hydrogen chloride gas), which is a CERCLA hazardous substance with a 5,000-pound RQ. In an August 30, 1989 rule (54 FR 35988), the Agency proposed to adjust the 5,000-pound RQ for hydrochloric acid to 100 pounds, based on application of the TPQ methodology (see Section I.C of today's preamble) as part of the RQ adjustment methodology. Because the proposed 100-pound RQ for hydrochloric acid (the reaction product) from the 1989 rule was no higher than the 100-pound primary criteria RQ for titanium tetrachloride (the parent compound), the Agency did not apply the secondary RQ adjustment criteria to raise the RQ for titanium tetrachloride in the October 22, 1993 NPRM.

As of today's final rule, however, EPA has not yet promulgated the 100-pound RQ for hydrochloric acid that was proposed in the August 30, 1989 rule and has not yet included the TPQ methodology as part of the RQ adjustment methodology in any final rule; thus, the current 5,000-pound RQ for hydrochloric acid still applies. This 5,000-pound RQ for hydrochloric acid is higher than the 100-pound RQ for titanium tetrachloride (i.e., the secondary product of the hydrolysis reaction is less toxic than the parent compound). Therefore, the Agency is applying the secondary RQ adjustment criterion of hydrolysis in today's final rule to raise the 100-pound primary criteria RQ for titanium tetrachloride one level to 1,000 pounds.[15]

4. Other Individual CAA Hazardous Air Pollutants

a. *Biphenyl*. Four commenters supported a 1,000-pound adjusted RQ for biphenyl, rather than the 100-pound RQ adjustment proposed in the October 22, 1993 NPRM. One of these commenters submitted data on the biodegradation of biphenyl and concluded that these data support a 1,000-pound RQ. After reviewing the data submitted by this commenter, the Agency disagrees with the commenter's conclusions. The data on biphenyl provided by the commenter do not meet several conditions necessary for adjustment based on biodegradation, including: (1) The substance must have a five-day biochemical oxygen demand (BOD_5) equal to or greater than 50% in ''unadapted'' media, which have not been previously exposed to the substance; and (2) the substance must be in a form that is available to microorganisms responsible for biodegradation.[16] Therefore, the Agency is promulgating an adjusted RQ of 100 pounds for biphenyl based on the chronic toxicity criterion, with no upward adjustment based on BHP.

b. *1,3-Butadiene*. Two commenters opposed the 10-pound proposed RQ for 1,3-butadiene. These commenters submitted potential carcinogenicity data to support the assertion that the potency factor calculated for 1,3-butadiene by the Agency in the proposed rule was ''at least an order of magnitude too high.'' According to the commenters, the Agency should recalculate a more accurate (and lower) value for the potency of 1,3-butadiene and should promulgate a 100-pound RQ for this substance, rather than the 10-pound proposed RQ.

Pending completion of its review of new epidemiology data on 1,3-butadiene submitted by the commenters, as well as data on the appropriate model for conducting quantitative risk assessments on this substance, the Agency will retain its current estimates, including a potency factor calculation of 8.4 $(mg/kg/day)^{-1}$ for RQ adjustment purposes.[17] This potency factor, coupled with a weight-of-evidence Group B2 classification, results in a final RQ of 10 pounds for 1,3-butadiene in today's final rule. EPA is continuing its comprehensive review of the potential carcinogenicity data on 1,3-butadiene to determine if a change in the Agency's potency factor estimate is necessary. The Agency will readjust the RQ for 1,3-butadiene in a separate rulemaking if its review results in an RQ other than 10 pounds for this substance.

c. *Cresols*. The Agency also proposed in the October 22, 1993 NPRM to adjust the RQ for another hazardous substance category, ''cresol(s),'' which, similar to ''xylene (mixed),'' is already listed in Table 302.4. This listing for the hazardous substance cresols represents a mixture of the three cresol isomers (m-cresol, o-cresol, and p-cresol) in any proportion. In 1990, the CAA Amendments added the three cresol isomers individually to the CAA section 112 list of hazardous air pollutants. In today's final rule, EPA is adding these three isomers as three separate entries in the 40 CFR 302.4 list of CERCLA hazardous substances.

In the October 22, 1993 NPRM, the Agency proposed adjustments to the statutory one-pound RQs for the three cresol isomers. EPA proposed to adjust each of the RQs for m-, o-, and p-cresol to 100 pounds based on studies published since the final rule designating the category cresols as a hazardous substance and assigning it a 1,000-pound RQ (see 51 FR 34561, September 29, 1986). Because there are three substances within the cresols category and EPA had sufficient data to assign 100-pound RQs to each of these substances, the Agency proposed to adjust the RQ for the ''cresol(s)'' category from 1,000 pounds to 100 pounds to be consistent with the data used to develop the 100-pound RQs for the m-, o-, and p-cresol isomers.

One commenter opposed the 100-pound RQ for the cresol isomers and asserted that the recent reclassification of cresols in the IRIS data base as a weight-of-evidence Group C, possible human carcinogen, was based on studies of doubtful validity. Based on data submitted to support its assertion, the commenter requested that EPA retain the 1,000-pound RQ for cresols, pending the outcome of EPA's decision on this matter.

EPA disagrees with the commenter that the 1,000-pound RQ for cresols should be retained. Hazardous substances are classified in weight-of-evidence Group C when the Agency determines that there is ''limited'' evidence of carcinogenicity in animals, in the absence of human data. According to EPA guidelines,[18] limited evidence of carcinogenicity in animals can be indicated by a wide variety of effects, including: (1) Malignant tumor responses in a single, well-conducted experiment that does not meet conditions for ''sufficient'' evidence; (2) tumor responses of marginal statistical significance in studies having inadequate design or reporting; (3) benign tumors (without malignant tumors) from an agent showing no response in a variety of short-term tests for mutagenicity; and (4) responses of marginal statistical significance in a tissue known to have a high or variable background rate of cancer.

EPA has carefully reviewed the data submitted by the commenter. As a result

[15] If EPA incorporates the TPQ methodology as part of the RQ adjustment methodology and adjusts the RQ for hydrochloric acid in a final rule, the RQ for titanium tetrachloride will be readjusted accordingly.

[16] For detailed responses to comments on the biodegradation of biphenyl, see Response Numbers II.B.4 and II.B.5 in Section II of the responses to comments document for this rulemaking, available for inspection at the CERCLA Docket Office, Crystal Gateway #1, 12th Floor, 1235 Jefferson Davis Highway, Arlington, VA 22202.

[17] For detailed responses to comments on the potential carcinogenicity of 1,3-butadiene, and EPA's basis for using its current estimates to adjust the RQ for this substance, see Response Numbers II.B.7 and II.B.8 in the responses to comments document for this rulemaking, available for inspection at the CERCLA Docket Office, Crystal Gateway #1, 12th Floor, 1235 Jefferson Davis Highway, Arlington, VA 22202.

[18] U.S. EPA 1988. Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102. Office of Health and Environmental Assessment, Washington, DC.