ecological receptors. In addition, EPA considered for its assessment the toxicological effects of silver on ecological receptors. EPA conducted a specific assessment of ecological risks for 47 constituents using the same five units and the same pathways (modified to reflect ecological exposures) for each unit. This risk assessment is described in more detail in sections V.B. and C.

Data limitations and resource constraints prevented EPA from conducting a risk analysis for the remaining constituents of concern. For each of these constituents, EPA extrapolated exit levels from levels derived-from the risk assessment for similar chemicals. EPA's extrapolation methodology is described in section IV.F.

The current capabilities of analytical chemistry constrain EPA's ability to use some of concentrations as exit levels. For approximately one-fourth of the constituents, EPA found that available methods could not routinely measure the constituent at the modeled or extrapolated risk-based exit level.

## C. Selection of Constituents of Concern

1. Development of the Master List

EPA developed an initial "Master List" of 506 constituents to be evaluated for purposes of establishing exit criteria. This master list was developed by combining the constituents specifically listed in the following appendices of 40 CFR part 261: Appendix VII, Basis for Listing Hazardous Waste; Appendix VIII, Hazardous Constituents; and appendix IX of part 264, the Ground-Water Monitoring List. The master list includes the full list of constituents referenced in appendix VII, including the F039 constituents.

Appendix VII to part 261, which was originally promulgated on May 19, 1980 (45 FR 33084) sets out the chemical constituents found to pose threats to human health and the environment that served as the actual basis for each of EPA's original hazardous waste listings. Appendix VIII to Part 261, also promulgated in 1980, is a more general listing of chemicals found to pose potential threats to human health and the environment. (45 FR 33084). EPA considers wastes containing appendix VIII constituents to be candidates for listing determinations. EPA amends appendix VII from time to time as EPA identifies additional potentially toxic constituents.

EPA later promulgated appendix IX to part 264 to identify those appendix VIII constituents which it could routinely expect owners and operators of permitted hazardous waste treatment, storage and disposal facilities to monitor in groundwater. EPA also included in this appendix 17 additional constituents found to pose significant risks that the Superfund program routinely monitored in groundwater. (52 FR 25942, July 9, 1987).

EPA established in these rulemakings that each of these constituents had significant potential to threaten human health, and, by implication, potential to threaten the environment. (Most of the data EPA utilized predicted toxic effects on humans.) EPA finds it reasonable to include each of these constituents on the list of chemicals of concern.

Further, EPA believes that, with the exception of the six chemicals identified below, the three appendices identify the chemicals of current concern to EPA that are likely to be found in listed wastes.

The Agency requests comment on whether the master list should also include six constituents that are not listed in any of the above sources. These six constituents, which are listed in Table 1, are found in six "U" listed wastes (commercial chemical products that become hazardous wastes when discarded). See 40 CFR 261.33(f). EPA originally listed these wastes because they routinely exhibited the characteristic of ignitability. Since the original listings, however, sufficient toxicity data have become available for these constituents. (The risk number for dimethylamine was recently withdrawn; however, EPA understands that it will shortly be replaced). Because of the toxicity data associated with these constituents, the Agency is taking comment on whether exit levels should be established for these six constituents in today's rulemaking. The Agency also requests comment on whether these six constituents should be added to Appendix VIII.

## TABLE 1.—CONSTITUENTS NOT ON APPENDICES VII, VIII, OR IX

CAS #	Constituent	Wastewater	Nonwastewater	
			Totals	Leach
75–07–0	Acetaldehyde (ethanal)			
98–82–8	Cumene	.67	18,000	2.5
124–40–3	Dimethylamine			
110–00–9	Furan	.16	1300	.06
79–10–7	Acrylic acid	(1)	(1)	(1)
98–01–1	2-Furancarbox- aldehyde (furfural)	(1)	(1)	(1)

<sup>1</sup>No exit levels because no EQC is available for this constituent. The criteria for exit would be to meet LDR treatment standards in §268.

Full documentation concerning the selection of constituents of concern is available in the docket under *The Background Document to Support Development of the Final Constituent List under the Waste Exit Rule.* 

2. Development of the Exit Constituent List

The Agency narrowed the list of 506 constituents to consist of 376 constituents that are included in the exemption list. 130 constituents were deleted from the master list. Criteria for constituent deletions from the master list include: Reactivity in air, analysis as a different constituent, reactivity in water, hydrolysis in soil or water, or is part of a chemical class with a specific constituent represented on the list. Because different methods and quantitation limits are necessary for solid and liquid matrices, two separate analyses were conducted. *The Background Document to Support Development of the Final Constituent List under the Waste Exit Rule* in the docket further justifies deletions of constituents from the master list and lists the deleted constituents.

Molybdenum is not on the Appendices VII, VIII, or IX, which provided the scope of today's master list of constituents. In anticipation of the Petroleum listing, due to a Drinking Water Sewage Sludge regulatory level, and due to available toxicity information, the Agency has included molybdenum on the exemption list. Due to modeling time constraints, Molybdenum was not modeled for groundwater risk. The groundwater