

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
AIR AND RADIATION

Ms. Carol E. Dinkins  
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Houston, Texas 77002-7760

Dear Ms. Dinkins:

This responds to your letter of February 26, 1991, to Henry Habicht written on behalf of your client, Golden Aluminum Company (Golden Aluminum). Golden Aluminum requests that the Environmental Protection Agency (EPA) reconsider a July 28, 1989 final prevention of significant deterioration (PSD) applicability determination and a July 20, 1990 clarification issued by EPA Region VI regarding a used-aluminum, beverage-can recycling and rolling mill facility in San Antonio, Texas. In those determinations, Region VI concluded that at least part of the San Antonio plant constitutes a secondary metals production facility within the meaning of section 169(l) of the Clean Air Act (CAA). This is significant because secondary metals production facilities are subject to a 100 ton per year (tpy) PSD applicability threshold, whereas a rolling mill is subject to a 250 tpy threshold. As discussed further below, because nothing in Golden Aluminum's reconsideration request alters the information already considered by EPA Region VI, we decline to reconsider those findings.

Golden Aluminum further requests that EPA issue a national policy which generally defines this sort of facility as a rolling mill (as opposed to a secondary metals facility) on the premise that in the San Antonio plant design, for example, the "melting of [used] aluminum is incidental to the process." Golden Aluminum makes this request in order to avoid the PSD preconstruction review process for several new plants that are anticipated to be built across the United States. In Golden Aluminum's view, the length of the PSD permitting process, and in particular the pre-construction monitoring requirements, severely impedes their ability to construct and begin operation of these plants in a timely manner. Golden Aluminum believes such a policy is justified because the proposed plants' inherent resource-recovery attributes and energy-efficient design are consistent with EPA's broader pollution prevention policy.

The EPA is committed to the goals of pollution prevention and resource preservation and is continually searching for ways to encourage projects in the private sector which further these goals. However, there will be occasions when a project, while laudable as a pollution prevention initiative, is nevertheless subject to environmental statutes. This is the situation here, under the PSD provisions of the CAA (Title I, Part C), where a proposed new source that has the potential to emit a "major" amount of any one of several air pollutants (taking into account pollution control equipment or federally-enforceable operating restrictions that reduce its potential emissions) will be subject to new source review (NSR). In this regard, an analog exists in new electric generating plants that choose to utilize emerging coal gasification technology. With this new technology, sulfur dioxide reductions of 99 percent and exhaust stream concentrations of 10 parts per million nitrogen oxides are achievable, and solid waste may be reduced to 1 percent of that generated by conventional flue gas emission control technology. Nevertheless, if potential annual emissions of any pollutant regulated by the CAA from such a new source exceed 100 tpy, those emissions would be subject to NSR requirements. While EPA applauds and encourages industry pollution prevention efforts and is committed to ensuring that regulatory burdens are minimized, EPA must also ensure compliance with all applicable statutes and regulations.

Due to the many variables that affect the character and, therefore, the classification of a facility such as the one proposed by Golden Aluminum, we maintain that the local permitting authority, which in the case of the San Antonio plant was EPA Region VI, is the proper agency to decide the status of such facilities on a case-by-case basis. [You probably recognize that EPA Region VI formally issues permits for Texas because that State has only partial delegation of the PSD program.] Since you indicate that Golden Aluminum intends to build additional plants similar to the one in San Antonio, we have enclosed a paper discussing a few basic principles that we would expect a permitting authority to consider in their applicability determination. Also discussed are PSD requirements as they may apply, should any of those facilities be subject to review. As you will see, we cannot agree that the PSD requirements will prove as burdensome or time consuming as you suggest. Rather, Golden Aluminum should be able to satisfy the requirements of the CAA without incurring significant additional costs or facing undue delays.

We hope this letter explains our position with respect to EPA Region VI's final determination regarding the classification of Golden Aluminum's San Antonio plant. As for Golden Aluminum's future plants, I have asked the technical staff of EPA's New Source Review Section (NSRS) to help facilitate the reviews of the permit applications to the extent

practicable, given limited resources. Because this letter may be helpful in the preparation and review of future permit applications, it will be distributed among the EPA's Regional NSR staffs to provide background for future determinations. Mr. Dennis Crumpler of the NSRS can answer any technical questions you may have regarding this letter. He can be reached at (919) 541-0871.

I appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

William G. Rosenberg  
Assistant Administrator  
for Air and Radiation

Enclosure

## DISCUSSION

### Source classification: Secondary Metals Production Facility vs. Rolling Mill

The applicable NSR regulations, statutory provisions, and other applicability determinations provide the analytical construct for deciding whether a proposed facility constitutes a secondary metals production facility or a rolling mill. "Stationary source" is defined at 40 CFR Part 52.21(b)(5) and 51.166(b)(5) as "any building, structure, facility, or

installation which emits or may emit any air pollutant . . . . 11

"Building, structure, facility, or installation" is defined in subparagraph (b)(6) of those same parts as "all of the pollutant emitting activities which belong to the same industrial grouping, to These definitions require the permitting authority to focus first on the origin of the emissions.

The permitting authority next looks to the facility's industrial grouping as determined from the two-digit code in the Standard Industrial Classification (SIC) Manual. The preamble to the August 7, 1980 rulemaking, which promulgated the definitions governing source classification, noted that when a collection of pollution-generating activities is represented by two or more two-digit SIC codes, the primary activity of the proposed facility governs which two-digit SIC code applies. The primary activity is determined by the product or group of products produced or distributed, or services rendered by the proposed source. Secondary metal production facilities and rolling mills, however, fall into the same two-digit SIC code. Consequently, the primary activity criterion in this case is not necessarily conclusive. This is particularly true since Congress, by naming secondary metals production facilities among other industries in section 169(l) that are subject to the 100 tpy threshold, specifically intended that these types of sources be given careful scrutiny under PSD.

Third, the actual industrial process or processes that are utilized, including raw materials, feedstock, process steps, and intermediate products are significant factors in a source's classification. The SIC Manual characterizes "Secondary Smelting and Refining of Nonferrous Metals" as "Establishments primarily engaged in recovering nonferrous metals and alloys from new and used scrap and dross . . . . 11 The McGraw-Hill Encyclopedia of Science and Technology also states that secondary aluminum producers reclaim the metal from scrap. The EPA's Compilation of Air Pollution Emission Factors, fourth edition, AP-42, and Supplements, give a description of secondary aluminum production which includes drying the scrap, burning off organic and other volatile residues such as paint or oil, melting, salt fluxing to separate other metals and oxide impurities, degassing, and filtering. A classical secondary aluminum process

concludes by casting recovered aluminum into ingots or blocks for sale and/or distribution. Under traditional industry practices, separate facilities produce rolled, drawn, or extruded aluminum from ingot and block.

### Golden Aluminum's Proposed Plant Design

The plant design proposed by Golden Aluminum combines the attributes of a "secondary smelting" plant with a flat rolling plant (SIC codes 3341 and 3353). Because of this, a traditional secondary smelter and Golden Aluminum's plant have numerous process steps in common. Indeed, Golden Aluminum's process for preparing the aluminum from used beverage cans is summarized in its promotional brochure for the Ft. Lupton Rolling Mill (which was provided to EPA prior to the final EPA Region VI determination regarding the San Antonio Plant). The brochure's description of the recovery and preparation of the aluminum for rolling is almost identical to that of conventional secondary smelting facilities. Used beverage cans are shredded, cleaned in a burn-off oven, then melted. Flux is added to enable the removal of impurities, alloying elements are added, and the molten alloy is degassed and filtered. The melt is then cast into a continuous sheet as opposed to ingots or blocks, which is the step where Golden Aluminum's process diverges from the conventional processes that cast the recovered aluminum into ingot or block.

The EPA's determination with regard to the San Antonio plant should not set binding precedent for the additional facilities that Golden Aluminum plans. As was suggested by the preamble to the August 7, 1980 promulgation of the PSD regulations [see 45 FR 52695], the variability of the relevant factors may directly affect the classification of sources such as the ones proposed by Golden Aluminum. If, for example, the plant could only use ingot or block from primary or secondary aluminum producers as feedstock, which require less purification than aluminum scrap, it would likely be a rolling mill. On the other hand, if a plant that recovers aluminum from scrap and produces roll stock has incorporated the capacity to produce ingot and block for sale or distribution when market conditions were favorable, the source classification would be most likely a secondary metals plant. That same plant might choose to purchase ingot or block to produce roll stock, if the market price is favorable, as opposed to producing its own feedstock. For these reasons, EPA prefers to continue to allow the authorized permitting agency to evaluate proposed facilities and the specific conditions under which they are proposing to operate on a case-by-case basis.

## PSD REQUIREMENTS

As mentioned earlier, authorized permitting agencies are required to determine whether a new proposed source or modification to an existing one will be major and, thus, subject to PSD review. Golden Aluminum has claimed that subjecting their facilities to the PSD permitting process would be "unjustifiably time consuming and costly." We are not convinced that this is the case. With regard to the application of best available control technology (BACT), the inherent cleanliness of Golden Aluminum's process, as well as the proposed control technology, may in fact represent BACT (as has been claimed by Golden Aluminum). We hasten to add, however, that the BACT determination proposed by the source would be reviewed as usual by the permitting authority.

The PSD provisions for preconstruction monitoring, which is of particular concern of Golden Aluminum, is not likely to delay Golden Aluminum significantly. First, if either the predicted ambient impact (i.e. the highest modeled concentration for the applicable averaging time caused by the proposed emissions increase) or the existing ambient pollutant concentrations are less than the prescribed significant monitoring value, the permitting agency may exempt an applicant from the monitoring requirement altogether [see 40 CFR 51.166(i)(8)(i)]. Second, where there is valid existing monitoring data, the permitting authority may allow the use of these data in lieu of new studies [see 40 CFR 51.166(m)(1)(iv)]. This flexibility has resulted in some 85 percent of all PSD sources being able to satisfy the preconstruction monitoring requirement without having to actually perform the monitoring.

If monitoring is required, as few as 4 months of data may be used if the source can make a satisfactory demonstration that the necessary air quality data will be obtained during a time period or periods when maximum ambient concentrations can be expected. If the plant were determined to be a major or significant source for volatile organic compounds, the preconstruction monitoring requirements could be met by satisfying all conditions of section IV of EPA's Emission Offset Interpretative Ruling (40 CFR Part 51, Appendix S) and performing post-construction monitoring.