

Government agencies has been or will be made. Such an event may include an onsite fatality or inadvertent release of radioactively contaminated materials.

(c) *Non-emergency notifications:* Eight-hour reports. Each licensee shall notify the NRC as soon as possible but not later than eight hours after the discovery of any of the following events or conditions involving spent fuel, HLW, or reactor-related GTCC waste:

(1) A defect in any spent fuel, HLW, or reactor-related GTCC waste storage structure, system, or component that is important to safety.

(2) A significant reduction in the effectiveness of any spent fuel, HLW, or reactor-related GTCC waste storage confinement system during use.

(3) Any event requiring the transport of a radioactively contaminated person to an offsite medical facility for treatment.

(d) *Non-emergency notifications:* 24-hour reports. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving spent fuel, HLW, or reactor-related GTCC waste:

(1) An event in which important to safety equipment is disabled or fails to function as designed when:

(i) The equipment is required by regulation, license condition, or certificate of compliance to be available and operable to prevent releases that could exceed regulatory limits, to prevent exposures to radiation or radioactive materials that could exceed regulatory limits, or to mitigate the consequences of an accident; and

(ii) No redundant equipment was available and operable to perform the required safety function.

(2) For notifications made under this paragraph, the licensee may delay the notification to the NRC if the end of the 24-hour period occurs outside of the NRC's normal working day (*i.e.*, 7:30 a.m. to 5:00 p.m. Eastern time), on a weekend, or a Federal holiday. In these cases, the licensee shall notify the NRC before 8:00 a.m. Eastern time on the next working day.

(e) *Initial notification:* Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a), (b), (c), or (d) of this section by telephone to the NRC Headquarters Operations Center.²

(2) When making a report under paragraphs (a), (b), (c), or (d) of this section, the licensee shall identify:

(i) The Emergency Class declared; or

(ii) Paragraph (b), "four-hour reports," paragraph (c), "eight-hour reports," or paragraph (d), "24-hour reports," as the paragraph of this section requiring notification of the non-emergency event.

(3) To the extent that the information is available at the time of notification, the information provided in these reports must include:

(i) The caller's name and call back telephone number;

(ii) A description of the event, including date and time;

(iii) The exact location of the event;

(iv) The quantities and chemical and physical forms of the spent fuel, HLW, or reactor-related GTCC waste involved in the event; and

(v) Any personnel radiation exposure data.

(f) *Follow-up notification:* With respect to the telephone notifications made under paragraphs (a), (b), (c) or (d) of this section, in addition to making the required initial notification, each licensee shall during the course of the event:

(1) Immediately report any further degradation in the level of safety of the ISFSI or MRS or other worsening conditions, including those that require the declaration of any of the Emergency Classes, if such a declaration has not been previously made; or any change from one Emergency Class to another; or a termination of the Emergency Class.

(2) Immediately report the results of ensuing evaluations or assessments of ISFSI or MRS conditions; the effectiveness of response or protective measures taken; and information related to ISFSI or MRS behavior that is not understood.

(3) Maintain an open, continuous communication channel with the NRC Headquarters Operations Center upon request by the NRC.

(g) *Preparation and submission of written reports.* Each licensee who makes an initial notification required by paragraphs (b)(1), (c)(1), (c)(2), or (d)(1) of this section shall also submit a written follow-up report to the Commission within 60 days of the initial notification. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all the necessary information and the appropriate distribution is made. These written reports must be of sufficient quality to permit legible reproduction and optical scanning and must be submitted to the NRC in accordance

with § 72.4. These reports must include the following information:

(1) A brief abstract describing the major occurrences during the event, including all component or system failures that contributed to the event and significant corrective action taken or planned to prevent recurrence;

(2) A clear, specific, narrative description of the event that occurred so that knowledgeable readers conversant with the design of an ISFSI or MRS, but not familiar with the details of a particular facility, can understand the complete event. The narrative description must include the following specific information as appropriate for the particular event:

(i) The ISFSI or MRS operating conditions before the event;

(ii) The status of structures, components, or systems that were inoperable at the start of the event and that contributed to the event;

(iii) The dates and approximate times of occurrences;

(iv) The cause of each component or system failure or personnel error, if known;

(v) The failure mode, mechanism, and effect of each failed component, if known;

(vi) A list of systems or secondary functions that were also affected for failures of components with multiple functions;

(vii) For wet spent fuel storage systems only, after the failure that rendered a train of a safety system inoperable, an estimate of the elapsed time from the discovery of the failure until the train was returned to service;

(viii) The method of discovery of each component or system failure or procedural error;

(ix) For each human performance related root cause, the licensee shall discuss the cause(s) and circumstances;

(x) For wet spent fuel storage systems only, any automatically and manually initiated safety system responses;

(xi) The manufacturer and model number (or other identification) of each component that failed during the event; and

(xii) The quantities and chemical and physical forms of the spent fuel, HLW, or reactor-related GTCC waste involved in the event;

(3) An assessment of the safety consequences and implications of the event. This assessment must include the availability of other systems or components that could have performed the same function as the components and systems that failed during the event;

(4) A description of any corrective actions planned as a result of the event, including those to reduce the

² The commercial telephone number of the NRC Headquarters Operations Center is (301) 816-5100. Those licensees with an available Emergency Notification System (ENS) shall use the ENS to notify the NRC Headquarters Operations Center.