

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Phelps Dodge Chicago Rod, Inc.
Attn: David Caskey
2324 South Kenneth
Chicago, Illinois 60623

Application No.: 06100069

I.D. No.: 031600FBZ

Applicant's Designation:

Date Received: October 27, 2006

Subject: Catalytic Oxidizer

Date Issued: January 26, 2007

Location: 2324 South Kenneth, Chicago, Cook County, 60623

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of replacement of the Polyad Resin Adsorption Control System with a catalytic oxidizer as the control system for the Rod Finishing Mill, Pickling System and IPA Recovery System (the affected units) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit authorizes the replacement of the Polyad Resin Adsorption System with a new catalytic oxidizer as the control system for the affected units.
- b. The existing control system shall not be removed from the source until emission testing has been completed demonstrating the ability of the new control system to comply with 35 Ill. Adm. Code Part 218, Subpart TT.
- 2a.
 - i. Total VOM emissions from the affected units after the change in control system shall not exceed 9.0 pounds/hour and 39.5 tons/year.
 - ii. This permit is issued based on no change in the emission units being controlled and a less than significant increase in emissions of VOM due to the change in control system.
- b. This permit is issued based on negligible emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) attributable to combustion in the catalytic oxidizer. For this purpose, emissions of each pollutant shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 3a. This permit does not relax or revise applicable emission standards, recordkeeping, or reporting for the affected units as contained in the CAAPP Permit. In particular, the Permittee shall continue to comply the applicable requirements of 35 Ill. Adm. Code Part 218 Subpart TT.

- b. At all times, the Permittee shall, to the extent practicable, maintain and operate the affected units and the new catalytic oxidizer in a manner consistent with good air pollution control practice for minimizing emissions.
- 4a. Within one year of initial startup of the catalytic oxidizer, the Permittee shall have tests conducted at its expense to measure VOM emissions and VOM destruction efficiency of the catalytic oxidizer to demonstrate compliance with applicable capture and control efficiency requirements. During testing, the affected units shall be operated at representative operating conditions and flow rates.
- b. The appropriate USEPA reference methods and procedures shall be used for testing of emissions, as further specified in 35 IAC 218.105(d) and (f): Refer to 40 CFR 60, Appendix A, for USEPA test methods.

Location of Sample Points:	USEPA Method 1
Gas Flow and Velocity:	USEPA Method 2
Flue Gas Weight:	USEPA Method 3
Moisture:	USEPA Method 4
Volatile Organic Material:	USEPA Method 18

- c. At least 30 days prior to the actual date of testing, a written test plan shall be submitted to the Compliance Section of the Division of Air Pollution Control for review. This plan shall describe the specific procedures for testing, including as a minimum:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
 - iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.
 - iv. The test method(s), which will be used, with the specific analysis method, if the method can be used with different analysis methods.
 - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- d. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept

notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

- e. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:
 - i. A summary of results.
 - ii. General information.
 - iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - iv. Detailed description of test conditions, including:
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
 - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
5. Pursuant to 35 IAC 218.105 (d) (2), the catalytic oxidizer shall be equipped with continuous monitoring device(s) which are installed, calibrated, operated and maintained according to vendor specifications at all times the catalytic oxidizer is in use. The monitoring device(s) shall monitor and record inlet temperature (the temperature of the exhaust before entering the catalyst bed) and the temperature rise across the catalyst bed.
6. This permit does not revise or relax the recordkeeping requirements in the CAAPP Permit except to allow the use of the catalytic oxidizer in lieu of the Polyad Resin Adsorption System.
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
9. Two copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811

Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

Telephone: 847/294-4000

Facsimile: 847/294-4018

10. The Permittee is allowed to operate the affected units with the new catalytic oxidizer as the control system under this construction permit until a new operating permit is issued for the source that addresses this change.

If you have any questions on this, please call Kevin Hecht at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

ECB:KTH:psj

cc: Region 1