

January 22, 1998

AR-18J

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
1600 WaterMark Drive
Columbus, Ohio 43215

Dear Mr. Hodanbosi:

This letter provides the U.S. Environmental Protection Agency's (USEPA) position on the proposed Pro-Tec Coating Company (Pro-Tec) modification and is based on our consideration of the latest information submitted by your office and our on-going discussions.

As noted in our letter of December 30, 1997, the first issue that must be resolved in determining the proper course of this permitting action is to determine whether or not the entire existing source is major, that is, equal or exceeding 250 tons per year (tpy) of actual or potential emissions for Prevention of Significant Deterioration (PSD) applicability. On January 2, 1998, you sent us information on the existing plant's fuel usage and calculations of nitrogen oxide (NOx) emissions from the second quarter of 1995 through the third quarter of 1997. These calculations are based on Pro-Tec's emission factors for the continuous annealing furnace and actual fuel usage allowed by the current Pro-Tec permit. This permit was issued in May 1995, as a modification to the original permit to install. It is our understanding that stack test information was used to develop the emission factors and the natural gas usage restrictions in the permit will keep the total existing facility NOx emissions at no more than 243 tpy. This was intended to keep the potential emissions at a minor source level.

The data recently provided indicates that Pro-Tec has not exceeded its fuel usage restrictions for the annealing furnace since May of 1995. Therefore, the calculated NOx emissions from that unit, together with the calculated NOx emissions from the rest of the plant, result in values less than 243 tpy. Although not provided, we assume there is similar documentation for carbon monoxide emissions which are also permitted near to the major source threshold at 246.8 tpy. For the purposes of the proposed permitting action, the conclusion that can be drawn from this information is that the existing facility as permitted since May 1995 has not emitted nor has it the potential to emit equal to or

more than 250 tpy of a regulated pollutant and therefore would not be considered a major source. This finding is based on numerical calculations and the reported fuel usage alone; any information which becomes available that demonstrates actual or potential emissions greater than the calculated levels would negate this determination.

Since the entire existing source is considered to be minor, then the proposed modification in total would need potential emissions of less than 250 tpy for each of the applicable regulated pollutants in order to also be considered minor. However, the existence of a nested major source as outlined in my December 22, 1997, letter to you must also be addressed. It is our determination that an annealing operation, one of the activities commonly found in iron and steel mills, should be considered one of the 28 categories of sources to which the 100 tpy emission threshold applies for PSD applicability, regardless of it being located or nested in a galvanizing plant. Based on the information you provided, the existing annealing furnace emits more than 100 tpy of NO_x and is therefore a nested major PSD source. Issues related to the past permitting of this unit are not relevant to the proposed modification but will instead need to be addressed as a separate issue.

To complete our analysis, we must determine the effect the existing major source annealing furnace as a nested source has on the permitting of the proposed modification. The USEPA has previously determined that the major source status of a nested activity does not dictate the major source status of the overall source independent of the total emission rate. In other words, if an entire source has the potential to emit of less than 250 tpy, then the existence of a major nested source does not make the entire source major for purposes of PSD applicability. Therefore, since the entire existing plant is not a major PSD source, the potential NO_x emissions for the entire proposed facility would need to equal or exceed 250 tpy to trigger PSD review. However, with respect to a nested activity within the modification, PSD review would be triggered if the new nested activities equaled or exceeded 40 tpy. The reason for this is that the nested activities within the existing facility and within the proposed facility remain grouped together within the same source category. The principles set forward here, while using NO_x as an example, would also apply to other applicable regulated pollutants at their respective significance levels.

In summary, the entire existing facility is considered a minor source, containing a nested major PSD source. The proposed project in its entirety would itself be considered minor if its total potential emissions were less than 250 tpy for any of the regulated pollutants. However, the proposed annealing operation is considered along with the existing major source annealing

operation and must be considered to be a major modification at the 40 tpy significance level.

I hope this information is useful. We appreciate your continued cooperation in the resolution of this matter. If you have any questions regarding this information, please contact Kaushal Gupta, of my staff, at (312) 886-6803.

Sincerely yours,

Cheryl Newton, Chief
Permits and Grants Section