Matthew Quinn
Senior Radiation Safety Officer

ES&H Division
P.O. Box 500, MS 371
Kirk Road and Pine Street
Batavia, Illinois 60510-5011
USA
Office: 630.840.5175
mquinn@fnal.gov

Date: January 4, 2024

To: Alexander Valishev, Head – AD

From: Matthew Quinn, Senior Radiation Safety Officer

Matthew Quinn, UID:mquinn Digitally signed by Matthew Quinn, UID:mquinn Date: 2024.01.04 14:48:02 -06'00'

Re: Approval of MTA Maximum Credible Incident Document

Message:

I have reviewed the document *Maximum Credible Incident Analysis for the MeV Test Area (MTA) Beamline and Enclosure*, version 1.4 dated January 4, 2024. This analysis details the maximum credible incident for MTA of 2.58E18 protons in one hour and the required credited controls to ensure doses are kept below 5000 mrem inside of buildings, 500 mrem outside of buildings. A combination of passive shielding and active interlocked detectors are required to meet these dose limits. I concur that the analysis is satisfactory in terms of methodology, completeness, and compliance with the Fermilab Accelerator Safety Envelope dose requirements, and thus approve of this MCI analysis and planned operations within its scope. Future versions of this document should consider including calculated doses without interlocked detectors present, and calculated doses after a detector trip.

Cc:
M. Clay
M. Convery
J. Fulgham
C. Johnstone
T. Kobilarcek
A. Mazzacane
J. Morgan
S. McGimpsey
W. Schmitt
M. Schoell