

Matthew Quinn
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Date: February 6, 2024
To: Alexander Valishev, Head – AD
From: Matthew Quinn, Senior Radiation Safety Officer
Re: Approval of Switchyard Fixed Target Beamlines Maximum Credible Incident Document

Message:

I have reviewed the document *Switchyard Fixed Target Beamlines Maximum Credible Incident*, version 1.0 dated February 6, 2024. This analysis details the maximum credible incident for the Switchyard Fixed Target areas of $2.75 \text{ E}15$ protons at 120 GeV in one hour and the required credited controls to ensure doses are kept below 5000 mrem inside of buildings, 500 mrem outside of buildings, 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.

Cc:
M. Clay
M. Convery
J. Fulgham
T. Kobilarcik
J. Malo
M. Olander
W. Schmitt
M. Schoell