

# PROJECT CONTROL DOCUMENT – TRP 9815

**PROJECT TITLE:** Dephosphorization When Using Direct Reduced Iron Pellets (DRI) or Hot Briquetted Iron (HBI)

**PROJECT DESCRIPTION:** The aim of the project is to reduce greenhouse gas emissions in high quality steelmaking by improving dephosphorization and increasing the use of DRI/HBI. Laboratory and in-plant testing will be conducted to better understand the phosphorous reaction when using DRI/HBI in the electric arc furnace. The goal is to develop a real-time, online process model to optimize phosphorous removal.

## PRIMARY RESEARCH ORGANIZATION(S):

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

**PRINCIPAL INVESTIGATOR(S):** Dr. Richard Fruehan

**PROJECT PARTICIPANTS:** Cleveland-Cliffs Inc.  
Ispat Mexicana, S.A.  
Center for Iron and Steelmaking Research

**PROJECT DURATION:** 30 Months

**PROJECT START - END DATE:** 5/19/99 – 10/5/01

**PROJECT BUDGET (excluding AISI Project Mgmt.):** \$323,267

**TECHNICAL PROJECT MANAGER:** W. Obenchain – AISI Washington

## KEY CONTACTS:

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