



State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL

Mr. Louis F. Hagan, Jr.
Vice President of Operations
New Jersey Steel Corporation
North Crossman Road
Post Office Box 96
Sayreville, N.J. 08871-0096

September 3, 1997

Subject: Facility Specific NO_x-RACT Plan
Source: Electric-Arc-Furnace/Melt-Shop And Billet Reheat Furnace
Plant Location: North Crossman Road, Sayreville, N.J.
APC Plant ID No.: 15076
Approval Date: September 3, 1997

Dear Mr. Hagan:

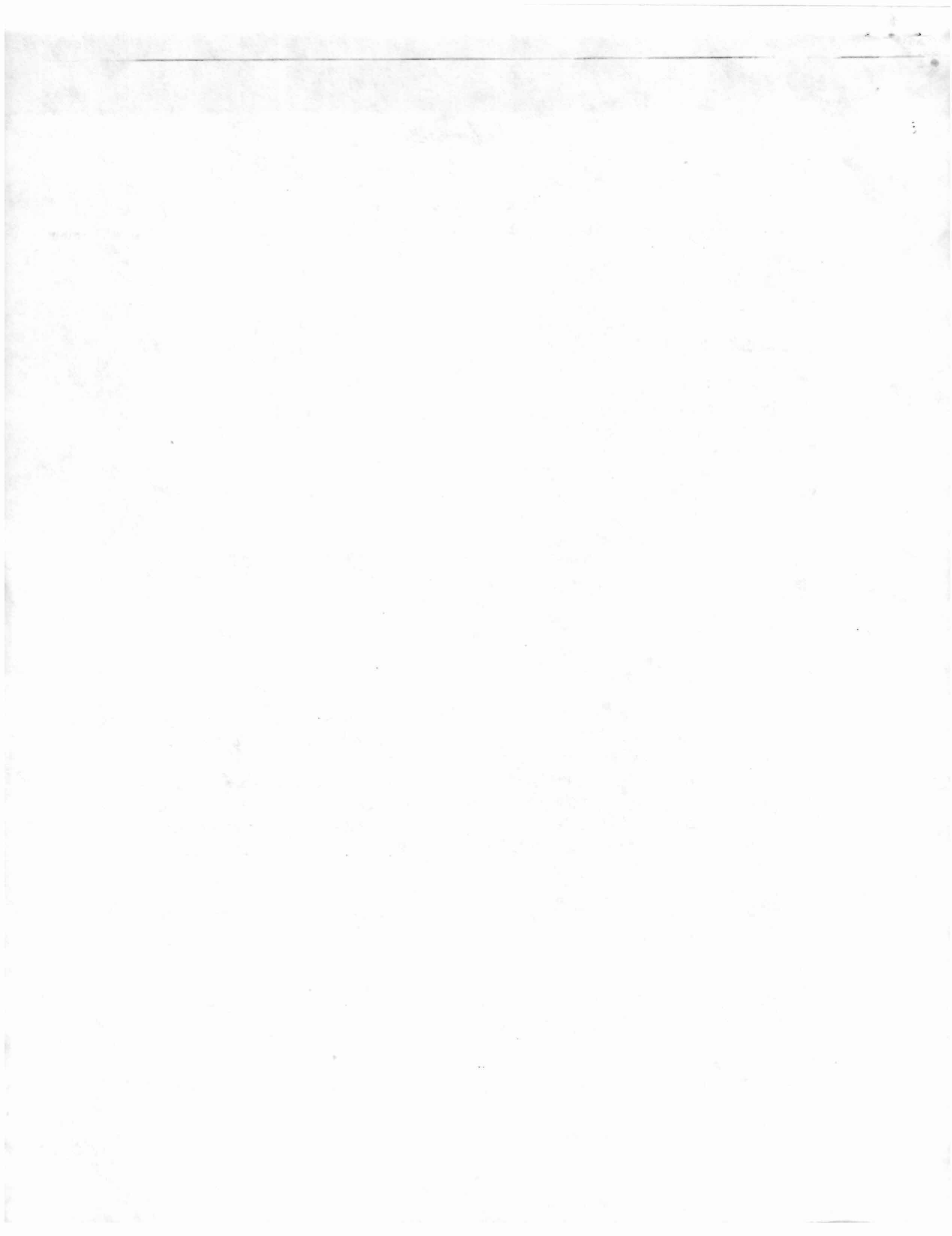
Based on the Facility-Specific NO_x-RACT plan, for the Electric-Arc-Furnace/Melt-Shop and the Billet Reheat Furnace located at the steel bar manufacturing facility at Sayreville, submitted on May 17, 1996 to the New Jersey Department of Environmental Protection (the Department) pursuant to N.J.A.C. 7:27-19.13, the Department has determined that the proposed NO_x control plan is the NO_x-RACT for the facility and satisfies the requirements of the New Jersey Air Pollution Regulations codified at N.J.A.C. 7:27-19.13. Accordingly, the Department approves the plan subjected to the requirement of EPA approval of the revised S.I.P. and the attached conditions.

Compliance with this NO_x Control Plan, effective immediately, will satisfy the requirements of N.J.A.C. 7:27-19.

Sincerely,


Louis Mikolajczyk, Chief
Bureau of New Source Review

Attachment
cc: CRO



ATTACHMENT

Control Plan for Nitrogen Oxides (NO_x)

Permittee: New Jersey Steel Corporation

Location: Sayreville, N.J.

BNSR Log Number:

**Source Designation: U0002 Melt-Shop/Electric-Arc-Furnace (EAF) &
U0003 Billet Reheat Furnace (BRF)**

APC Plant ID No.: 15076

DEFINITIONS:

The Department: New Jersey Department of Environmental Protection

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

Regional Enforcement Office: Central Regional Air Pollution Control Office
NJ Dept. Of Environmental Protection
Horizon Center
Robbinsville, N.J. 08026
Mailing Address: CN 407, Trenton, N.J. 08625-0407
Phone: (609) 584-4100

CONDITIONS OF APPROVAL

A. CONTROL STRATEGY

1. Melt-Shop/Electric-Arc-Furnace (EAF) And Billet Reheat Furnace:

When permitted based on the current PSD permit applications (BNSR Log Nos. 01-96-0908 and 01-96-2386), the Permittee shall adhere to all the conditions in the new PSD permit for the melt-shop/electric-arc-furnace with baghouse and the Billet Reheat Furnace.

2. Billet Reheat Furnace (BRF)

- a. The existing four pairs of North American Twinbed burners at the Charge zone of the BRF will be retrofitted with Staged Fuel Injection (SFI) low-NO_x burners.
- b. The Permittee shall annually adjust the combustion process of the furnace in each calendar year according to N.J.A.C. 7:27-19.16.



B. NO_x EMISSION LIMIT

1. Effective September 3, 1997, the emission rate of nitrogen oxides (NO_x) from the melt-shop/electric-arc-furnace baghouse stack shall not exceed 168 tons per year as measured by CEMS.
2. Effective September 3, 1997, the emission rate of nitrogen oxides (NO_x) from the BRF shall not exceed 169.5 tons per year or 0.27 lb-NO_x/MMBTU as verified by annual stack testing.

C. LIMITS OF OPERATION

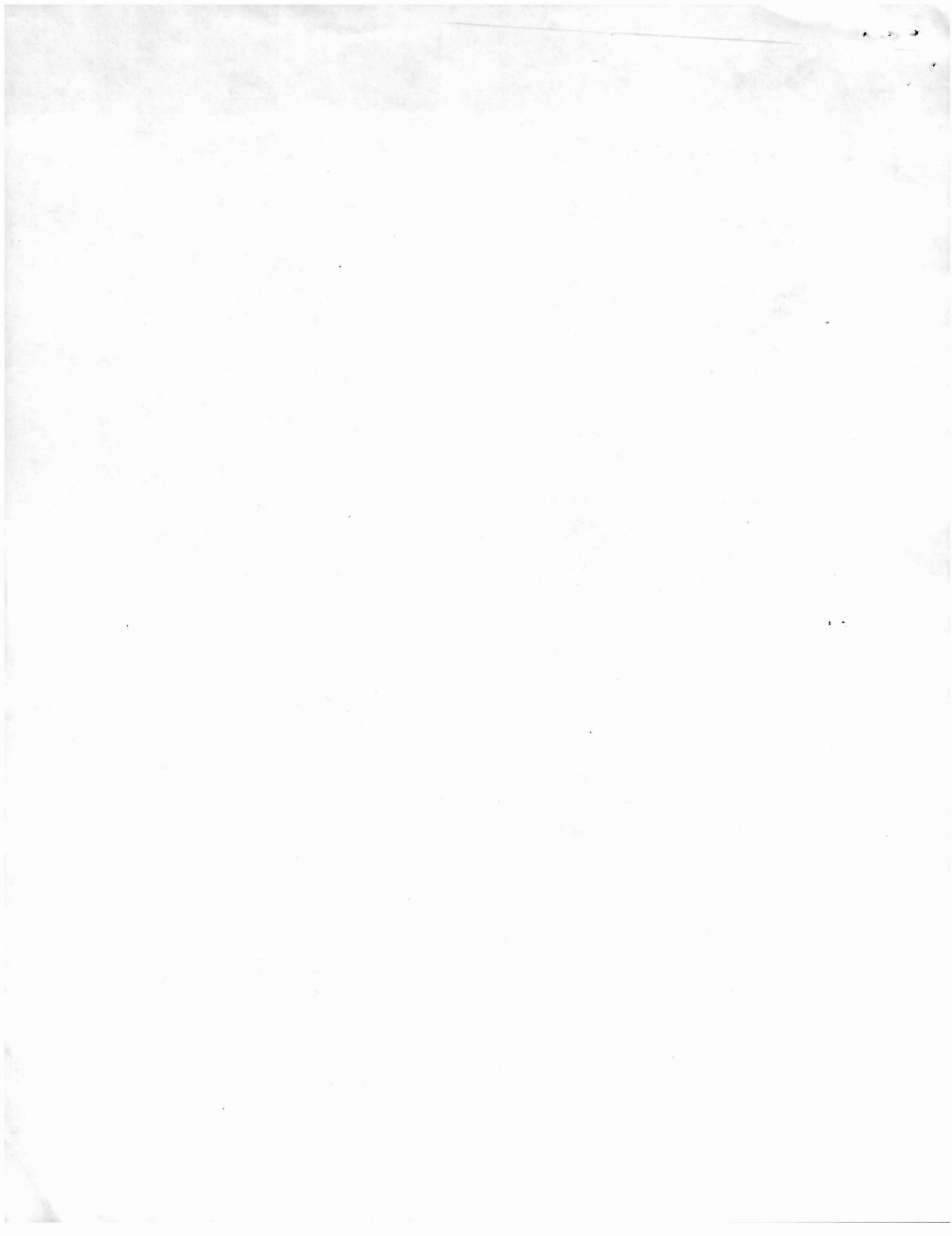
1. The maximum short term production rate of the EAF Melt Shop is limited to 3,000 billet tons per day. The maximum annual production rate of the EAF Melt Shop is limited to 800,000 billet tons per year.
2. All the burners of the Billet Reheat Furnace will use natural gas as the primary fuel. No. 2 fuel oil is a standby fuel to be used only during natural gas curtailment to a maximum of 1000 hours of operation in any one calendar year. The consumption of natural gas is limited to the rate of 3.444 MMSCF/Day and 1,257 MMSCF/Year assuming 8760 hours of operation. The annual consumption of No. 2 fuel oil is limited to 1,025,000 Gallon/Year.

D. SOURCE EMISSION TESTING

1. The baghouse stack for the melt shop has a Continuous Emission Monitoring System (CEMS) for nitrogen oxides (NO_x). The CEMS is equipped with data logger and integrator to obtain hourly and annual emission rates.
2. After the PSD permits are approved, initial performance stack tests will be conducted in accordance with N.J.A.C. 7:27-19.17 for both the stacks using protocols approved in advance by the Department.
3. Annual stack testing will be conducted to determine NO_x emission rates from the PT0301 Billet Reheat Furnace stack.

E. RECORD KEEPING

1. The permittee shall record the operating hours of the Electric Arc Furnace for which the NO_x emission rate exceeds the primary emission limits set forth in the PSD permit condition to be issued
2. The Permittee shall record the amounts of natural gas and #2 fuel burned in the Billet Reheat Furnace. The Permittee shall record the hours of operation using #2 fuel oil in the Billet Reheat Furnace.



3. Records and log books shall be maintained on site for a period of 5 years, and shall be made available during normal working hours for review by the Department upon request.

F. REVISION OF STATE IMPLEMENTATION PLAN (SIP)

A revision to the State Implementation Plan (SIP) for ozone to include this NO_x Control Plan will be submitted to EPA for approval. EPA will review the NO_x control plan, propose action on the SIP revision and finalize its action after public comment. Disapproval of the SIP revision by the EPA will cause the approval to be revoked, or may result in modification of the control plan.

G. MODIFICATION OF NO_x CONTROL PLAN

Approval of an amended NO_x Control Plan will be required by the Department before any alterations may be made to the affected sources that will cause the NO_x emission rate to increase.

