

# **North Dakota State University Heating Plant/Boiler Equipment Railcar/Railroad Track Safety**

## **I. Introduction**

With a railroad track running through parts of the NDSU campus, employees are exposed to the hazards of a railroad crossing. By learning and following safe practices, we learn to help prevent injury.

## **II. Purpose**

To ensure all employees know the correct and safe procedures for operating and maintaining equipment in the Heating Plant.

## **III. Goals**

To reduce the risk of potential work related injuries associated with Heating Plant operations and maintenance.

## **IV. Procedure**

### **1. Railcar/Railroad Track Safety**

- a. Maintain awareness for presence of railroad cars/trains at all railroad intersections.
- b. Stop, look and listen for trains at all crossings if barriers, lights, or warnings are not present.
- c. Never drive around lowered gates or barriers, it's illegal and deadly.
- d. Never race a train to a crossing.
- e. Do not stop your vehicle on a railroad crossing.
- f. Get out of your vehicle immediately if it stalls on a crossing. Call local law enforcement for assistance.
- g. Watch for a second train when crossing multiple tracks.
- h. As a pedestrian, never walk, run or cycle on railroad tracks – it's trespassing and illegal.
- i. If you work with railroad cars or are in the area where railroad cars are used or moved, use the buddy system to perform your job. Let your presence be known.
- j. While working with rail cars, allow the trained railroad personnel to manage or assist whenever possible.
- k. During loading or unloading operations, railroad car wheel stops or other recognized positive protection shall be provided to prevent cars from moving. (OSHA 1910.178(k)(2))

### **2. Incinerator (Heating Plant)**

- a. PPE - personal protective equipment is mandatory while cleaning the incinerator.

This shall include, but is not limited to:

Goggles  
Hat

Face Mask  
Coveralls

Respirator  
Gloves

- b. NDSU's *Safe Operating Procedures - Lockout/Tagout and Confined Spaces* shall be the guidelines followed when inspecting, cleaning, or repairing an incinerator.
- c. Thoroughly clean ashes from primary chamber semi-annually or as required.
- d. Inspect primary chamber making sure all air inlets and smoke passages are free of debris and interior is in good condition.
- e. Wind direction and speed must be monitored prior to and during operation.
- f. Lock charging door and ash door when unit is not in use.
- g. After last firing, allow unit to cool before cleaning - this may be several days or weeks - for a complete cooling. Contact the supervisor for further instructions.
- h. Do not quick cool with water.
- i. Leave unit to cool before shutting off electrical power unit.
- j. **CAUTION** - Do not strike refractory with cleaning tools - this will cause the internal chamber to deteriorate quicker.
- k. Shovel burned debris out the ash cleaning door.
- l. Clean the unit with shovel and broom or with automatic cleaning equipment.
- m. If using the hoist to lift loads of ash out the trap door:
  - 1. check all chains and cable prior to use
  - 2. be aware of and avoid pinch/catch points in the chains and cables
  - 3. do not wear loose clothing around chains or pulleys
  - 4. use the "buddy system" while using this method of ash removal
- n. The cleaning process should be done by a 2 person team for maximum safety
- o. All federal, state, and local government regulations must be followed for appropriate use and emissions. This would include disposal of waste - ash and animal waste products. Records must be kept and monthly reports provided.
- p. Work in conjunction with the Facilities Management Grounds Crew for notification and need of separate dumpster for ash holding, cooling and disposal.
- q. Refer to Incinerator Owner's Manual for further Standard Operating Procedures.

### 3. Incinerators (Van Es Hall)

- a. Refer to Incinerator Owner's Manual for Standard Operation Procedures of incinerators.