

From: [Mallon, Darcy J](#)
To: [Ben-Zvi, Ilan](#); [Cirnigliaro, Peter P](#); [Lederle, Dewey L](#); [Reich, Jonathan](#); [Sullivan, Patrick T \(DOE\)](#); [Dimino, Charles](#); [Beavis, Dana](#); [Bernholz, Nicole M](#); [Costa, Raymond](#); [Cubillo, Mario](#); [Gaffney, Michael](#); [Gunther, William E](#); [Haas, Edwin](#); [Hill, Leslie](#); [Kahnhauser, Henry E](#); [Karol, Raymond C](#); [Lee, Robert J](#); [Lessard, Edward T](#); [McIntyre, Gary T](#); [Schaefer, Charles W](#); [Than, Yatming \(Roberto\)](#); [Tuozzolo, Joseph E](#)
Subject: LESHC 12-04 Revised Prototype ERL ASE and CAD USI
Date: Tuesday, September 30, 2014 8:26:01 AM

Below find the list of action items from the 12-04 LESHC meeting - Revised Prototype ERL ASE and CAD USI. All actions have been completed.

LESHC 12-04 Review the Revised Prototype Energy Recovery Linac (ERL) Accelerator Safety Envelope and C-AD USI (ATS 7470) - Open

- 1.14.1 Verify the check valves on the LN line. (See 1.1.2.1) Addendum: 6/18/13, R. Than, The check valves have been engineered into the LN vent line system. P&ID dwg: 010604174. 6/21/13, E. Lessard concurs this is closed. **Closed.**
- 1.14.2 Provide the state table for the LN system isolation valve. (See 1.1.2.1) Addendum: 6/18/13, R. Than, The state table has been reviewed as part of 1.14.5. 6/21/13, E. Lessard concurs this is closed. **Closed.**
- 1.14.3 Asher Etkin and Dana Beavis will sign off on the logic of the 11,000 gallon LN Dewar isolation valve interlock for the 1" LN line from the LN tank. Addendum: 5/31/13, A. Etkin, "The state table mentioned in item 1.14.2 defines the logic of the system and I reviewed and approved it. The system certification is documented in OPM 4.120.280.h and has been repeatedly done and reviewed by me." **Closed.**
- 1.14.4 Post a sign indicating "low pressure" at the fill valve for the 11,000 gallon LN vertical storage Dewar. (See 1.1.2.3) Addendum: 6/18/13, R. Than, The state table has been reviewed as part of 1.14.5. 6/21/13, E. Lessard concurs this is closed. **Closed.**
- 1.14.5 Verify that the 11,000 gallon LN storage tank meets environmental code requirements, i.e., high winds. (See 1.1.2.3) Addendum: 6/19/13, R. Than, The storage tank meet environmental code requirements and the engineering record is on file with Facilities & Experimental support group. 6/21/13, E. Lessard concurs this is closed. **Closed.**
- 1.14.6 Ensure there is a safety breakaway on the LN fill tank. (See 1.1.2.5) Addendum: ATS 7470.1.1, R. Than action owner, due date 9/30/14. **Closed.**
- 1.14.7 Evaluate EEBA for compliance in needing both audible and visual alarms. (See 1.1.5) Addendum: 6/19/13, R. Than, Both audible and visual alarms have been implemented for the ODH system. 6/21/13, E. Lessard concurs this is closed. **Closed.**
- 1.14.8 For workers in EEBA, conduct training on the alarms. (See 1.1.5) Addendum: 5/29/13, J. Maraviglia, All workers were trained in Oct 2012. Any new workers arriving receive an area-specific training briefing which covers the ODH alarms. **Closed.**
- 1.14.9 Ensure that permanent protection or equivalent is provided for all external tanks in accord with advice from the Traffic Safety Committee. (For Joe Tuozzolo) ATS 7470.1.2, J. Tuozzolo action owner, due date 9/30/14. **Closed.**
- 1.14.10 Incorporate into the procedures the operators' response to an ODH event. Addendum: 6/19/13, R. Than, This has been incorporated in OPM 18-07-04 section 6.4.1, and referenced to OPM 18.3.2 has been made. 6/21/13, E. Lessard concurs this is closed. **Closed.**

- 1.14.11 Post the Small Vertical Test Facility as ODH-0 and, if desired, add an administrative control requiring a personal oxygen monitor to enter the SVTF when the SVTF is charged with cryogens. (See 1.5.6) Addendum: 6/19/13, R. Than, This has been implemented and POMs are being worn for entry into SVTF when the dewar is charged with cryogen. 6/21/13, E. Lessard concurs this is closed. Addendum: 6/27/13, R. Than, The wearing of the POM is currently administratively controlled. There is no additional sign on the entry door to let the user know that a POM is required when the dewar is charged. Lee Hammons is in charge with operations of the Vertical test facilities. **Closed.**
- 1.14.12 Include the date on R. Than's ODH analysis document (C-AD document 010604071 CAL-10). Addendum: 5/16/12, The date is March 2012. **Closed.**
- 1.14.13 In the USI, add as paragraph 7 to ensure that the EEBA construction area was reviewed for ODH concerns during construction activities. (See 1.11.2.7) Addendum: R. Karol, 5/15/12, This will not be added to the USI but will be part of the work planning process for the EEBA shop addition construction project. **Closed.**
- 1.14.14 Match the changes in the revised Prototype ERL ASE to the changes in C-AD SAD Chapters 4 and 5. **Closed.**

Darcy Mallon
Safety Engineering Group
Office of Research Administration
Brookhaven National Laboratory
Bldg. 120
Upton, NY 11973-5000
631 344-3362