

05/15/02

FACT SHEET

FINAL GENERIC AIR TOXICS STANDARDS FOR FOUR SOURCE CATEGORIES: CYANIDE CHEMICALS MANUFACTURING, CARBON BLACK PRODUCTION, ETHYLENE PRODUCTION AND SPANDEX PRODUCTION FACILITIES

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing a final rule amendment to reduce emissions of toxic air pollutants, also known as air toxics, from four categories of pollution sources: cyanide chemicals manufacturing, carbon black production, ethylene production, and spandex production facilities. Toxic air pollutants are those pollutants known or suspected of causing cancer or other serious health effects.
- ! EPA is also issuing a direct final rule to amend the standards for spandex production facilities. The amendment is to clarify EPA's intent concerning dry spinning spandex production processes and imposes no additional regulatory requirements on owners or operators of affected facilities.
- ! EPA developed today's final rule in close partnership with major stakeholders, including industry representatives and state and local agencies.

BACKGROUND

- ! Under the Clean Air Act, EPA is required to regulate emissions of 188 air toxics listed in the Act. The EPA included cyanide chemicals manufacturing, carbon black production, ethylene production, and spandex production in the list of industries that are major sources of air toxics. "Major" sources are those that emit 10 tons/year or more of a single listed air toxics or 25 tons/year or more of a combination of air toxics.
- ! For listed categories of major sources, the Clean Air Act requires EPA to develop standards that require the application of stringent air pollution controls, known as maximum achievable control technology (MACT). The rule being issued today is known as the Generic MACT rule.
- ! The main products made by facilities affected by today's final rule are:
Cyanide Chemicals Manufacturing: cyanide chemicals are used in the production of nylon and other products.
Carbon Black Production: carbon black is used primarily in the production of rubber tires.
Ethylene Production: ethylene is used to make the plastic polyethylene and ethylene oxide, a gas used to sterilize medical instruments and other objects.

Spandex Production: spandex fiber is used to make spandex garments.

- ! The final standards for cyanide chemicals manufacturing, carbon black production, ethylene production, and spandex production are included in the Generic MACT rule which is already in place. This rule establishes emission standards for similar pollution sources, such as process vents, storage tanks, equipment leaks, and wastewater. It also contains the definitions, applicability criteria, and emission standards for each category of pollution sources, and refers to other existing rules for equipment design, operating, testing, inspection, monitoring, repair, and recordkeeping and reporting requirements that apply to all sources.
- ! The Generic MACT rule is written in such a way that it can be amended to add more categories of similar pollution sources, as is being done with today's final rule amendment to add cyanide chemicals manufacturing, carbon black production, ethylene production, and spandex production.

HEALTH AND ENVIRONMENTAL BENEFITS

- ! Today's final rule will reduce air toxics, including cyanide compounds, acrylonitrile, acetonitrile, carbon disulfide, carbonyl sulfide, benzene and 1,3 butadiene. These compounds are known or suspected of causing cancer and can damage the central nervous system and kidneys. Today's final rule will reduce air toxics emissions by about 3,240 tons annually.

WHO WILL BE AFFECTED BY EPA'S FINAL RULE?

- ! The final rule will affect approximately 73 existing industrial sources, plus any similar facilities built in the future. The number of these existing sources by source category are: cyanide chemicals manufacturing, 14; carbon black production, 20; ethylene production, 36; and spandex production, 2.

FINAL RULE REQUIREMENTS

- ! Following is a summary for each source category:

Cyanide Chemicals Manufacturing

- < The final standards apply to each cyanide chemicals manufacturing process unit, along with associated wastewater streams and equipment, that produces cyanide chemicals by specific processes known as the Blausaure Methane Anlage process, the Andrussow process, the Sohio production process, or the neutralization (wet) process.
- < The final standards regulate air toxic emissions from process vents from continuous unit

operations, vessels storing hydrogen cyanide product, transfer operations, wastewater and equipment leaks. The standards for new and existing sources are the same.

Carbon Black Production

- < The final standards apply to each process unit, along with associated process vents and equipment, that produces carbon black by specific processes known as the furnace black process, the thermal black process, or the acetylene decomposition process.
- < The final standards regulate air toxic emissions from process vents associated with the main unit filter. The standards for new and existing sources are the same.

Ethylene Production

- < The final standards apply to each ethylene manufacturing process unit.
- < The final standards regulate air toxic emissions from process vents from continuous unit operations, storage vessels, transfer racks, waste operations and heat exchange systems. The standards for new and existing sources are the same.

Spandex Production

- < The final standards regulate air toxic emissions from process vents, storage vessels, and fiber spinning lines that are associated with reaction spinning spandex production processes. The standards for new and existing sources are the same.

FINAL RULE COSTS

! The total annual cost of this final rule is \$23.7 million. The total annual cost by source category is: cyanide chemicals manufacturing, \$2.4 million; carbon black production, \$11.2 million; ethylene production, \$10 million; spandex production, \$80,000.

! These estimates include the cost of monitoring, recordkeeping and reporting.

FOR FURTHER INFORMATION . . .

! For further information about the final rule, contact Mark Morris of EPA's Office of Air Quality Planning and Standards at (919) 541-5416. The final rule can be accessed from the Clean Air Act Amendments bulletin board of EPA's Technology Transfer Network (TTN) at the following Internet address: <http://www.epa.gov/ttn/caaa/t3pfpr.html>.

! For further information about how to access the TTN, call (919) 541-5384.