**WORK INSTRUCTIONS FOR OPERATING WATER SPRINKLERS AT BOTH SIZER PLANTS /YARDS**

# OVERALL RESPONSIBILITY: Furnace in charge/Raw material Supervisor

**Identified Hazards:**

1. Fall from sprinkler platform
2. Failure to inform control room before starting activity resulting in panic condition due to fire hydrant alarm
3. Failure to inform control room to stop the pump after activity is over resulting in damaging the pump
4. Human behavior -Horseplay
5. Impact with high pressure water /impact with sprinkler attachment.
6. Failure to inform people working in the area to move away resulting in panic situation.
7. Human behavior -Nonuse of PPE
8. Incorrect valve operation
9. Valve jamming

**Significant Aspect**:

1. Usage of water

**Procedure for Sprinkler operation**

* The sprinklers are to be operated by trained people only.
* Hand gloves to be worn for operating valves, F handle to be used. Other PPEs Viz safety shoes, helmet should be worn.
* Horseplay is strictly prohibited.
* Inform BF-1 control room engineer before starting sprinklers (of both furnaces) so that C.R. engineer can check the overhead tank level & give subsequent clearance for starting and to avoid panic situation due to fire hydrant alarm.
* Inform people working in the area to stay away before opening sprinkler valve
* Do not try to adjust sprinkler valve manually while sprinkler is on
* Do not run around or panic while sprinkler is on, walk away immediately after opening the valve.
* Use F handle if valves are jammed.
* When sprinklers are on, an alarm \***Main pump started**\* will come in the control room. The C.R. engineer should immediately report this to the S.S. The S.S should check the cause of the starting of the pump (there could be a fire emergency too)
* Ensure that line pressure should never exceed the rated pressure of 7 kg/cm2 for the sprinklers.
* Open the main sprinkler valve near the entrance to the car wash ramp(for F-1), and near new pug mill shed (for F-2)
* Adjust individual sprinkler valves for attaining the required pressure and reach.
* Ensure that the entire area designed for sprinkling is covered.
* Run the sprinklers only for the required time. Ensure that the sprinklers are never run long enough so as to have an effect on the moisture of the raw materials stacked in the surrounding area.
* Sprinklers are designed to rotate 360 degrees. Degree of rotation can be set as desired, by adjusting the locking arrangement.
* It is better to operate one sprinkler at a time to achieve the required throw and flow. Starting 2 or more sprinklers at a time reduces the reach of the sprinklers correspondingly.
* Inform control room to stop the main pump from remote stopping provision given in control room after the job is over.

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| **Prepared By:**  Head – Production PID I | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Pig Iron Division |
| **Signature:** | **Signature:** | **Signature:** |
| **Date: 15.07.2022** | **Date: 15.07.2022** | **Date: 15.07.2022** |

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