

October 7,2020



TO: Distribution
FROM: M. Quinn
SUBJECT: Radiation Safety Subcommittee Meeting of October 7, 2020

MEMBERS (P=Present, A=Absent):

S. Borton	A	D. Hahn	P	M. Quinn, Chair	P	P. Sedory	A
N. Chelidze	P	D. Hockin	A	D. Reitzner	P	K. Vaziri	A
J. Compton	P	R. Madiar	P	W. Schmitt	P	M. Zientarski	P
K. Gollwitzer	P	S. McGimpsey	P	M. Schoell, Deputy Chair	P		
K. Graden	P	D. Newhart	A	J. Scott	A		

Others Present: Matt Green (FSO), Joel Fulgham

New Buisness

- 1. New FSO Teammember** – Matthew Green. Welcome!
- 2. Accelerator Startup** – Linac signed off/authorized to run beam 10/2/2020. Booster and FAST will be authorized this week.
- 3. Dose to Public FSO Concerns** – Post-start recommendation from FSO with approval of ASE Rev 12 (MTA revision) highlighted FSO concerns about FNAL use of occupancy factors when calculating potential dose to the public. Recommended controls be put in place for any areas of concern when removing occupancy factor. Recommendation also mentions external DOE review. This stemmed from the DOE looking at Fermilab’s site accessibility.

As the Fermilab site is closed to the general public, the otherwise publicly accessible areas of the site that could exceed public dose restrictions (if not for occupancy adjustment) do not represent a public risk. Prior to Fermilab allowing public access to the site, the areas that would then be publicly accessible, that could exceed public dose restrictions (if not for occupancy adjustment), must be posted as restricted to Fermilab workers unless a subsequent DOE external review proposes alternative expectations that are subsequently accepted by the FSO Manager.

RP Departments looking into this. Planning for increasing area monitors (dosimetry badges) throughout the site as well as potential beam-on surveys.

R. Madiar reported that there will be an 10 CFR 835 reiew on the November/December timrframe. The plan for this assessment has been in the works since pre-COVID. However additional lines of inquiry from a security standpoing.

M. Quinn stated that review may be focused on our set of criteria (our occupancy assumptions) and if that’s still appropriate.

4. **Safety/Security Assessments (Response to FSO letter from August)** – K. Graden performed an assessment on access controls for areas where other accountable nuclear material (OANM) materials are stored. Draft complete, will submit pending results of currently ongoing Site-Security Review. W. Schmitt working on cross-walk for 10 CFR 458.1. M. Schoell working on cross-walk for DOE O 420.0c.
5. **Comingled Work/Desk/Kitchen Spaces** – SBN-FD found kitchen space set up next to previously installed source box. Something for group to pay attention to and keep on the running list until we have opportunity to look into this in more detail.
6. **Locked Buildings** – M. Quinn reported that buildings will be locked going forward to improve on site security. AD Footprint will be cored to AC0 key/core set. Should have the same level of access for cardreaders. J. Compton reported that they are working with Security on access to the Footprint, and plans to install cardreaders.
7. **DUNE Laser** – D. Newhart mentioned laser system for DUNE and ready to start working with LSO on setup.

Old Business Carried Forward

8. **NuMI horn PH2-02 move** – J. Fulgham reported that the move was completed successfully!
9. **SURF radon monitoring** – R. Madiar reported that the Site Office has completed its review of the radon monitoring plan for underground areas at SURF and concurs with its conclusions. This plan will be increasingly important to help monitor environmental occupational radon exposures as cavern excavation activities proceed for DUNE. K. Graden reported no update for this meeting. Will be part of ongoing program. Will be removed from list.
10. **IARC Proposes New RGD** – A new electron accelerator is being planned for use in the HAB pit. It will need to be added to the list of RGDs (RP Form 108). The SRSO is in the process of determining DOE O 420.2c applicability. No update.
11. **RPCF** – M. Zientarski reported they are continuing to support PIP-II IT. Temporary FOXs returned to Linac. Instruments loaned to JLab in 2017 are being returned, will soon be available for use at Fermilab. New MUX station at CMTF is already being utilized. Able to shift FOXs around to get Linac their needed FOXs. RPCF being evaluated next week for cardreader access into the building.
12. **COVID-Safe Mode** – Updates:
 - Accelerators are turning on following standard Start Up process.
 - RGDs starting back up as Divisions/Sections deem necessary, after RSO confirms interlock test and interlocked detector calibrations still valid.
 - Practical Factors training online requalification change made within TRAIN. Continuing to encourage people who can requalify online to do so to ensure space available for individuals who need to take the training in person.
 - Received a waiver to current MC&A plan for forgoing quarterly report (required internally, regulations require annually) and postponing annual physical inventory until MBA custodians are back on site (required annually internally, regulations require every 2 years). K. Graden also working on updating MC&A plan to make these changes permanent.

- Secretary of Energy did issue a memo allowing for some relief of some safety & health regulations. MC&A plan waiver appears to be the only relief needed/asked for by RP.
13. **NEXUS DD Neutron Generator** – D. Hahn reported that it's been removed from the Mu2e pit. The generator is moved to Lab G and the deuterium bottle is at Site 40. D. Hahn also reported that this is good because Mu2e DT Neutron Generator may be delivered soon.
 14. **LBNF Site Prep** – S. McGimpsey reported that some of the steel plates were found to be radioactive (low Class 1, with hottest 13,000 cpm over background on a Bicon) (7 of the 49 plates) , making arrangements to move the plates to the Railhead for storage. MMR being worked on, will need approval from the Neutrino Division for Property to move/store the material. Shielding steel placement at culverts has completed and subsequent work on berm continues. There appear to be no lasting negative effects as a result of the BNB well sump temporary discharge piping repair and all tritium sample results came in well below 100 pCi/mL. No news on pending followup review activities involving FSO for this event. At the end of LBNF site prep work, the plan is still to gather all sample results and put any additional useful information into a flowchart. Also, Sue agreed to follow-up with M. Zientarski on activities concerning reconfiguring the communications ductwork in the site-prep area. S. McGimpsey reported that cable pulls are planned to occur mid-September.
 15. **Safety Assessment Document review** – The MTA SAD has been approved to the SAD subcommittee. SAD and ASE have been approved by Lab and FSO. MINOS chapter out to committee for review. New members have been added to the subcommittee, and a meeting was held to go over the structure of the SAD and the process for SAD chapter review.
 16. **Accelerator Readiness** – W. Schmitt reported that the PIP2IT operations readiness ORC occurred last week and went well. Recommendations include updating HA and improving facility readiness. M. Schoell reported that the MTA ARR was held September 9-11. Recommendations being worked through.
 17. **Contamination in Enclosures** – S. McGimpsey reported that MI-8GeV was decontaminated to provide “clean slate” for resuming build-up studies. Booster, 8-GeV and MI-30 collimators all have stanchions and postings in place locally along the beamline elements. S. McGimpsey is continuing to work with members of AD MI Department for help bringing the multi-cell wipe counter online.
 18. **SARP** – K. Gollwitzer reported no new assessments for SARP.

ALARA Topics

19. MI-30 Collimator Insert job ongoing, paused due to parts issues. MI-30 LCW repair ongoing. MI-40 sump repair work planned for “post-shutdown pre-beam” timeframe. NuMI Module Rebuild work ongoing.

Operations

J. Compton reported that beam is running to the Linac absorber, working on tuning beam. Looking forward to Booster beam next week. MCR also working on plan for beamline experts for startup with COVID restrictions.

Minutes of Radiation Safety Subcommittee Meeting October 7, 2020

PLACE AND DATE FOR THE NEXT MEETING: THE NEXT MEETING WILL BE ON NOVEMBER 4, 2020 AT 2:00 PM CENTRAL VIA ZOOM (MEETING INFORMATION WITHIN OUTLOOK CALENDAR EVENT).

FY2021 Minutes: ESH DocDB 6112

Distribution via E-Mail-

Amber Kenney – Chief Safety Officer	Subcommittee Members
Eric McHugh	Bridget Iverson
Raymond Lewis	Nicole Gee
Others Present	