

Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

To: New Source Review Division Date: September 19, 1996

Thru: Victoria Hsu, P.E., Division Director

From: Johnny Vermillion, P.E., Chemical Section
Louise Ngo, Combustion & Coatings Section

Subject: When should a compound be considered an air contaminant

The term "air contaminant" is defined in §382.003(2) of the TCAA as "particulate matter, radio active material, dust, fumes, gas, mist, smoke, vapor, or odor, including any combination of those items, produced by processes other than natural." Compounds which exert vapor pressures include organics and inorganics. NSR has determined that there are vapor pressure levels below which it is not reasonable to estimate emissions; therefore, the following guidelines have been established to help determine if emission calculations are necessary.

For compounds/mixtures which have vapor pressures (X) of:

Case 1

$X < 0.01$ mm Hg (0.0002 psia) at a temperature not to exceed 40°C (104°F): Emission calculations are not required. Exception: For non-heatset/heatset printing inks with vapor pressures of < 0.01 mm Hg, as an industry standard, assume a 5% evaporation rate of the solvents for non-heatset inks.

Case 2

$X \geq 0.01$ mm Hg (0.0002 psia)

a) 0.01 mm Hg $\leq X < 0.1$ mm Hg at no more than 104 °F: Emissions to be calculated on a case by case basis.

b) $X \geq 0.1$ mm Hg (0.002 psia) at no more than 104 °F: Emission calculations necessary for all compounds.

The temperature listed above (40°C or 104°F) refers to either ambient temperature or the operating temperature of the process if above ambient temperature.