



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 Broadway
New York, NY 10007-1866

March 9, 2009

Mr. Robert Lenney
Environmental Health and Safety Modernization Manager
Alcoa Massena Modernization Project
Park Avenue East, PO Box 150
Massena, New York 13662

Re: Alcoa Massena Modernization Project
Request for a Single Source Determination

Dear Mr. Lenney:

This is in response to Alcoa Inc.'s October 20, 2008 request for a single source determination and PSD nonapplicability determination for the Massena East and Massena West Plants whose individual property lines are separated by approximately 3.4 miles in Massena, New York. This request was augmented by a subsequent submittal dated December 2, 2008. For the reasons noted below, EPA has determined that the Massena East and West Plants can be considered a single source for purposes of PSD/NSR applicability. The issues pertaining to your PSD nonapplicability request will be addressed in a separate letter.

Background

Alcoa is proposing to modernize their Massena East and Massena West aluminum smelter facilities located in New York. The East and West Plant have historically been managed as two distinct and separate operating entities. The West Plant has always been owned and operated by Alcoa Inc. The East Plant was previously owned and operated by the former Reynolds Metals Company. In 2000, Alcoa Inc. acquired the Reynolds Metals Company, now a wholly-owned subsidiary of Alcoa Inc. The improvements for the proposed modernization include:

- 1) ***At Massena East*** --- replacing the Soderberg potline with a modern technology pre-bake potline. Among the physical changes include the shutdown and removal of the following: the anode pin room, the carbon plant, the cathode digging, and three alumina/coke conveyance units. New units to be constructed include an anode cooling process, a new cruce augering, four new bath filling areas, a bath storage silo transfer point, and an aluminum fluoride filling area. No changes will be made to the existing boilers at the East Plant. Under this proposed modernization project some existing units will be "debottlenecked."

- 2) *At Massena West* --- increasing the throughput of the anode manufacturing facility to supply the needs of the new potline at Massena East as well as the existing potline at Massena West. Also, the Massena West Plant will be adding metal processing capacity to facilitate the processing of the new additional metal production from both the East and West smelters. Among the physical changes include the removal of three existing homogenized heat treat furnaces. Units to be constructed include 7 new homogenized heat treat furnaces, 3 new molten aluminum melting and holding furnaces, 3 new in-line filterbox fluxing units. Under this proposed modernization project some existing units will also be “debottlenecked.” There will be no changes made to the existing boilers at the West Plant except for an increase in load demand (debottlenecked). The annual aluminum production at the West Plant will increase from an average of 141,998 tons/year to 160,040 tons/year.

The Massena West Plant is located adjacent to the Massena Power Canal in the Village of Massena. The Massena East Plant property line is located approximately 3.4 miles east of the Massena West Plant property line in Rooseveltown. Alcoa has indicated that after the company purchased the East Plant in 2000 its efforts focused on increasing the synergies between the two plants to create one Alcoa facility in Massena, NY. According to Alcoa, after the proposed modernization is completed, they will be shipping intermediate baked anode products and bath from the West Plant to the East Plant at a rate of approximately 72 trucks per day and they will also be shipping hot metal from the East Plant to the West Plant at a rate of approximately 50 hot crucible trucks per day. Furthermore, Alcoa also states that the operations manager is responsible for both facilities, as are most of the other support departments, including the environmental health and safety, accounting, purchasing, information technology, human resources, and security departments. In addition, according to Alcoa, the employees of these departments will be travelling between the two plants to perform their jobs. Therefore, Alcoa is requesting that, for the purpose of PSD applicability assessment, the East and West Plants be viewed as a single source following the modernization project.

Discussion

The federal definitions under 40 CFR 52.21 apply. 40 CFR Part 52.21(b)(5) defines a stationary source as:

...any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act.

Furthermore, 40 CFR Part 52.21(b)(6) defines a building, structure, facility or installation, in pertinent part, as:

...all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are

under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” (i.e., which have the same first two digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement....

Common Control

Because both the Massena East Plant and the Massena West Plant are owned and managed by Alcoa Inc., and share the same plant management team and departmental personnel, these two facilities are under common control.

Industrial Grouping

Both the East and West Plants are under the same industrial grouping with a Standard Industrial Classification code of 3334 – Primary Aluminum.

Contiguous/Adjacent Location

Over the years, EPA has issued guidance in a number of cases regarding the question of whether two facilities should be considered contiguous or adjacent. There is no bright line, numerical standard for determining how far apart activities may be and still be considered “contiguous” or “adjacent.” As explained in the preamble to the August 7, 1980 PSD rules, such a decision must be made on a case-by-case basis. Moreover, in further explaining this factor, EPA has noted that whether or not two facilities are adjacent depends on the “common sense” notion of a source and the functional inter-relationship of the facilities and is not simply a matter of the physical distance between the two facilities. However, the physical distance between two facilities is obviously a factor to be considered in deciding whether the two are close enough to be considered one source in a given situation.

Although there is no clear physical connection via a pipeline or dedicated conveyance between the East and West Plants, their property lines are separated by approximately 3.4 miles. This distance is consistent with previous Agency single source determinations where additional factors were present suggesting that the plants were contiguous or adjacent. In this case, the proposed operation after the modernization, as described by Alcoa, will involve considerable trucking of materials between the two plants and sharing of personnel. In addition, Alcoa has indicated that their intention since purchasing the second plant has been to focus on increasing the synergies between the two plants to create one Alcoa facility in Massena, NY. Therefore, there appears to be a functional inter-relationship between the two plants’ operations.

In this particular case, EPA has weighed the information before it and concluded that, given the totality of the circumstances, the two facilities should be considered contiguous or adjacent for purposes of PSD/NSR. Note that no single factor leads us to this conclusion and EPA retains all of its enforcement authorities under the Clean Air Act if

Alcoa's operates in a manner different from what has been represented to the Agency.

Conclusion

Based on all of the above factors, we have concluded that Alcoa Inc.'s Massena East Plant and Massena West Plant do meet the "common sense" notion of a single source and that they should be treated as one facility for purposes of PSD and NSR applicability determination. This letter is not a final agency action on the part of EPA.

If you have any questions, please call me at (212) 637-4074 or Mr. Frank Jon, of my staff, at (212) 637-4085.

Sincerely yours,

/ s /

Steven C. Riva, Chief
Permitting Section
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