

SYNTHETIC MINOR DETERMINATION

A) SOURCE DESCRIPTION:

The owner of Plant Factory, Inc. has requested a modification in the Permit to Operate (PTO) for the 7.6 mmBtu/hour coal-fired spreader stoker at its facility at 6346 Avon Belder Road, North Ridgeville, Ohio. The modification would result in a federally enforceable State operating permit sulfur dioxide emissions limit for this source (B005) of 83.37 tons/year. SO₂ emissions for the facility would be limited to 99.50 TPY.

B) FACILITY EMISSIONS AND AREA ATTAINMENT STATUS:

North Ridgeville is in the east-central portion of Lorain County which is designated attainment for SO₂. Current actual annual SO₂ emissions for this source are estimated to be 9.43 tons. Actual annual SO₂ emissions from this facility (including SO₂ emissions of approximately 8.07 tons from two minor sources, a 12 mmBtu/hr. gas fired boiler and a 12.5 mmBtu/hr. gas/No. 2 oil-fired boiler) are estimated to be 17.5 tons.

C) MODIFIED SOURCE EMISSIONS LIMITATIONS:

Through the "Additional Federally Enforceable Emissions Requirements for Sulfur Dioxide" section of this PTO, this facility will be limited to annual SO₂ emissions of 99.50 TPY. This specific source (B003) will be restricted to annual SO₂ emissions of 83.37 TPY to be achieved by:

- 1) Limiting the sulfur content of the coal purchased and burned in this 7.6 mmBtu/hour boiler to 3.34 pounds of SO₂ per million Btu heat input on a "dry" basis. (This value shall be determined by a weighted monthly average of supplier analyses of coal shipments during each month.)
- 2) Limiting the number of hours of source operation to 6576 on a rolling 365 day cumulative total basis
- 3) Requiring this facility to record monthly coal quality data and operational hours and to report this data on a semi-annual basis to NEDO.

D) CONCLUSIONS:

NEDO believes that the coal quality and boiler operating time restrictions placed on this relatively small source will effectively limit this facility to "synthetic minor" status with regards to SO₂ emissions. The facility is a minor source for other air pollutants.