Title: Design of the Mercury Handling System for a Muon Collider/Neutrino Factory Target

Author(s): Kirk T. McDonald (PU, Princeton, New Jersey), Harold G. Kirk, Hisham Kamal Sayed (BNL, Upton, Long Island, New York), Van Graves (ORNL, Oak Ridge, Tennessee), Nicholas Souchas, Robert Weggel (Particle Beam Lasers, Inc., Northridge, California), Xiaoping Ding (UCLA, Los Angeles, California)

Abstract: The baseline target concept for a Muon Collider or Neutrino Factory is a free-stream mercury jet within a 20-T magnetic field being impacted by an 8-GeV proton beam. A pool of mercury serves as a receiving reservoir for the mercury and a dump for the unexpended proton beam. Design issues discussed in this paper include the nozzle, splash mitigation in the mercury pool, the mercury containment vessel, and the mercury recirculation system.

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Footnote

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SPMS Author:  Matthew Arena — Fermi National Accelerator Laboratory

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