

SUMMARY OF PROPOSED AIR TOXICS RULE REVISIONS
SEPTEMBER 2005

Vermont's Air Toxics Regulations, set forth at §5-261 and Appendices B-E of the Air Pollution Control Regulations, were originally adopted by the Agency of Natural Resources in the late 1980s. In 1992, the legislature scrutinized these regulations and appropriated monies for air toxics monitoring to obtain critical information on the status of ambient air concentrations of air toxics in Vermont. At that time, the Agency committed to review each hazardous ambient air standard (HAAS) for the Category I hazardous air contaminants (HACs) listed in Appendix C and the method for their derivation specified in Appendix D "to assure that each standard represents a level requisite to protect the public health" by January 1, 1998. *See* § 5-261(6)(c). A considerable quantity of new information on HACs has emerged during the last 15 years. Based on this new information, the Agency is now proposing to amend the Air Toxics Regulations.

In meeting its obligation under § 5-261(6)(c), the Agency asked the Vermont Department of Health to evaluate each HAAS for all 288 HACs listed in Appendix C, not just those listed in Category I. Based on the Health Department's review of current toxicological information, the Agency is proposing to revise the HAAS and toxicity category for many HACs to ensure that the standards are up-to-date and protective of human health. HACs are generally classified into one of three toxicity categories: Category I, known or suspected carcinogens; Category II, chronic systemic toxicity due to long-term exposure; and Category III, short-term irritants. Facilities that emit more than 5 tons of air pollutants per year must register their emissions with the Air Pollution Control Division and pay a fee for any HAC emissions. *See* 3 V.S.A. § 2822(k). The fees for HAC emissions are highest for Category I HACs and lowest for Category III HACs. Consequently, the HAC emission fees for some facilities may increase as HAC toxicity categories become more stringent. For a summary of the HAC category changes and a conservative estimate of the emissions fee increases, see the Attachment. To ease the economic hardship that may result from the proposed revisions, the Agency is proposing to wait until 2008 to calculate HAC emission fees based upon the revised toxicity categories. This will provide sources with additional time to install new control technology, incorporate the use of less toxic alternatives, and/or provide more refined emissions estimates to lessen the economic impact.

In addition, because the action level for each HAC is based on the HAAS, the proposed revisions also include changes to the action levels for many HACs. Action levels are used to determine the applicability of § 5-261 to stationary sources. When the emission rate of a HAC is above the action level, § 5-261 requires the source to apply control technology, production processes, or other techniques to achieve the hazardous most stringent emission rate (HMSE). If the source remains above the action level, § 5-261 may require modeling. Under the proposed revisions, it is expected that up to 13 additional sources will become subject to § 5-261 of the regulations. However, some of these sources may be able to reduce their HAC emissions below the action level through product reformulation or substitution.

ATTACHMENT

The Agency, in conjunction with the Vermont Department of Health, is proposing to update the hazardous ambient air standards and toxicity categories based on currently available toxicological information. The proposed revisions will reclassify several HACs into different toxicity categories. *See* Table 1. For instance, 5 HACs currently listed as Category II and 21 HACs listed as Category III would be reclassified to Category I as known or suspected carcinogens. In addition, 4 HACs currently listed as Category I and 110 HACs listed as Category III would be reclassified as Category II HACs. The proposed revisions are expected to have a minimal effect on permitting fees and structure. However, the proposed category changes are predicted to potentially increase the emission inventory fees paid by some companies registered with the Air Pollution Control Division. A conservative summary of the largest resulting emission fee increases by chemical is presented below in Tables 2 and 3.

Table 1: Toxicity Classification Changes

| Toxicity Category | Current | Proposed |
|--------------------------------|----------------|-----------------|
| Category 1 | 52 | 75 |
| Category 2 | 44 | 155 |
| Category 3 | 192 | 60 |
| Unclassified (Appendix B only) | 94 | 94 |
| Total | 382 | 384 |
| Removed | | (3) |

Table 2: Largest Fee Increases by Chemical for Category I

| # | HAC | Total Estimated Fee Increase | # of Affected Sources | Category change |
|----------|-------------------|-------------------------------------|------------------------------|------------------------|
| 1 | 2-Butoxyethanol | \$19,377 | 34 | 3 → 1B |
| 2 | Styrene | \$14,906 | 18 | 2 → 1B |
| 3 | Ethylbenzene | \$7,388 | 58 | 3 → 1B |
| 4 | Trichloroethylene | \$5,164 | 8 | 1B → 1A |
| 5 | Vinyl acetate | \$4,465 | 7 | 3 → 1B |

Table 3: Largest Fee Increases by Chemical for Category II

| # | HAC | Total Estimated Fee Increase | # of Affected Sources | Category change |
|----------|--------------------|-------------------------------------|------------------------------|------------------------|
| 1 | Acetone | \$22,565 | 50 | 3 → 2 |
| 2 | Isopropyl alcohol | \$12,213 | 56 | 3 → 2 |
| 3 | Methyl amyl ketone | \$10,402 | 22 | 3 → 2 |
| 4 | N-Butyl acetate | \$10,312 | 28 | 3 → 2 |
| 5 | Ethyl alcohol | \$9,100 | 34 | 3 → 2 |