

GENERATED ATMOSPHERE CHAMBER FOR APPROVAL TESTING OF RESPIRATORS.

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The National Personal Protective Technology Laboratory of the National Institute for Occupational Safety and Health employs a Laboratory Respirator Protection Level (LRPL) test as part of the certification process for Chemical, Biological, Radiological and Nuclear (CBRN) rated respirators. The LRPL is an advanced form of evaluating the fitting characteristics of respirators for CBRN approval. The design of the generated corn oil atmosphere testing facility for LRPL and the experience bringing this facility into use will be discussed. The characteristics of the chamber environment including particle size distribution, airborne concentration, and air flow will be addressed and an overview of our approval testing results, chamber capabilities and correlation with selected other fit test methods will be provided.