

# TRS SAFETY PROCEDURE

## 1. Purpose

This procedure establishes a program for reducing potential exposures to hazardous concentrations of total reduced sulfur (TRS) gases by those employees assigned to perform tasks in specific areas of the TRS system. This procedure designates a TRS Area where the guidelines established by this program are in effect.

## 2. Scope

This procedure applies to all International Paper and contractor employees. Mill visitors to the area will be escorted by International Paper employees.

## 3. Designated TRS Area

\* Area - This area includes the D, E, and F evaporators, excluding the E hotwell, and the TRS fans at #6 power boiler.

\* Signs - Entrances to the designated TRS areas will be marked by caution signs. These signs will state "Caution - designated TRS area - check in at evaporator or turbine control room before working in the area. An escape respirator must be in your possession.

\* Monitors - Fixed, continuous, multi-sensor monitoring systems for hydrogen sulfide are located in the designated areas. Monitors for these sensors are located in the evaporator and turbine control rooms. Operators in these control rooms are responsible for monitoring these instruments.

\* Audio/Visual Alarms - Sensors at the D and F evaporator hotwells and the TRS fans are provided with local individual audio/visual alarms. Each alarm is designated by appropriately worded signs. Each of the two monitors mentioned above has an audio/visual alarm system displayed/heard in the appropriate control room.

\* Engineering Controls - High priority will be placed on maintaining and repairing equipment which results in emissions of hazardous concentrations of TRS gases into the area. Engineering design controls will be implemented whenever possible to eliminate gas emissions resulting from process upsets or changes.

\* Respiratory Protection - Self contained breathing apparatuses are available in the evaporator and turbine control rooms. The North 7902 organic vapor/acid gas escape respirator will provide escape protection against TRS gas exposures.

## 4. Procedure for Working in the TRS Area

\* Check in - Employees check in with either the Evaporator or Turbine control rooms. Ask about any TRS concentrations in the area and inform the control room operators regarding the location and duration of the job task.

\* Personal Monitors - When the fixed, continuous monitor sensors and/or the sensor audio/visual alarms are inoperable or unreliable, employees entering the area will be required to use a personal hydrogen sulfide monitor. One monitor is adequate for more than one individual as long as they remain in reasonably close proximity to each other. These monitors must be approved for use by the Safety Department and properly calibrated.

\* Respiratory Protection - Employees must have in their possession a minimum of a North 7902 organic vapor/acid gas escape respirator.

\* Gas Concentrations - Employees entering and working in the designated area are responsible for informing control room operators and/or their supervisor of any unusual concentrations of TRS gases noted while in the area. These employees will evacuate the TRS area if TRS concentrations are known or suspected to be hazardous, and whenever the audio/visual alarms are activated.

\* Control Room Operators - Upon knowledge of a condition or process upset which has or might potentially result in the emission of hazardous concentrations of TRS gas, the control room operator will initiate notification of those individuals in the TRS area who might be exposed to these concentrations. Log book entries will be made accordingly.

## **5. Training**

All employees who will be working in the designated TRS area will receive training in the following subjects:

- a. The "TRS Safety Procedure"
- b. Use of personal hydrogen sulfide continuous monitors
- c. Proper use of respirators in accordance with the International Paper, Franklin Mill Respiratory Protection Program
- d. Safety and health hazards of TRS gas