

# PROJECT CONTROL DOCUMENT – TRP 9760

**PROJECT TITLE:** Recycling of Waste Oxides in Steelmaking Furnaces

**PROJECT DESCRIPTION:** The research project has the primary objective of enhancing the direct recycle of waste oxides in oxygen steelmaking. The goal is to develop techniques to reduce slopping by examining the rate of reaction of FeO in slag and carbon in steel. Secondly, the project will examine the mechanisms of ZnO formation in the waste oxide dust to optimize the separation of ZnO during dust collection.

## PRIMARY RESEARCH ORGANIZATION(S):

Carnegie Mellon University  
Department of Materials Science and Engineering  
Pittsburgh, PA

**PRINCIPAL INVESTIGATOR:** Dr. Richard Fruehan

**PROJECT PARTICIPANTS:** CMU Center for Iron & Steelmaking Research  
(CISR)  
Bethlehem Steel  
Cleveland-Cliffs, Inc.  
Timken Company  
Weirton Steel

**PROJECT DURATION:** 32 Months

**PROJECT START - END DATE:** 4/1/98 – 1/8/01

**PROJECT BUDGET (excluding AISI Project Mgmt.):** \$366,399

**TECHNICAL PROJECT MANAGER:** Bill Obenchain – AISI Washington, DC

## KEY CONTACTS:

| <u>NAME</u>    | <u>COMPANY</u>   | <u>PHONE</u>      | <u>FAX</u>   |
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