

TITLE: Instruction for Vacuum Venting Users' Equipment in the First Optical Enclosure

CATEGORY: Operations

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ABSTRACT:

When vacuum venting equipment in the First Optical Enclosure (FOE), the following process needs to be followed:

Front End containing a window:

1. Submit work required on vacuum system.
2. Notify the Floor Coordinator to close the Front End Valve (FEV) and the Beamline Isolation Valve (BIV; if present). The Floor Coordinator will notify Try Leng Kruey (AES-ER) and record this activity in the shift log.
3. Turn off all ion pumps and gauges that will be vented.
4. Slowly vent the vacuum system with boil off LN ₂ .
5. The Floor Coordinator is to monitor the vacuum system downstream of the FEV, or upstream of the BIV, if used, during venting. If the vacuum system increases in pressure, stop venting immediately and contact Try Leng Kruey before continuing.
6. Pump out system and perform leak checks.
7. Turn on ion pumps and gauges.
8. Notify Try Leng Kruey for system check to be approved, and for the opening of the FEV and BIV.

Front End containing a Differential Pumping (windowless) system:

1. Submit work required on vacuum system.
2. Notify the Floor Coordinator to close the Front End Valve (FEV) and the Beamline Isolation Valve (BIV; if present). The Floor Coordinator will notify Try Leng Kruey (AES-ER) and record this activity in the shift log.
3. Turn off RGA, ion pumps and gauges that will be vented.
4. Slowly vent the vacuum system with boil off LN ₂ .
5. The Floor Coordinator is to monitor the vacuum system downstream of the FEV, or upstream of the BIV, if used, during venting. If the vacuum system increases in pressure, stop venting immediately and contact Try Leng Kruey before continuing.
6. Pump out system and perform leak checks.
7. Turn on ion pumps, gauges and RGA.
8. Notify Try Leng Kruey for system check and a hard copy of the RGA display.
9. If the RGA display spectrum is acceptable, the Beamline Isolation Valve (BIV) may be opened and the Front End Valve (FEV) may be opened. If the display is not acceptable due to insufficient vacuum or contamination, the valves can not be opened until the problem is corrected.