

Matthew Quinn  
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**Date:** February 8, 2024  
**To:** Alexander Valishev, Head – AD  
**From:** Matthew Quinn, Senior Radiation Safety Officer  
**Re:** Approval of Meson Area Maximum Credible Incident Document

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**Message:**

I have reviewed the document *Meson Area Maximum Credible Incident*, version 1.0 dated February 8, 2024. This analysis details the maximum credible incident for the Meson Primary, Meson Test (through M05) and Meson Center (through MC6) 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, 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:  
G. Annala  
M. Clay  
M. Convery  
J. Fulgham  
T. Kobilarcik  
J. Malo  
M. Olander  
W. Schmitt  
M. Schoell