

ATTACHMENT 3.2-4 TO RMPP 3.2

PROCEDURE FOR REPORTING EVENTS

This is a procedure for determining if an event is reportable and steps need to be taken.

Note: Provide clear reference to documents on file that were used to generate the event report.

Vermont Hazardous Materials Response Team (VHMRT): (800) 641-5005
Vermont Department of Health (Department): (800) 439-8550
Health Department Fax: (802) 865-7745
Local Law Enforcement: 911

If yes is the answer to any of the following questions, then the appropriate contacts listed on the following pages should be notified.

- Does the release present either an acute or chronic radiation exposure to humans?
- Does the exposure include, but is not limited to, inhalation, skin absorption, and ingestion?
- Does the release involve a fire or explosion potential?

Potential causes of fires/explosions are chemical reactions, ignition of flammable or explosive chemicals or vapors, ignition of materials due to oxygen enrichment, agitation of shock- or friction-sensitive compounds, and sudden releases of radioactive materials under pressure.

- Does the release of the product involve radiation exposure to the public or contamination of the environment?
- Does the release involve the loss, recovery, or theft of radioactive material?

Fire/Police/Sheriff Department: 911
Vermont Department of Health: (800) 439-8550
Health Department Fax: (802) 865-7745

<p><u>IMMEDIATE</u> (WITHIN 4 HOURS OR LESS) NOTIFICATION FOR ANY OF THE FOLLOWING:</p>
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Reports of removable contamination on package > limits in 10 CFR 71.87 (See Table 9, 49 CFR 173.443). 10 CFR 20.1906(d)(1);

Radiation levels on package > limits in 10 CFR 71.47, 10 CFR 20.1906(d)(2);

Reports of lost, stolen, or missing licensed material ≥ 1000 X Appendix C value under such circumstances that it appears to the licensee that an exposure could result to persons in unrestricted areas 10 CFR 20.2201(a)(i).

Exposure (real or threatened) \geq TEDE of 25 rem (0.25 Sv), or lens dose equivalent ≥ 75 rem (0.75 Sv), or shallow dose equiv. (skin\extremities) ≥ 250 rads (2.5 Gy). 10 CFR 20.2202(a)(1).

Release where individual could have intake ≥ 5 X ALI over 24 hours. 10 CFR 20.2202(a)(2).

Events involving prevention of immediate protective actions, necessary to avoid exposures to radiation, radioactive materials, or releases of radioactive material that could exceed regulatory limits 10 CFR 30.50(a).

Well logging source rupture. 10 CFR 39.77(a).

Theft or loss, exposures, or excessive concentration of radioactive material 10 CFR 39.77(b).

Events involving immediate protective actions; unplanned contamination in accessible areas; disabled or malfunctioning equipment; unplanned medical treatments; and unplanned fires or explosions. 10 CFR 40.60(a). (Note: Same as 10 CFR 30.50 above, except that this is reporting that is required concerning source materials.) 10 CFR 40.60(a).

Events involving immediate protective actions; unplanned contamination in accessible areas; disabled or malfunctioning equipment; unplanned medical treatments; and unplanned fires or explosions. Essentially the same as 10 CFR 30.50 and 40.60 except that this is required for special nuclear material (SNM) and there are some small variations in reporting details following Paragraph (c). See 10 CFR 70.4, "Definitions" for a definition of SNM. 10 CFR 70.50(a).

10 CFR 71.5 provides that licensees shall comply with the applicable requirements of the Department of Transportation regulations in 49 CFR.

49 CFR 171.15(b)(1) (Events involving hazardous materials, including radioactive materials) requires the immediate reporting of incidents involving hazardous materials (which include radioactive materials) that result in an individual's death, injury requiring hospitalization, evacuation of the general public for at least one hour, the operational flight pattern or routine of an aircraft is altered and the closure of one or more major transportation facility or roadway for at least one hour 49 CFR 171.15 (b)(1) and (2).

49 CFR 171.15(b)(2) requires the immediate reporting of fire, breakage, spillage, or suspected radioactive contamination that occurs involving the shipment of radioactive material.

10 CFR 37.57 requires immediate notification to the Department and Local Law Enforcement Agency (LLEA) after determining that an unauthorized entry resulted in an actual or attempted theft, sabotage, or diversion of a category 1 or category 2 quantity of radioactive material. As soon as possible after initiating a response, but not at the expense of causing delay or interfering with the LLEA response to the event, the licensee shall notify the Department at (800) 439-8550 and VHMRT at (800) 641-5005. In no case shall the notification to the Department be later than 4 hours after the discovery of any attempted or actual theft, sabotage, or diversion.

10 CFR 37.57 requires the licensee to assess any suspicious activity related to possible theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material and to notify the LLEA as appropriate. As soon as possible, but not later than 4 hours after notifying the LLEA, the licensee shall notify the Department at (800) 439-8550 and VHMRT at (800) 641-5005.

Notify the NRC's Operations Center at (301) 816-5100 if the results from an FBI identification and criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Database.

<u>24 HOUR EVENT REPORTING</u>

Reports of lost, stolen, or missing licensed material $> 10 \times$ Appendix C value and is still missing at this time (i.e., within 30 days it becomes known to the licensee). 10 CFR 2201(a)(1)(ii).

Release where individual could have intake $> 1 \times$ ALI over 24 hours. 10 CFR 20.2202(b)(2).

Events involving unplanned contamination 10 CFR 30.50(b)(1), see items (i)-(iii) for other conditions that apply.

Events in which equipment is disabled or fails to function as designed. 10 CFR 30.50(b)(2), see items (i)-(iii) for other conditions that apply.

Events involving unplanned medical treatment of a contaminated person 10 CFR 30.50(b)(3).

Events involving unplanned fire, or explosion affecting integrity of material, device or container, or equipment containing licensed material. 10 CFR 30.50(b)(4) when the quantity of material involved is greater than five times the lowest annual limit on intake specified in Appendix B of 10 CFR 20.

The following events are reportable under 10 CFR 36.83 if not reported under other Department reporting requirements: stuck sources, fire/explosions, damage to source racks, cable or drive mechanism failure, access control system failure, detection of source by the product exit monitor, contamination from licensed material, etc. {See 10 CFR 36.83 (a)(1) through (10)} for specific descriptions of reportable events.

Events involving immediate protective actions; unplanned contamination in accessible areas, disabled or malfunctioning equipment, unplanned medical treatments, and unplanned fires or explosions. (Note: Same as 10 CFR 30.50 above, except that this is reporting that is required concerning source materials.) 10 CFR 40.60(b)(1)-(4)

Events involving immediate protective actions; unplanned contamination in accessible areas, disabled or malfunctioning equipment, unplanned medical treatments, and unplanned fires or explosions. Essentially the same as 10 CFR 30.50 and 40.60 except that this is for special nuclear material (SNM) and there are some small variations in reporting details following Paragraph (c). See 10 CFR 70.4, "Definitions" for a definition of SNM. 10 CFR 70.50(b)(1)-(4).

Notify the Department (800) 439-8550 if the results from an FBI identification and criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Database.

NEXT CALENDAR DAY REPORTING

Notifications and reports of medical events involving administration and use of byproduct materials, except for patient intervention events. 10 CFR 35.3045.

Events involving an unauthorized dose of 50 mSv (5 rem) to an embryo/fetus or a nursing child, or an unintended functional damage to an organ or a physiological system of the child. 10 CFR 35.3067.

5 DAY REPORTING

Reporting of leaking sources, leak test results ≥ 0.005 microcurie (185 Bq). 10 CFR 34.27(d).

Reports of leak test results that demonstrate the presence of 185 becquerel (0.005 microcurie) or more of removable contamination. 10 CFR 35.3067.

Reports of leak test results (of sources leak tested at intervals not greater than every 6 months) when the presence of 185 becquerel (0.005 microcurie) or more of contamination is detected.

(See remaining paragraphs of 10 CFR 39.35 for other conditions, including exemptions, that apply). 10 CFR 39.35(d)(2)

30 DAY REPORTING

Reports of lost, stolen, or missing licensed material > 10 X Appendix C value and is still missing at this time (i.e., within 30 days it becomes known to the licensee). 10 CFR 20.2201(a)(1)(ii)

Radiation doses, releases, or concentrations of radioactive material that exceed the limits of 10 CFR 20. See 10 CFR 20.2203(a) for a list of reportable events.

Immediately suspend operation of a device if there is a failure of or damage to the shielding or an indication of a failure of or damage to the shielding, or the on-off mechanism or indicator, or upon detection of 185 becquerel (0.005 microcurie) or more of removable radioactive material and submit a written report within 30 days. 10 CFR 31.5(c)(5). (See 10 CFR 30.50(c)(5) for other conditions and restrictions that apply.)

Radiography source disconnection, inability to retract source, or component failure (critical to safe operation of device.) (See 10 CFR 30.50 requirements and other sections of the regulations.) 10 CFR 34.101(a)

After notification and classification that a well logging source is irretrievable, a report shall be made to the Department. 10 CFR 39 .77(c), (d)