a) Section 215.510 shall comply with that Section by December 31, 1986;

b) Sections 215.512 through 215.514 shall comply with those Sections by December 31, 1985.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.517 Compliance Plan

The owner or operator of a facility or emission source subject to this Subpart shall submit to the Agency, a compliance plan and project completion schedule for:

a) Section 215.510 by August 31, 1986;

b) Section 215.514 by October 31, 1985.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

SUBPART V: AIR OXIDATION PROCESSES

Section 215.520 Applicability

This Subpart applies to plants using air oxidation processes which are located in any of the following counties: Will, McHenry, Cook, DuPage, Lake, Kane, Madison, St. Clair, Macoupin and Monroe.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.521 Definitions

In addition to the definitions of 35 Ill. Adm. Code 211, the following definitions apply to this Subpart:

"Air Oxidation Process": any unit process including ammoxidation and oxychlorination which uses air or a combination of air and oxygen as an oxidant in combination with one or more organic reactants to produce one or more organic compounds.

"Cost Effectiveness": the annual expense for cost of control of a given process stream divided by the reduction in emissions of organic material of that stream.

"Flow (F)": Vent stream flowrate (scm/min) at a standard temperature of 20°C.

"Full Operating Flowrate": Maximum operating capacity of the facility.

"Hourly Emissions (E)": Hourly emissions reported in kg/hr measured at full operating flowrate.

"Net Heating Value (H)": Vent stream net heating value (MJ/scm), where the net enthalpy per mole of offgas is based on combustion at 25°C and 760°mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C, as in the definition of "Flow."

"Process Vent Stream": An emission stream resulting from an air oxidation process.

"Total Resource Effectiveness Index (TRE)": Cost effectiveness in dollars per megagram of controlling any gaseous stream vented to the atmosphere from an air oxidation process divided by $1600/Mg, using the criteria and methods set forth in this Subpart and Appendices E and F.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.525 Emission Limitations for Air Oxidation Processes

a) No person shall cause or allow the emission of volatile organic material (VOM) from any process vent stream unless the process vent stream is vented to a combustion device which is designed and operated either:

1) To reduce the volatile organic emissions vented to it with an efficiency of at least ninety eight percent (98%) by weight; or

2) To emit volatile organic material at a concentration less than twenty parts per million by volume, dry basis.

b) Air oxidation facilities for which an existing combustion device is employed to control process VOM emissions are not required to meet the 98 percent emissions limit until the combustion device is replaced for other reasons, which shall be considered to include, but not be limited to, normal maintenance, malfunction, accident, and obsolescence. The combustion device is considered to be replaced when:

1) All of the device is replaced; or

2) When the cost of the repair of the device or the cost of replacement of part of the device exceeds 50% of the cost of replacing the entire device with a device which complies.

c) The limitations of subsection (a) do not apply to any process vent stream or combination of process vent streams which has a Total Resource Effectiveness Index (TRE) greater than 1.0, as determined by the following methods:

1) If an air oxidation process has more than one process vent stream, TRE shall be based upon a combination of the process vent streams.

2) TRE of a process vent stream shall be determined according to the following equation:

$$TRE = E^{-1}\left[a + bF^{n} + cF + dFH + e(FH)^{n} + fF^{0.5}\right]$$