

* The model of Saber radios used at TSCA have the attached certification labels and the matching green dots on both the radios and batteries indicating that they are designed to be intrinsically safe. The model of MTS 2000 radios in use did not have the proper intrinsically safe markings for use in hazardous atmospheres.

* An order was issued by the TSCA Operations Manager to cease usage of the MTS 2000 radios and to inspect and remove from service any radios and/or batteries that do not meet the stated intrinsically safe criteria.

* A review of the ASA revealed that a Limiting Condition of Operation was not violated. It was discovered that the use of radios not meeting the National Electrical Code requirements for Class 1, Division 2, Group D was not evaluated as part of the hazard analysis.

* The ASA identifies the usage of electrical equipment designed for Class 1, Division 2, Group D environments as a design feature for safety. The types of equipment evaluated in the ASA include field-mounted instruments, electrical equipment, and forklifts, but hand-held radios and similar equipment were not evaluated.

* An Unusual Occurrence (UO) was prepared as a result of this incident.

ANALYSIS: Causal analysis for this incident has not been completed.

RESOLUTION/RECOMMENDED ACTIONS: The TSCA Incinerator Facility removed from service all radios not meeting Class I, Division II, Group D requirements. Other facilities with safety basis documents that establish conditions for the mitigation of hazards associated with flammable materials storage and potentially explosive atmospheres should review their operating conditions and safety documentation for the establishment of controls on the use of electronic equipment such as radios, cellular phones, pagers, bar-code readers, etc.

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PRIORITY DESCRIPTOR: Yellow/Caution

KEYWORDS: Intrinsically safe, Unreviewed Safety Question, USQ, radio

REFERENCES: Occurrence Report Number: ORO-BJC-K25WASTMAN-1999-0010

DOE FUNCTIONAL CATEGORIES: Conduct of Operations, Safety

BJC FUNCTIONAL CATEGORIES: OP - Conduct of Operations

HAZARDS: Fire/NFPA, Other

WORK ACTIVITY: Facility Equipment, Other

FOLLOW-UP ACTION: Information in this report is accurate to the best of our knowledge. As means of measuring the effectiveness of this report please notify Joanne E. Schutt at (423) 574-1248, e-mail at

s6u@ornl.gov of any action taken as a result of this report or of any technical inaccuracies you find. Your feedback is important and appreciated.