



State of New Jersey

Department of Environmental Protection

Bureau of Air Quality Engineering
401 East State - 2nd Floor
CN-027
Trenton, NJ 08625-0027

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL

Mr. Robert DeCicco, Manager
Safety, Health and Environmental Programs
Johnson Matthey, Inc.
2001 Nolte Drive
West Deptford, NJ 08066

REFERENCE: Facility-Specific Emission Limit for
Nitrogen Oxides (NOx)
Pursuant to N.J.A.C. 7:27-19.13

COMPANY NAME: Johnson Matthey Incorporated

PLANT LOCATION: 2001 Nolte Drive
West Deptford (Gloucester County), NJ

APC PLANT ID NUMBER: 55270

STACK DESIGNATION: Plant Stack 001

SOURCE DESCRIPTION: Multi-Chamber Recovery Furnace, used in the
recovery of precious metals from spent
catalysts and other precious metals
containing materials.

APPROVAL DATE: 6/13/95

Dear Mr. DeCicco:

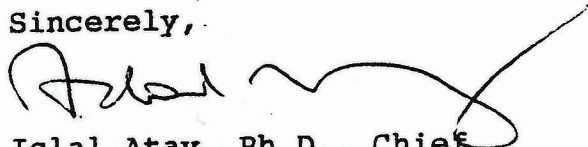
On the basis of all the information available to the New Jersey
Department of Environmental Protection (the Department) with
reference to the application for a facility-specific emission limit
for nitrogen oxides (NOx), which was submitted on October 6, 1994,
the Department has determined that the proposed facility-specific
emission limit satisfies the requirements of the New Jersey Air
Pollution Control Regulations codified at N.J.A.C. 7:27-19.13.
Accordingly, the Department approves this facility-specific NOx
emission limit with the conditions specified in Attachment 1.

Compliance with this facility-specific NOx emission limit will satisfy the requirements of N.J.A.C. 7:27-19 by Johnson Matthey Incorporated for the multi-chamber recovery furnace.

If, in your judgement as an applicant for a facility-specific NOx emission limit, the Department is imposing any unreasonable condition of approval, you may appeal the Department's decision and request a contested case hearing pursuant to the Administrative Procedures Act, N.J.S.A. 52:14b-1 et. seq. and the New Jersey Administrative Code at N.J.A.C. 1:1 and 7:27-8.12. All requests for a contested case hearing must be received in writing by the Department within 20 calendar days of the date you receive this approval letter and must contain the information specified in Attachment 2 (Administrative Hearing Request Form for Permit Actions).

If you have any questions, please call Mr. Carroll Sawyer at (609) 633-1124.

Sincerely,



Iclal Atay, Ph.D., Chief
Bureau of Air Quality Engineering

- c: W. O'Sullivan, Administrator
- D. Patterson, Assistant Director, Enforcement
- J. Preczewski, Chief, BTS
- E. Choromanski, REO, Southern Office
- Y. Doshi, Supervisor
- C. Sawyer, Project Manager

ATTACHMENT 1

CONDITIONS OF APPROVAL

FACILITY-SPECIFIC EMISSION LIMIT FOR NO_x

JOHNSON MATTHEY INCORPORATED

2001 NOLTE DRIVE

WEST DEPTFORD (GLOUCESTER COUNTY), NJ

FOR

MULTI-CHAMBER RECOVERY FURNACE

EQUIPPED WITH LOW NO_x BURNERS

USING NATURAL GAS FUEL

APC PLANT ID NO. 55270

APPROVAL DATE: 6/13/95

TABLE OF CONTENTS

I. DEFINITIONS

II. CONDITIONS OF APPROVAL

- A. Source Description
- B. Air Pollution Control Equipment
- C. NOx Emission Limit
- D. Operating Requirements
- E. Stack Emissions Testing
- F. Monitoring, Recording and Recordkeeping
- G. Revision of State Implementation Plan
- H. Modification of Facility-Specific NOx Emission Limit

I. DEFINITIONS:

The Department: New Jersey Department of Environmental Protection

BAQE: Bureau of Air Quality Engineering
NJ Department of Environmental Protection
CN-027
Trenton, NJ 08625-0027
(609) 984-3023

BTS: Bureau of Technical Services
NJ Department of Environmental Protection
CN-411
Trenton, New Jersey 08625
(609) 530-4041

Regional Enforcement Office:

SRO: Southern Regional Air Pollution Control Office
NJ Department of Environmental Protection
Bureau of Enforcement Operations
20 East Clementon Road/Suite 302N
Gibbsboro, NJ 08026
(609) 346-8071

II. CONDITIONS OF APPROVAL

A. SOURCE DESCRIPTION

Existing facilities used for the recovery of precious metals from spent catalysts include an existing three-chamber recovery furnace system consisting of the following:

Primary Chamber

Seven original gas fired batch loaded and intermittently operated single chamber combustion furnaces, plus an eighth furnace that was permitted on September 2, 1993 (Reference Log No. 01-92-3165). The eighth furnace is a Joy Energy Systems Model 300Ei/249 gas fired dual chamber batch furnace, known as the Rich Paper Recovery batch furnace.

Secondary Chamber

Flue gases from each of the eight batch furnaces discharge into a common secondary chamber, fired with two natural gas burners, each with a nominal heat rate of 8 million Btu/hr.

Tertiary Chamber

Gases from the secondary chamber discharge into a tertiary chamber, fired with a natural gas burner with a nominal heat rate of 8 million Btu/hr.

B. AIR POLLUTION CONTROL EQUIPMENT

1. The tertiary chamber of the APC recovery furnace system provides a minimum of 1.4 seconds residence time at a minimum temperature of 1600°F.
2. New Low NOx burners are being installed to replace conventional burners in the secondary and tertiary chambers of the recovery furnace system. In accordance with the permit (reference Log No. 01-94-4060) that was issued on February 17, 1995, the low NOx burners shall be installed and operational on or before May 31, 1995.

C. NOx EMISSION LIMIT

Effective May 31, 1995 the emission rate of nitrogen oxides (NOx) from the tertiary chamber of the three-chamber recovery furnace system shall not exceed 7.1 pounds per hour, based on the average of three 1-hour stack emissions tests, conducted in accordance with the protocol approved pursuant to condition E.1 below.