



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
MC 61-53  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

TO: Interested Parties / Applicant  
DATE: January 11, 2007  
RE: Alcoa Warrick Operations / 173-25797-00007  
FROM: Matthew Stuckey, Deputy Branch Chief  
Permits Branch  
Office of Air Quality

### Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER-AM.dot12/3/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

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Samuel H. Bruntz  
ALCOA - Warrick Operations  
Bldg. 860E, P.O. Box 10  
Newburgh, IN 47629-0010

January 11, 2008

Re: 173-25797-00007  
Exemption  
Part 70 Operating Permit No. 173-6627-00007

Dear Mr. Bruntz:

ALCOA - Warrick Operations was issued Part 70 Operating Permit No. 173-6627-00007 on January 5, 2007 for a stationary aluminum production plant. A letter requesting a determination for a lubricant formulation change was received on December 27, 2007.

According to information provided in your request, the C18 fatty acid component of the lubricant system for cold rolling mills #2 and #4 is being replaced by a C12 fatty acid, which is more easily recovered in the distillation process and is believed to have a much lower distillation bottoms loss than the C18 component.

Based on the data submitted and the provisions of 326 IAC 2-1.1-3, it has been determined that the proposed change in lubricant formulation is exempt from air pollution permit requirements. This process is not specifically regulated; therefore, no change will be made to Part 70 Operating Permit No. 173-6627-00007. All other conditions of the permit shall remain unchanged and in effect. See Appendix A of this document for emission calculations.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Laura Spriggs, at (317) 233-2637, or dial (800) 451-6027, and ask for extension 3-2637.

Sincerely,

Original Signed By:  
Matthew Stuckey, Deputy Branch Chief  
Permits Branch  
Office of Air Quality

Attachments: Appendix A  
LSS

cc: File – Warrick  
U.S. EPA, Region V  
Warrick County Health Department  
IDEM Southwest Regional Office  
Air Compliance Section Inspector - Dick Sekula

**Appendix A: Emissions Calculations**  
**Formulation Change for the #2 and #4 Cold Rolling Mills Lubricant**

**Company Name:** ALCOA - Warrick Operations  
**Address, City IN Zip:** Jct. IN Hwys. 66 & SR 61, Newburgh, IN 47629-0010  
**Exemption Number:** 173-25797-00007  
**Reviewer:** Laura Spriggs  
**Date:** January 3, 2008

Maximum Daily Throughput of C12 Fatty Acid Component (lb/day)
3750

	Pollutant	
	PM/PM <sub>10</sub>	VOC
Emission Factor* (lb/ton)	2	8.34
PTE (lb/day)	3.75	15.64
PTE (lb/hr)	0.16	0.65
PTE (ton/yr)	0.68	2.85

\*Emission Factors determined as follows:

- PM/PM10: AP-42, Section 11.7, Table 4-1 lists PM emissions from mixing of raw materials and additives as 4 lb/ton. The permittee estimates that the dumping of the C12 fatty acid component will emit 2 lb/ton as is assumed for the C18 fatty acid component.
- VOC: AP-42, Section 4.7 lists VOC emissions from condenser vents associated with organic liquid distillation as ranging between 0.52 and 8.34 lb/ton. The VOC PTE is less than the 326 IAC 2-1.1-3 exemption level using the most conservative emission factor.

**Methodology:**

$PTE \text{ (lb/day)} = \text{Maximum Daily Throughput (lb/day)} * \text{Emission Factor (lb/ton)} * (1 \text{ ton}/2000 \text{ lb})$

$PTE \text{ (lb/hr)} = PTE \text{ (lb/day)} * (1 \text{ day}/24 \text{ hr})$

$PTE \text{ (ton/yr)} = PTE \text{ (lb/hr)} * (8760 \text{ hr/yr}) * (1 \text{ ton}/2000 \text{ lb})$

*Note: The above calculations represent the PTE of using the C12 fatty acid in the #2 and #4 Cold Rolling Mills lubricant and do not account for the decrease in emissions from discontinuing the use of the C18 fatty acid.*