

April 1, 2020



TO: Distribution  
FROM: M. Quinn  
SUBJECT: Radiation Safety Subcommittee Meeting of April 1, 2020

MEMBERS (P=Present, A=Absent):

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

### New Buisness

- COVID-Safe Mode** – M. Schoell reported that the lab is currently in a COVID-safe state due to the COVID-19 pandemic, with limited operations on site. At the time of this meeting, Illinois is under a stay-at-home order until April 30th. In this COVID-safe state:
  - Accelerators have been locked off. Beam Permits & Running Conditions remained in place, with continuing review & discussion between RPO Department Head and AD Division Head.
  - RGDs have been confirmed off and in a safe state by their custodians.
  - 68 sources were retrieved from the field and returned to Site 40. Remaining sources in the field are installed in equipment/aparatus.
  - Q2 Dosimeters were issued prior to going into COVID-safe state and are available to personnel for use. Pick up of the Q1 dosimeters will be delayed.
  - Practical Factors training classes have been cancelled. 10 CFR 835 does not require hands training for requalifying radiological workers, so we are working with individuals on a case-by-case basis to renew qualifications as needed. If they've taken the updated RW-C(V) (on or after February 6, 2020) and have taken RW-PF within the last 25 months (within 2 year requalification or just expired in the previous month), will be asked to review updated PF slides (available online) and RSO will give updated qualification.
  - RAF getting a little bit of a backlog. Routine monitoring results will take a bit of time.
  - Will be asking for waivers 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). Requesting a waiver to current MC&A plan from FSO. K. Graden also working on updating MC&A plan to make these changes permanent.
  - R. Madiar recommened working with FSO on if any exemptions are needed. J. Blakie available for consultation if needed.
- MI-40 Sump Pump Failure** – M. Schoell reported that the MI-40 lower sump pump (outside of the Absorber room) failed again this morning. This is the same sump pump that failed and was replaced in October 2019. There were no alarms to noify personnel of the failure, it was found by RCTs doing other routine work in the enclosure. No personnel were in the flooded water, no risk of personnel contamination. At the time of this meeting, FESS is working on repairing the controller (out of the

flooded region) and RAF is analyzing the water sample to confirm if any radioactivity is present to determine any requirements/restrictions for work in the flooded region (if it's needed) and proper disposal of the water. This work is currently ongoing.

3. **BODA Alpha Meter** – Currently due for calibration at the end of April. M. Zientarski is aware and working on plans to calibrate it.

### Old Business Carried Forward

4. **Request from FESS to bring U. Florida x-ray Field System on site** – K. Graden reported that she was contacted by FESS with this request to study tree root mass through “our National Environmental Research Park program”. Additional follow-up with RP and ES&H will be needed. K. Graden provided TSW website to FESS, waiting for response.
5. **JULIE Expiration Question** – Following the recent excavation incident at IERC (see Old Business IERC topic for details), the question came up on when a JULIE is officially closed, and when/how many times it can be extended. RP will follow up with FESS. Still being worked on.
6. **NEXUS DD Neutron Generator** – ORC approved week of 2/24. Acceptance testing is being performed at Mu2e. After the testing is finished, the generator will be disassembled and stored until a permanent installation for NEXUS is built. N. Chelidze reported that it's still in the Mu2e alcove 3 pit, off and in safe state (keys for the deuterium bottle and interlock reset are locked in RSO key cabinet). Still need to work with vendor to finalize acceptance testing. Work paused during COVID-safe state. Will need to confirm next steps when back to normal operations.
7. **Instruments** – Working on OWL specifications. Will meet with “Future Radiological Instrument Needs” group soon. M. Zientarski reported that work is progressing.
8. **10 CFR 835 Assessment** M. Quinn working with D. Hahn, W. Schmitt, D. Newhart, and J. Compton to start planning this review. W. Schmitt reported that initial meeting was held 3/10/2020. Plan to have draft by middle of May. Coordinate any necessary interviews via email or zoom. Subparts being reviewed: E, I, J, N. May have follow-up meetings as needed, please include FSO for observation. S. McGimpsey reported use of Lines of Inquiry (LOIs) for JLab's 835 reviews, might be a possible OFI.
9. **LBNF**
  - a. Site Prep/work planning: S. McGimpsey reported work ongoing.
  - b. Sue working on soil management plan/documentation.
  - c. Signs for posting construction areas have been received, working with FESS to post our “no excavation” line.
10. **Safety Assessment Document reviews** – The Muon Campus SAD & updated ASE fully approved. Other chapters under review: MTA->ITA, 1039.
11. **IERC** – On 3/2 RPO was notified that the IERC subcontractor excavated for work on a manhole cover without properly notifying the RSO or the TM/CC, as required in the JULIE. The work was performed under the original JULIE that had been “kept open”/extended. The excavation did not impact required shielding. A USI will be performed to document. This work violated the JULIE

requirement for no excavating within 20ft of the enclosure wall without RSO notification while beam was operational. Since the JULIE is still active, the area will be posted with the “no excavation” signs purchased for LBNF. M. Schoell reported that RPO working with IERC to post

12. **Contamination in Enclosures** – Check sources have been received, need to be on site to continue with calibration and use procedures. RPO is in communication with the manufacturer to get the broken cell fixed. One spot in MI-30 that was above FRCM limits from January wipe survey. RPO plan is to decontaminate the area before the next access period. Beam was approved to turn on 11/1, so there was ~3 months of running before build-up above FRCM limits.
13. **SARP** – W. Schmitt reported SARP is currently working on the MTA assessment.
14. **Mu2e Diagnostic Absorber ARR** – Review was closed out Feb 20, 2020. We are waiting for the final report. Pre-start for self-identified enclosure/beam things. Post-start for program improvements.
15. **ITA** - Work on the planned Irradiation Test Area is progressing. The facility will need a new shielding assessment, SAD and ASE update. SARP currently reviewing shielding assessment. SAD being worked on. Activity of equipment is being calculated and analyzed to better understand requirements/process for sample retrieval, storage, shipment, etc.

### ALARA Topics

16. Summer shutdown planning. Still need job plans for RSO review.
  - NuMI target module job being planned for shutdown. Anticipated to be a higher dose job. The crew is thinking about doing mock-ups.
  - NuMI may have additional horn & target change outs planned for shutdown.
  - MI collimator work being planned for shutdown.

### Operations

**PLACE AND DATE FOR THE NEXT MEETING: THE NEXT MEETING WILL BE ON MAY 6, 2020 AT 2:00 PM IN THE CROSS GALLERY HUDDLE OR VIA ZOOM (MEETING ID: 898 028 457).**

**FY2020 Minutes: ESH DocDB 5337**

### Distribution via E-Mail–

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