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### RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

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## 1. Appendix VIII and Appendix IX

What is the difference between Appendix VIII and Appendix IX under RCRA? When each is used?

The hazardous waste regulations (40 CFR) contain two lists of chemicals which are sometimes confused: Appendix VIII of Part 261, and Appendix IX of Part 264.

### -Appendix VIII

Appendix VIII in 40 CFR Part 261 is EPA's list of RCRA hazardous constituents. This list was first promulgated in the May 19, Federal Register (45 FR 33130). The Appendix VIII list is comprised of chemicals which have toxic, carcinogenic, mutagenic, or teratogenic effects on humans or other life forms. Compounds which meet the criteria for 40 CFR Sections 261.33(e) and (f) as identified in Sections 261.11(a)(1)(2),and (3) are also included in Appendix VIII.

# 1. Appendix VIII and Appendix IX (Cont'd)

Appendix VIII is a composite of several other lists of regulated chemicals. Appendix VIII includes chemicals from the priority pollutants list under the Clean Water Act, chemicals considered hazardous to transport under Department of Transportation, chemicals identified as carcinogens by EPA's Carcinogen Assessment Group, and chemicals which have a high acute toxicity as identified by NIOSH's registry of Toxic Effects of Chemical Substances list. Appendix VIII lists the chemical names in alphabetical order, the Chemical Abstract Service (CAS) name and number, and the RCRA hazardous waste code (where applicable). There are currently 416 chemicals or classes of chemicals on Appendix VIII.

The main purpose of Part 261, Appendix VIII is to identify the universe of chemicals of concern under RCRA. Appendix VIII is used for two main purposes. EPA uses Appendix VIII to determine if a waste contains hazardous constituents and, therefore, should be considered for listing under 40 CFR Section 261.11. (Appendix VIII however, should not be used by a generator identifying hazardous wastes under Part 261, Subparts C and D. Appendix VIII is much broader than the actual hazardous waste lists in 40 CFR sections 261.31-261.33.)

Owners/operators of RCRA facilities use Appendix VIII for hazardous waste analysis before incineration (Section 264.340).

EPA's original regulations for ground-water monitoring at permitted land disposal facilities required owners and operators, under some circumstances, to analyze samples of groundwater for all constituents listed on Appendix VIII. The Agency soon discovered that compliance with this requirement caused a wide range of practical analytical problems. These problems included listings in Appendix VIII that covered broad categories (e.g., chlorinated naphthalene, not otherwise specified), listings of standard existed. To abate these groundwater monitoring problems, EPA promulgated Appendix IX of Part 264, the Groundwater Monitoring List (see 52 FR 25112).

### -Appendix IX

Part 264, Appendix IX was promulgated to replace Part 261, Appendix VIII for groundwater monitoring for permitted facilities. Hence Part 264, Appendix IX is the Groundwater Monitoring List. It is comprised of compounds in the Part 261, Appendix VIII list for which it is feasible to analyze in groundwater samples as well as a few compounds routinely monitored under Superfund. Appendix IX lists the chemicals' common name in alphabetical order, the CAS number, the CAS index name, the SW-846 suggested test method, and the Practical Quantitation Limits

## 1. Appendix VIII and Appendix IX (Cont'd)

(PQL's) which are the lowest concentrations of analytes in groundwater that can be reliably determined within specified precision and accuracy limits using the suggested method. Appendix IX of Part 264 currently contains 211 chemicals and their associated test methods.

Under the July 9, 1987 rules (52 FR 25942), and owner/operator of a RCRA facility will have certain Part 261 Appendix VIII hazardous constituents specified in his permit for which he must determine background levels (40 CFR Section 264.98). If he determines that there is a statistically significant increase over the background values specified in his permit at any monitoring well, he must notify the Regional Administrator and immediately sample the groundwater in all monitoring wells to determine the presence and concentration of any Part 264, Appendix IX constituents.

Appendix IX is only used for groundwater monitoring. It is not used as widely as Part 261, Appendix VIII (e.g., incineration, listing criteria). For further discussion of Part 261, Appendix VIII and Part 264, Appendix IX and their respective roles in groundwater monitoring program under RCRA, see Part 264, Subpart F and the July 9, 1987 Federal Register (52 FR 25942).

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