R. Dortwegt
4-18-2005

TECHNICAL NOTE WORK REQUEST NO: 17408

Install new throttle valve in supply piping from standby pump for linac gallery (pump P-PR-SB or P-103).

Engineer: R. Dortwegt **Radiation Safety System:** no

Chief Technician: R. Ferry (work supervisor) **Red tag:** no

This technical note summarizes a discussion between R.Ferry at the work location on April 18, 2004 concerning the approach to this work and safety related issues.

1. Prior to performing work, persons assigned to this project will:

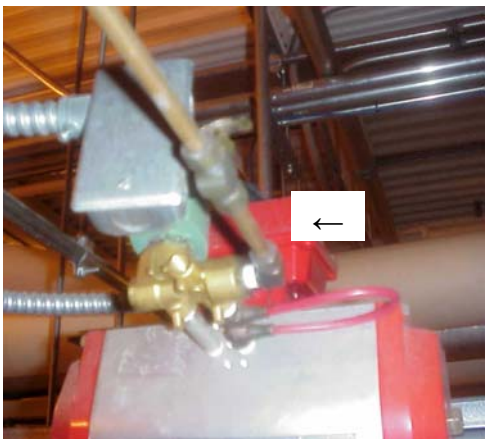
   - Perform LOTO on all four pumps on the PAR mezzanine
     - P-PR-LT (P-101)
     - P-PR-KLY (P-102)
     - P-PR-SB (P-103)
     - P-PR-PAR (P-201)
   - Perform LOTO on the valves at the suction (pump inlet) of the same pumps
   - Perform LOTO on the valves at the filter housing inlet of the same pumps

2. The air operated valve adjacent to the valve to be installed is a butterfly type valve. Prior to removing any existing water lines, the air supply line for the air operated valve shall be physically disconnected upstream of the solenoid valve that controls air delivery to the operator. The outlet of the manual air supply shutoff valve shall be capped. This step is intended to prevent inadvertent motion of the valve which, if it occurred, could pinch a worker's fingers. The photos below show the valve and the location of the physical disconnection.

Air operated valve

Copper air supply line with manual valve and solenoid valve.

Disconnect at arrow and install cap.



3. Installation of the valve (weight estimated between 50-80 lbs) shall be done using an appropriate, certified lifting device rated for the service. The valve shall be secured to ensure that it can not fall during the lift.