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: March 14, 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: 2024.03.14 09:43:14 -05'00'

Re: Approval of Updated Neutrino Muon Beamline Maximum Credible Incident Document

Message:

I have reviewed the document *Maximum Credible Incident Analysis for the Neutrino Muon Beamline*, version 2.1 dated March 13, 2024. This analysis details the maximum credible incident for the Neutrino Muon Beamline of 2.75 E15 protons at 120 GeV in one hour and the required credited controls to ensure doses are kept below 5000 mrem inside of buildings and locked fencing, and 100 mrem to members of the public. 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. This approval supersedes the Neutrino Muon approval of 3/11/24.

Cc:
G. Annala
M. Clay
M. Convery
J. Fulgham
C. Johnstone
T. Kobilarcik
J. Malo
S. McGimpsey
W. Schmitt
M. Schoell