

OCT 21 1976

RADIOACTIVE EFFLUENTS

GAS ANALYZERS

LIMITING CONDITION FOR OPERATION

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2.4.2.6 Primary waste gas holdup system components shall not contain explosive gas mixtures.

APPLICABILITY: ALL MODES

ACTION:

- a. For systems designed to withstand a hydrogen explosion, the gas monitor shall alarm, both locally and in the control room, at a set point of 4% by volume of hydrogen or oxygen. If the hydrogen or oxygen concentration reaches the set point, action shall be taken to reduce the concentration below 4% by volume of hydrogen or oxygen within 48 hours. If the gas monitor or alarm is inoperable, gas samples shall be taken and analyzed each 4 hours during offgas system operation, and the instrument shall be made operable within two weeks or the primary waste gas holdup system shall not be operated.
- b. For systems not designed to withstand a hydrogen explosion, the automatic control features to prevent potentially-explosive gas mixtures in the system components, shall be initiated by either of two independent gas monitors and both shall alarm locally and in the control room at the set points of 2% and 4% by volume of hydrogen and/or oxygen; or if the automatic control features fail to be actuated when either set point is reached, immediate action shall be taken to reduce the hydrogen or oxygen concentration to safe levels. If either gas monitor or any alarm is inoperable, gas samples shall be taken and analyzed each 4 hours during offgas system operation; and if the instrument can not be made operable within two weeks the primary waste gas holdup system shall not be operated. If the automatic control features to prevent potentially-explosive gas mixtures are inoperable and cannot be made operable within 48 hours, the primary waste gas holdup system shall not be operated.

SURVEILLANCE REQUIREMENTS

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2.4.2.6-1 All gas analyzers shall have daily sensor checks, monthly functional tests, and quarterly calibration by an appropriate gas mixture source. Any automatic control features to prevent potentially-explosive mixtures shall have a monthly functional test.