August 15, 2018

Martha E. Michels
Chief Safety Officer

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Mr. Michael J. Weis
Site Manager
Fermi Site Office
U.S. Department of Energy
P. O. Box 2000
Batavia, Illinois 60510
U.S.A.

U.S. DEPARTMENT OF ENERGY LABORATORY ACCREDITATION PROGRAM (DOELAP)
EXTERNAL DOSIMETRY PROGRAM ONSITE ASSESSMENT REPORT – CORRECTIVE ACTION PLAN

Dear Mr. Weis,

The letter contains the corrective action plan to resolve the three concerns identified in the DOELAP onsite assessment report, performed on the Fermi National Accelerator Laboratory (Fermilab) External Dosimetry Program during July 17 and 18, 2018. This plan is being submitted to you for your approval as required by the U.S. Department of Energy Standard DOE-STD-1111-2013, "Department of Energy Laboratory Accreditation Program Administration.

Upon approval, the plan must be forwarded by the DOE field office with a cover letter indicating concurrence to:

Laird C. Bean
DOELAP Senior Technical Manager
U.S. Department of Energy, Idaho Operations Office
1955 Fremont Avenue, MS 2112
Idaho Falls, ID 83415-2112

These documents must be forwarded by September 1, 2018, in order to meet the 45 day response requirement contained in DOE-STD-1111-2013.

Sincerely,

Martha E. Michels
Chief Safety Officer

cc: N. Lockyer, w/o encl.
T. Meyer, w/o encl.

ESH&Q File: Dosimetry

Response to the

DOELAP Onsite Assessment Report dated July 18, 2018

This letter contains Fermilab's written response to the three concerns identified during the DOELAP onsite assessment, which was conducted July 17 and 18, 2018. This response is being provided to you in accordance with U.S. Department of Energy Standard DOE-STD-1111-2013, "Department of Energy Laboratory Accreditation Program Administration.

If you have any questions regarding this response, you may contact Susan McGimpsey of my staff at 630-840-8386, or e-mail at mcgimpsey@fnal.gov.

Concern #1

Generic position descriptions on file do not include responsibilities for the EDP that can be correlated to responsibilities assigned in the EDM. (P.1, P.2, P.5, P.6)

Fermilab's response to Concern #1

Specific position descriptions will be created for the External Dosimetry Program (EDP). These will also outline the individual responsibilities, consistent with the responsibilities already documented it the External Dosimetry Manual (EDM). This will be completed by April 1, 2019

Concern #2

The training program is not fully documented to be adequate for training new staff members. There is no documented practice for annually ensuring staff competency reviews are performed or to ensure 2-year retraining is met. The records are either on paper in a binder or assigned a training module number and entered in the TRAIN system. This system does not incorporate a frequency requirement or reminder to ensure the two-year requalification assignments are met. (P.14, P.15, P.16, P.17, P19)

Fermilab's response to Concern #2

Prior to the ESH&Q reorganization, only the Dosimetry Program Manager (DPM) backup required an OTJ training plan, and it was documented on R.P. Form #102. With new personnel filling the EDP roles, a list of reading and training requirements was created for technical/administrative support and a new DPM, and it was added to the EDM. All training requirements will now be fully documented for each member of the EDP, will be consistent by giving all training modules an official number, and will be entered into the TRAIN database. This will ensure that the appropriate training is completed, and the 2-year requalification is met. All training will be consistent with the individual responsibilities for each member of the EDP. This will be completed by April 1, 2019.

Concern #3

> The application included accreditation for both Landauer U ring and Saturn ring extremity dosimeters. However, all references to the U ring have been removed from the current EDM. U rings are continuing to be retrieved for processing this quarter and previous accreditation remains in effect until this accreditation process is complete. Therefore, documentation for the U ring needs to be included as required by the DOELAP criteria to meet ongoing accreditation until all U ring dose results are closed out and reported. (G.1, G.2, G.3, G.6, D.1, D.2, D.5, T.2)

Fermilab's response to Concern #3

Fermilab's previous conditions of accreditation included Landauer's U-ring extremity dosimeter. However, Landauer is in the process of phasing out the U-ring and only making the Saturn ring available to its customers. So, in May 2018 Fermilab asked DOELAP for an amendment to our conditions of accreditation to include the Saturn ring, so that the new extremity dosimeter could be used beginning July 2018. Being granted this amendment was dependent on Fermilab updating the External Dosimetry Manual and Technical Basis Document, to reflect the use of the new extremity dosimeter prior to deploying the Saturn ring. Fermilab updated all documentation and the amendment was granted in June 2018.

The only difference between the U-ring and the Saturn ring is the holder (LLD, Angular Dependence, Algorithm, energy response etc. is the same). Since there would be (1) no degradation in the quality of the reported results with our documentation now referencing the Saturn ring, and (2) the remaining U-rings from the second quarter 2018 will be processed, and results reported and approved by August 31, 2018 (before the response to this Concern is due, on September 1, 2018), Fermilab considers that any adjustments to the current program documentation is unwarranted. This Concern will be corrected by August 31, 2018.

Fermilab did list both the U-ring and the Saturn ring on the latest DOELAP application and both rings were tested in the 2018-A test session. Fermilab will formally request that DOELAP only include the Saturn ring on the new conditions of DOELAP accreditation. This memo will be

sent to DOELAP by August 31, 2018.