

## **RCA Case Study #8: PSEG**

Jersey City, NJ

**Undesirable Event Summary:** In a power plant Pulverizer operations are designed to feed the boiler by grinding and conveying pulverized coal with air at desired ratios in order to maintain efficient boiler combustion during steam production. Due to the highly combustible atmosphere of the system it is possible to have an explosive environment or for a fire to develop from the accumulation of these combustibles in the air chamber, grinding zone, classifier, burning lines, air inlet-duct and/or the feeder whether the Pulverizer is in operations or in an idle state.

After extinguishing three pyrites hopper fires earlier in the day, there was an explosion in the Pulverizer that resulted in the tripping of the unit and activation of the inerting gas and fogging safeguards of the Pulverizer system. The plant was put into a safe operating environment and it was determined that a formal Root Cause Analysis, facilitated by the Reliability Center, Inc., be conducted on this important incident at this time.

### **Effect on Bottom Line:**

- Elimination of all future Pulverizer explosions
- Safe and effective response to pyrites fires in Pulverizer(s)

### **Additional Comments:**

- Consulting plus labor costs of company employees: approx. \$100,000
- Findings of the analysis leveraged throughout entire corporation

### **RCA Team Statistics**

- Start Date: July/2007
- End Date: August/2007