

Risk-informed separation distances for hydrogen stations

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This study describes the minimum separation distances from a hydrogen station to keep other facilities safe from accident scenarios caused by unintended release of hydrogen. A risk-informed approach has been performed to identify key factors that can influence accident scenarios and the resulting selection of separation distances. In this approach, the overall risk from accidental releases of hydrogen resulting in other specified consequences are evaluated against the separation distances required to protect people, equipment or structures from a specified level of damage. The estimated risk for the facility is used to establish an acceptable risk level to determine. The results also indicate the sensitivity of the results to key modeling assumptions.