

PROCEDURE FOR REPORTING EVENTS

This is a procedure for determining if an event is reportable to the Indiana Department of Homeland Security and steps that need to be taken. Immediate notification to the Local Law Enforcement Agency (LLEA) is required 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 (see Appendix A to Part 37 – Category 1 and Category 2 Radioactive Materials)

Indiana Department of Homeland Security: (317) 233-6615 Option 2
Local Law Enforcement Agency: 911

IMMEDIATE (WITHIN 4 HOURS OR LESS) NOTIFICATION

Reports of removable contamination on packages > limits in 10 CFR 71.87	10 CFR 20.1906(d)(1)
Radiation levels on packages > limits in 10 CFR 71.47	10 CFR 20.1906(d)(2)
Reports of lost, stolen, or missing licensed materials $\geq$ 1000 times Appendix C to 10 CFR Part 20 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)(1)(i)
Exposure (real or threatened) $\geq$ TEDE of 25 rem (0.25 Sv), or lens dose equivalent $\geq$ 75 rem (0.75 Sv), or shallow dose equivalent to the skin or extremities $\geq$ 250 (2.5 Gy)	10 CFR 20.2202(a)(1)
Release where an individual could have an intake $\geq$ 5 time the annual limit on intake (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) (Byproduct Material) 10 CFR 40.60(a) (Source Material) 10 CFR 70.50(a) (Special Nuclear Material)
Well logging source rupture	10 CFR 39.77(a)
Theft or loss of radioactive materials, radiation overexposures, or excessive levels and concentrations of radiation.	10 CFR 39.77(b)
Events involving failure of licensees to comply with the applicable requirements of the Department of Transportation regulations in 49 CFR.	10 CFR 71.5
Events involving hazardous materials, including radioactive materials per 49 U.S.C 5103(a) require the immediate reporting of incidents involving hazardous materials that result in an individual's death, injury requiring hospitalization, evacuation of	49 CFR 171.15(b)(1)

the general public for at least one hour, the operational flight pattern or routine of a aircraft is altered, or the closure of one or more major transportation facility or artery for at least one hour.	
Fire, breakage, spillage, or suspected radioactive contamination that occurs involving the shipment of radioactive material.	49 CFR 171.15(b)(2)
Unauthorized entry resulting in an actual or attempted theft, sabotage, or diversion of a category 1 or category 2 quantity of radioactive material. • Immediate notification to the LLEA • 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 IDHS RMCP via phone. In no case shall the notification to IDHS be later than 4 hours after the discovery of any attempted or actual theft, sabotage, or diversion.	10 CFR 37.57
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 as appropriate. As soon as possible, but no later than 4 hours after notifying the LLEA, the licensee shall notify the IDHS RMCP via phone.	10 CFR 37.57

24 HOUR EVENT REPORTING

Release where, had an individual been present for 24 hours, individual could have intake of > 1 times occupational ALI over 24 hours.	10 CFR 20.2202(b)(2)
Events involving unplanned contamination that: (i) requires access to the contaminated area, by workers or the public to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area; (ii) involves a quantity of material greater than five times the lowest annual limit on intake specified in Appendix B of 10 CFR Part 20 for the material; and (iii) has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.	10 CFR 30.50(b)(1) (byproduct material) 10 CFR 40.60(b)(1) (source material) 10 CFR 70.50(b)(1) (special nuclear material)

Events in which equipment is disabled or fails to function as designed when: (i) the equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident; (ii) the equipment is required to be available and operable when it is disabled or fails to function; and (iii) no redundant equipment is available and operable to perform the required safety function.	10 CFR 30.50(b)(2) (byproduct material) 10 CFR 40.60(b)(2) (source material) 10 CFR 70.50(b)(2) (special nuclear material)
Events requiring unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.	10 CFR 30.50(b)(3) (byproduct material) 10 CFR 40.60(b)(3) (source material) 10 CFR 70.50(b)(3) (special nuclear material)
Events involving unplanned fire or explosion affecting the integrity of the material, device or container, or equipment containing licensed material when the quantity of material involved is greater than five times the lowest annual limit on intake specified in Appendix B of 10 CFR Part 20 for that material, and the damage affects the integrity of the licensed material or its container.	10 CFR 30.50(b)(4) (byproduct material) 10 CFR 40.60(b)(4) (source material) 10 CFR 70.50(b)(4) (special nuclear material)
Events involving irradiators not reported under other reporting requirements: source stuck in an unshielded position, and fire or explosion in a radiation room, damage to source racks, failure of the cable or drive mechanism used to move the source racks, inoperability of the access control system, detection of source by radioactive material, etc.	10 CFR 36.83(a)(1) through (10)

NEXT CALENDAR DAY REPORTING

Notifications and reports of medical events involving administration and use of byproduct material, except for patient intervention events, that result in certain doses listed in the regulations	10 CFR 35.3045
Events involving an unauthorized dose of 50 mSv (5 rem) to an embryo/fetus or a nursing child, or unintended permanent functional damage to an organ or a physiological system of a nursing child.	10 CFR 35.3047

5 DAY REPORTING

Reporting of leaking sealed source or guide tube, leak test results ≥ 0.005 microcuries (185 Bq)	10 CFR 34.27(d)
Reports of leak test results that demonstrate the presence of 0.005 microcuries (185 Bq) or more of removable contamination from a sealed source.	10 CFR 35.3067 (medical uses) 10 CFR 39.35 (well logging)

30 DAY REPORTING

Reports of lost, stolen, or missing licensed material > 10 times Appendix C to 10 CFR Part 20 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	10 CFR 20.2203(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 0.005 microcuries (185 Bq) or more of removable radioactive material.	10 CFR 31.5(c)(5)
Radiography source disconnection, inability to retract source, or component failure (critical to safe operation of device).	10 CFR 34.101(a)