Under section 112 of the CAA, as amended, 190 specific substances or broad generic categories of substances are listed as hazardous air pollutants; 52 of these (47 individual substances and five broad generic categories of substances) did not previously appear individually on the list of CERCLA hazardous substances at 40 CFR 302.4. The substances not previously listed became hazardous substances pursuant to CERCLA section 101(14) upon enactment of the 1990 CAA Amendments and were assigned a onepound statutory RQ under CERCLA section 102(b).

In an October 22, 1993 Notice of Proposed Rulemaking (NPRM) (58 FR 54836), EPA proposed to add the 47 hazardous air pollutants to the regulatory list of CERCLA hazardous substances at 40 CFR 302.4, and adjust their RQs. For the five CAA hazardous air pollutants that are broad generic categories, EPA requested public comment on five options for reporting that could potentially apply.¹

The October 22, 1993 NPRM also proposed to adjust the RQs for certain hazardous wastes listed under RCRA. In today's final rule, the Agency is adjusting the RQs for four hazardous wastes (F025, K088, K090, and K091) included in the October 22, 1993 NPRM from their statutory one-pound levels. As proposed in the October 22, 1993 NPRM, EPA is readjusting the RQs for five additional RCRA wastes (F004, D023, D024, D025, and D026) that already have been designated as hazardous and assigned adjusted RQs. RQ adjustments for the two remaining RCRA wastes that are included in this final rule, F037 and F038, were proposed prior to the October 22, 1993 NPRM. On March 27, 1991, EPA evaluated F037 and F038 under the RQ adjustment methodology and proposed one-pound adjusted RQs for these wastes (56 FR 12826); the Agency is promulgating the one-pound RQs for F037 and F038 in this final rule.

C. Reportable Quantity Adjustment Methodology

In today's rule, EPA is promulgating adjusted RQs for the individual hazardous air pollutants based upon specific scientific and technical criteria that relate to the possibility of harm from the release of a CERCLA hazardous substance in certain amounts.² EPA's methodology for adjusting the RQs of individual hazardous substances begins

with an evaluation of the intrinsic physical, chemical, and toxicological properties of each hazardous substance. The intrinsic properties examined—called "primary criteria"—are aquatic toxicity, mammalian toxicity (oral, dermal, and inhalation), ignitability, reactivity, chronic toxicity, and potential carcinogenicity.³

Generally, for each intrinsic property, EPA ranks hazardous substances on a scale, associating a specific range of values on each scale with an RQ value of 1, 10, 100, 1,000, or 5,000 pounds. The data for each hazardous substance are evaluated using various primary criteria; each hazardous substance may receive several tentative RQ values based on its particular intrinsic properties. The lowest of the tentative RQs becomes the "primary criteria RQ" for that substance.

After the primary criteria RQs are assigned, substances are further evaluated for their susceptibility to certain degradative processes, which are used as secondary adjustment criteria.

These natural degradative processes are biodegradation, hydrolysis, and photolysis (BHP).4 If a hazardous substance, when released into the environment, degrades relatively rapidly to a less hazardous form by one or more of the BHP processes, its RQ (as determined by the primary RQ adjustment criteria), is generally raised one level.⁵ Conversely, if a hazardous substance degrades to a more hazardous product after its release, the original substance is assigned an RQ equal to the RQ for the more hazardous substance, which may be one or more levels lower than the RQ for the original substance.

EPA indicated in an August 30, 1989 proposed rule (54 FR 35988) that substances could be further evaluated by applying the methodology for developing threshold planning quantities (TPQs) pursuant to EPCRA

section 302, but has not yet incorporated the TPQ methodology as part of the RQ adjustment methodology in any final rule.

EPÅ currently is evaluating the RQ adjustment methodology to identify ways in which the methodology could be improved; for example, the Agency is considering whether the application of BHP to developmental toxicants should be limited. EPA is interested in receiving other suggestions for refining or improving the existing RQ adjustment methodology. It is important to note, however, that the Agency does not intend to formally respond as part of the rulemaking to suggestions provided by the public for changes to the RQ adjustment methodology.

D. Summary of Changes From the Proposed Rule

EPA has made the following changes from the October 22, 1993 NPRM. Each change is discussed in the preamble section noted (if applicable).

- Six RCRA hazardous wastes (K119, K120, K121, U354, U355, and U357) with RQ adjustments proposed in the October 22, 1993 NPRM are not included in today's final rule. These six wastes are proposed, but not yet finalized, as RCRA hazardous wastes and, thus, are not yet CERCLA hazardous substances, as defined by CERCLA section 101(14)(C).
- The Agency is promulgating onepound final RQs for two RCRA wastes, F037 and F038, that did not appear in the October 22, 1993 NPRM (see Section II.B.6).
- In the October 22, 1993 NPRM, EPA proposed to add m-xylene, one of the 47 hazardous air pollutants, to Table 302.4 and to adjust its statutory one-pound RQ to 100 pounds. After reviewing data recently submitted by the commenters, however, EPA has decided to promulgate a 1,000-pound final RQ for m-xylene (see Section II.B.1).
- The Agency also proposed in the October 22, 1993 NPRM to add dimethylformamide, another hazardous air pollutant, to Table 302.4 and to adjust its statutory one-pound RQ to 10 pounds. After evaluating data submitted by the commenters, the Agency has decided in this final rule to promulgate a 100-pound final RQ for dimethylformamide (see Section II.B.2).
- Similarly, after reviewing comments submitted on the 100-pound RQ proposed for titanium tetrachloride in the October 22, 1993 NPRM, the Agency has decided to promulgate a 1,000-pound RQ for this substance in today's final rule (see Section II.B.3).
- EPA requested public comments on five options for assigning RQs to the

 $^{^{\}rm I}$ For a list of these options, see Section II.C.1 of today's preamble.

² See Section II.C.1 of this preamble for a discussion of RQ adjustments for the five broad generic categories.

³For further information on assigning adjusted RQs to hazardous substances under the primary criteria, see the Technical Background Document to Support Rulemaking Pursuant to CERCLA Section 102, Volume 2, August 1986 (for chronic toxicity), Volume 3, July 1989 (for potential carcinogenicity), and Volume 1, March 1985 (for the four other primary criteria), available for inspection at the CERCLA Docket Office, Crystal Gateway #1, 12th Floor, 1235 Jefferson Davis Highway, Arlington, VA 22202.

⁴For further information on the methodology for applying BHP, see the Technical Background Document to Support Rulemaking Pursuant to CERCLA Section 102, Volume 1, March 1985, available for inspection at the CERCLA Docket Office, Crystal Gateway #1, 12th Floor, 1235 Jefferson Davis Highway, Arlington, VA 22202.

⁵ No RQ level increase based on BHP occurs if the primary criteria RQ is already at its highest possible level (100 pounds for potential carcinogens and 5,000 pounds for other types of hazardous substances). BHP is not applied to radionuclides.