Abstract Submitted for the DNP10 Meeting of The American Physical Society

The Ursinus College Liquid Hydrogen Target JESSICA PALARDY, NICHOLAS FERRANTE, LEWIS RILEY, Department of Physics and Astronomy, Ursinus College, REMCO ZEGERS, National Superconducting Cyclotron Laboratory, Michigan State University — The Ursinus College Liquid Hydrogen Target has been constructed at the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University, for the purpose of eliminating unwanted gamma-rays from carbon in polyethylene or deuterated polyethylene targets that are commonly used in experiments requiring thick proton targets. Existing geant4 simulations of the Segmented Germanium Array (SeGA) and the CAESium iodide ARray (CAE-SAR) have been modified to incorporate the liquid hydrogen target. The impact of the target on gamma-ray detection efficiencies and the use of the simulations to plan experiments with the target are discussed.

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Date submitted: 11 Aug 2010

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