#### **FACT SHEET**

# SUMMARY OF SUPPLEMENT TO EPA'S PROPOSED STANDARD TO CONTROL EMISSIONS OF VOLATILE ORGANIC COMPOUNDS FROM WASTEWATER AT SYNTHETIC ORGANIC CHEMICAL MANUFACTURING FACILITIES

#### **TODAY'S ACTION**

- ♦ The Environmental Protection Agency (EPA) is proposing a supplement to the proposed standard that would control volatile organic compound emissions from wastewater generated by the synthetic organic chemical manufacturing industry (SOCMI).
- ♦ The revisions that EPA is now proposing would provide affected facilities with a regulation that is more streamlined and easier to implement while still providing strong environmental protection. This action will not change the predicted emission reductions from affected facilities or the cost of the final rule.

#### **BACKGROUND**

- ♦ Under the Clean Air Act Amendments of 1990, EPA is required to regulate emissions of volatile organic compounds. Volatile organic compounds, when emitted into the ambient air, are precursors to the formation of tropospheric ozone. A wide variety of acute and chronic respiratory health effects and welfare (e.g., agricultural, ecosystem) effects have been attributed to concentrations of ozone commonly measured in the ambient air throughout the U.S.
- ♦ On August 21, 1979, EPA published a priority list of source categories that emit volatile organic compounds. The SOCMI was number one on that list. The Clean Air Act requires EPA to develop standards that will require the application of stringent air pollution controls, known as best demonstrated technology to new, reconstructed, or modified facilities.
- ♦ EPA proposed a new source performance standard for SOCMI Wastewater on September 12, 1994. EPA then published a supplement to this proposal on October 11, 1995. Today, EPA is publishing an additional supplement to the proposed rule.

## WHAT ARE THE EXPECTED ENVIRONMENTAL BENEFITS OF THE PROPOSED SOCMI WASTEWATER NEW SOURCE PERFORMANCE STANDARD?

♦ EPA expects the proposed rule, once promulgated, to reduce total annual emissions of volatile organic compounds, many of which are also air toxics, by 16,200 megagrams (17,852 tons) per year from wastewater generated by facilities that are built during the first five years after

proposal.

- ♦ Volatile organic compounds play a significant role in the chemical reactions that produce ozone. While beneficial in the upper atmosphere, ozone in the lower atmosphere can cause a variety of health problems as it can damage lung tissue, reduce lung function, and sensitize the lungs to other irritants. Ground-level ozone also interferes with the ability of plants to produce and store food making them more susceptible to disease, insect attack, and other pollutants.
- ♦ Children are at a higher risk from ozone exposure than adults. They breathe more air per pound of body weight than adults and they spend more time outdoors, especially in the summer, when exposure to ozone is more prevalent. Because children's respiratory systems are still developing, they are more susceptible than adults to environmental threats.
- ♦ The requirements in proposed standard must be met upon initial start-up or the promulgation date, whichever is later. EPA expects to promulgate this rule no earlier than April 2000. This will allow facilities adequate time to plan for compliance and, if necessary, to retrofit equipment.

## WHAT DO THE PROPOSED REVISIONS TO EPA'S SOCMI WASTEWATER NEW SOURCE PERFORMANCE STANDARDS REQUIRE?

- The proposed standard is based on a combination of control techniques that require removal or destruction of volatile organic compounds from wastewater at the synthetic organic chemical manufacturing industry plant. Designated chemical process units, i.e., process lines or process units, would be subject to the rule.
- ♦ Under the proposed standard, constructed, reconstructed, or modified designated chemical process units would be required to apply appropriate controls to affected wastewater tanks, surface impoundments, containers, individual drain systems, and oil and water separators, and to treat process wastewater to remove or destroy the volatile organic compounds.
- The proposed revisions include: 1) revisions to the applicability provisions (i.e., provisions which identify who is subject to the requirements) to provide more flexibility and clarity, 2) revisions to the wastewater requirements to make them easier to understand, and 3) revisions to the definition of "wastewater" to clarify the type and location of wastewater streams and where control requirements would apply.
- ♦ The proposed revisions to the rule also include a number of changes that reduce the recordkeeping and reporting requirements of the rule. The revisions to the wastewater control and compliance demonstration sections of the rule would improve the enforceability of these provisions.

### **FOR FURTHER INFORMATION**

- Interested parties can download the Federal Register notice and proposed revisions from the EPA's web site on the Internet under recent actions at the following address: (http://www.epa.gov/ttn/oarpg). These proposed revisions can also be obtained from the Air and Radiation Docket and Information Center, by telephone (202) 260-7548 or by electronic mail, a-and-r-docket@epamail.epa.gov (a reasonable fee may be charged for copying). The SOCMI Wastewater New Source Performance Standard docket number is A-94-32. For technical questions about this action, contact Mary Tom Kissell at (919) 541-4516 or by electronic mail, kissell.mary@epamail.epa.gov.
- ♦ The EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's homepage address is: (http://www.epa.gov/oar/).