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:
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)**