Indiana Department of Homeland Security

Radioactive Materials Control Program

Radioactive Materials Control Program Procedure 3.2, Revision 0

Incident Response

Prepared By: Date:

Reviewed By: Date:

Approved By: Date:

Effective Date:

Revision	Date	Description of Changes
0		

Table of Contents

1.0 PURPOSE

1.1 Applicability
1.2 References
1.3 Definitions

2.0 RESPONSIBILITIES

2.1 Health Physicist (HP)
2.2 Senior Health Physicist (S/HP)
2.3 Radiation Control Program Director (RCPD)

3.0 PROCEDURE

3.1 Initial Notification
3.2 On-Scene Response
3.3 Report
3.4 Follow up

4.0 RECORDS

5.0 COMMUNICATING EVENTS TO THE APPROPRIATE STATE AND FEDERAL AGENCIES

6.0 ATTACHMENTS TO RMCPP 3.1

3.2-1 Radiological Incident Notification Form
3.2-2 Radiological Incident Response Q&A
3.2-3 Impoundment Guidelines
3.2-4 Reporting Events
3.2-5 Examples of Reportable Events
3.2-6 Event Reporting Schedule

Incident Response

1.0 PURPOSE

1.1 Applicability

1.1.1 This applies to all Indiana Department of Homeland Security, Radioactive Materials Control Program (RMCP) staff responding to an incident involving real or suspected radioactive materials. This procedure does not apply to a known or suspected terrorist incident. If terrorism is known or possible, contact the Local Law Enforcement Agency (LLEA) and/or the Indiana State Police, and/or the U.S. Federal Bureau of Investigation (FBI), and NRC Operations Center (Phone: 301-816-5100; e-mail: HOO.HOC@nrc.gov; or fax: 301-816-5151) as appropriate.

1.1.2 This addresses preparation for responding to a radiological incident and an abnormal occurrence (AO), as defined in 1.3.1.

1.1.3 This procedure describes radiation detection instruments and other equipment potentially required for response to a radiological incident, safety precautions for RMCP staff and other responders during a response effort and options for identifying unknown radioactive material in the field and laboratory.

1.1.4 This procedure establishes guidelines for voluntary reports on lost and stolen events involving any types of radioactive material, as well as situations that cannot be specifically tied to a reporting requirement (such as “found” sources that were not reported as lost, material contaminated with radioactive material, and landfill alarm trips).

1.1.5 This procedure establishes notification requirements to other federal (including NRC), state, and local agencies as well as event notification through the Nuclear Materials Events Database (NMED) and notification of a possible generic problem to other affected licensees, etc.

1.2 References

1.2.1 Indiana Radioactive Materials Control Rules

1.2.2 NRC Procedure, SA-300, “Reporting Material Events”

1.3 Definitions

1.3.1 Abnormal Occurrence (AO): An incident or event at a facility or involving an activity that is licensed or otherwise regulated by the Department, NRC, or another Agreement State. An incident or event is considered an AO if it involves a major reduction in the protection of public health

or safety and poses a moderate or severe impact on public health or safety.

1.3.2 Agency: The Radioactive Materials Control Program (RMCP) of the Indiana Department of Homeland Security.

1.3.3 Apparent Violation: A potential noncompliance with a regulatory requirement that has not yet been formally cited as a violation or order.

1.3.4 Deviation: A licensee's failure to satisfy a non-legally binding commitment (e.g. failure to tie-down a commitment during licensing and the licensee has not implemented that commitment.)

1.3.5 Escalated Enforcement Action: An enforcement action for any Severity Level I, II, or III violations. Violations with willful aspects (i.e. careless disregard or deliberate misconduct) will typically be considered for escalated enforcement.

1.3.6 Immediate Notification: For this procedure, notification is required to be made to the Indiana Department of Homeland Security by the licensee or its representative (Radiation Safety Officer) after the licensee identifies the incident. Notification is required to be within 4 hours or less of the identification that an incident has occurred.

1.3.7 Investigation: An inquiry necessary to gather sufficient facts to determine whether a violation or noncompliance has occurred or to determine if any person is causing, engaging in or maintaining, or is about to cause, engage in or maintain, any condition or activity that, in the Department's judgement, will result in or likely to result in imminent threat to human health or the environment.

1.3.8 Noncompliance: A violation or deviation.

1.3.9 Notice of Violation: A written notice that sets forth one or more apparent violations of a requirement following an inspection. AN NOV documents violation and is typically the only enforcement action taken unless the criteria for escalated enforcement are met.

1.3.10 Observation: A factual detail noted during an inspection.

1.3.11 Potentially Generic Issue: An inspection finding that may have implications for other licensees, certificate holders, or vendors whose facilities or activities are of the same or similar manufacture or style.

1.3.12 Regulatory Commitment: An explicit statement to take a specific action, agreed to or volunteered by a license, where the statement has been submitted in writing to the Department. These are often captured as tie-down conditions in a license.

1.3.13 Requirement: A legally binding obligation such as a statute, regulation, license condition, or order.

1.3.14 Violation: The failure to comply with a legally binding regulatory requirement such as a statue, regulation, order, or license condition.

2.0 RESPONSIBILITIES

2.1 Health Physicist (HP)

2.1.1 Informs the S/HP of all radioactive materials incidents.

2.1.2 Assumes the lead role in immediate response as required to incidents involving radioactive materials and coordinates with the S/HP or the Radiation Control Program Director (RMCP) or designee.

2.1.3 Immediately responds to incidents involving radioactive materials, as directed by the RCPD or designee.

2.1.4 Assists the RCPD or designee with incident response and documentation, including report preparation, as needed.

2.2 Senior Health Physicist (S/HP)

2.2.1 Notifies the RCPD or designee of radiological incidents.

2.2.2 Assigns staff to respond to incidents involving radioactive materials.

2.2.3 Coordinates immediate response effort during normal working hours.

2.2.4 In coordination with the RCPD and general counsel, makes decisions to impound radioactive materials found in the public domain.

2.2.5 Advises the RCPD whether legal assistance is required.

2.2.6 Ensures that notifications are made of reportable events and required reports as indicated in Attachment 3.2-4, and SA-300 “Reporting Materials Events,” including immediate, 24-hour, and 5 to 30-day event reporting requirements.

2.2.7 Has the responsibility to ensure that written documentation of reportable incidents is completed and for assuring the quality of the reports to the Nuclear Materials Events Database (NMED) within the appropriate time period as required by the incident. Abnormal occurrences should be managed in accordance with NRC’s Management Directive 8.1 “Abnormal Occurrence Reporting Procedures.”

2.2.8 If necessary, and in consultation with the RCPD, request federal assistance from the NRC Headquarters Operations Officer (HOO) at (301) 816-5100.

2.3 Radiation Control Program Director (RCPD)

2.3.1 Final authority, if needed, for radiological incident response activities (conflict resolution).

2.3.2 Requests legal assistance, if required.

2.3.3 Coordinates immediate response effort outside normal working hours. This duty may be delegated to a trained H/P or S/HP if necessary.

3.0 PROCEDURE

3.1 Incident Type and Classification

3.1.1 Transportation Incident: An incident which occurs in association with any activity involving the movement of radioactive materials by a motorized conveyance on roadways, to include but not limited to trucks, planes, automobiles, trains, ships, etc. This does not include movement of materials at a facility by forklift, hand-truck, or other transfer method. Such incident would be considered as a fixed facility incident.

3.1.2 Fixed Facility Incident: An incident which occurs in association with any activity involving radioactive material at a fixed location. This would include temporary work sites (soil testing and non-destructive testing of welds), manufacturing sites (thickness gauges, etc.), or any other location which does not involve the movement of radioactive materials by a motorized conveyance on roadways as indicated above. This does not include incidents at nuclear power generating stations, independent spent fuel installations, and submarine bases.

3.1.3 Terrorism Incident: An incident which occurs in association with any deliberate act of sabotage or destruction which includes the use of radioactive materials. This type of incident may include transportation or fixed facility, but due to the initiating event, will require coordination of response actions to ensure crime scene issues are considered.

3.1.4 Incident Classification: Level I – an incident in which no release of radioactive materials has occurred. This is determined by visual assessment of the incident scene. If there is not a high confidence level by the response personnel in declaring a Level I incident, it should default to a Level II incident.

3.1.5 Incident Classification: Level II – an incident in which there may be a release of radioactive materials. This is determined by visual assessment of the incident scene. Level II would be declared when there is reasonable doubt of the integrity of the containment of the radioactive materials (package shows significant damage, but there is no visible sign of material release).

3.1.6 Incident Classification: Level III – an incident in which there is a release of radioactive material. This is determined by visual assessment of the incident scene. There must be a high level of confidence by the response personnel before declaring a Level III incident.

3.2 Initial Notification

3.2.1 When the Indiana Department of Homeland Security is notified that an incident has occurred, the Radiation Section's on-call staff member will obtain as much information as possible in order to determine the level of response and investigation required. If upon notification of the radioactive material incident, the on-call staff member, with consultation with the RCPD if necessary, determines that the incident is a major emergency, the RCPD or designee will contact the applicable agencies listed in Attachment 3.2-4 for assistance. Not all incidents will require an immediate response. If immediate response is not required, the on-call staff member will notify the appropriate program director (i.e. transportation program manager will be notified for transportation incidents; REP program director will be notified for Nuclear Power Plant related incidents; the S/HPs within the RMCP will be notified for incidents involving licensed materials; etc.) The appropriate response can be ascertained by obtaining as much information as possible and based on the guidance from the program's response plan and/or in Appendix A of SA-300 "Reporting Materials Events." In the event that multiple simultaneous incidents are being reported, the RCPD or designee will coordinate the response activities to ensure the incidents are properly categorized and prioritized. The extent and timeliness of investigations shall be commensurate with the potential risk the incident poses to public health and safety or the environment.

Incident may be received in a number of ways, including but not limited to in-person, phone, email, letter, news media, and/or internet social media. If the incident is assigned to RMCP staff, the incident is screened to determine the level of response required. RMCP personnel should use this section as guidance when responding to byproduct, source, or special nuclear material incidents. Radiological material incidents should be recorded on Attachment 3.2-1 Radiological Incident Notification Form and the incident reported in accordance with Attachment 3.2-4 Procedure for Reporting Events.

For major radiological emergencies, IDHS radiation program staff should coordinate with other state agencies, the NRC 24-hour Headquarters Operations Center Officer at (301) 816-5100, the Radiation Emergency Assessment Center/Training Site (REAC/TS) at (865) 576-1005, and EPA Region 5 at (312) 353-2000.

The below procedures should be performed for events classified as Significant Events, meaning events identified as having generic concerns

or issues with a significant potential to impact public health and safety and/or the environment, requiring immediate (within 4 hours) or 24-hour reporting as specified in SA-300 Appendix A. Including but not limited to:

3.2.1.1 Multiple occurrences of an event tracked as a performance measure (medical events, overexposures, lost or stolen sources of concern);

3.2.1.2 A single occurrence of an event tracked as a strategic goal (deaths, loss of organ function, significant releases to the environment);

3.2.1.3 Events involving possible generic concerns or issues (equipment malfunctions, equipment failure, inadequate user procedures, software problems); or

3.2.1.4 Consequences or casual factors not previously seen in the event assessment.

3.2.2 Obtain as much of the following information as possible:

- Caller's name, if by phone, affiliation, and location.
- Phone number where the informer may be reached.
- On-scene contact person and phone number.
- Location of the incident.
- Overall description of the incident, including any injuries.
- Indications that radioactive material is involved.
- Description of the radioactive material, including packaging.
- Any writing or inscription on the materials.
- Availability of a shipping manifest (transportation incident).
- Indications of a possible spread of contamination from meter readings, broken source housing, leaking packaging, etc.
- Other agencies or personnel involved.

3.2.3 For incidents involving quantities of Category 1 and Category 2 radioactive materials, ensure the required notifications are made in accordance with the provisions of 10 CFR 37.57.

3.2.4 Inform the S/HP and RCPD or designee of the incident.

3.2.4.1 Criteria for determining the level of response required follows the reporting requirements listed in SA-300, based on the relative risk to public health and safety or the environment and the factors in 3.2.3.2. The primary responsibility for responding to an incident remains with the licensee. However, the RMCP may give advisory support and may assist the licensees in diagnosing the situation and determining potential courses of action.

3.2.4.2 Factors that should be considered for determining the appropriate response include but are not limited to:

- Potential to escalate.

- Location of incident.
- Potential for exposure or contamination.
- Media interest.
- Type of release
- Involvement of other responders.
- Request for specific type of assistance.

3.2.5 Upon receipt of a notification of an incident, advise the notifier on proper measurements to limit exposure and minimize the spread of contamination.

3.2.6 As necessary, keep the public informed thought IDHS Public Affairs office. Attachment 3.2-2 Radiological Incident Response Question and Answer Sheet may be helpful and can be provided to the IDHS Public Affairs office. Relative to communication with the public, consider the following factors:

- Extent of public risk and perception of the risk.
- Extent of media interest.
- Confidence in validity of information reported to the Department.
- Reassessment of the measures that have been taken (e.g., health physics and medical services that have been made available to the public).
- Coordination of information among the NRC, federal agencies, regional partners, and state and local agencies. Ensure that other state and federal agencies are informed of any information to be released to the media or the public.
- Assurance of correctness of information provided to the news media and public.

3.2.7 Examples of reportable events from SA-300 are included in Attachment 3.2-5.

3.2.8 The notifications to be made to NRC are contained in Attachment 3.2-6.

3.3 On Scene Response

3.3.1 If necessary to prevent imminent danger to public health or environment, the Department may request that a person voluntarily stop or not take an action or surrender a source of radioactive material.

3.3.1.1 If the person is about to engage in an activity that the HP, in consultation with the RCPD or designee, determines may result in imminent danger to public health and safety of the environment and does not voluntarily comply with direction from the HP, then the HP should contact the RCPD or designee and request the Department pursue a formal cease and desist order or impoundment order.

3.3.1.2 The RCPD or designee should consult the IDHS General Council to coordinate such orders.

3.3.2 When possible, a minimum of two people should provide immediate response to a radiological incident.

3.3.3 The following equipment should be obtained and transported to the incident scene for immediate response:

- Appropriate Personal Protective Equipment (PPE)
- Appropriate survey instrumentation,
- An instrument capable of field identification of unknown isotopes,
- Personally assigned dosimetry,
- Cellular phone,
- Other instruments and supplies, as necessary.

3.3.4 Site approach for immediate response team:

3.3.4.1 Don appropriate PPE

3.3.4.2 Approach the incident site/material from upwind.

3.3.4.3 Turn on exposure rate instrument and electronic personal dosimeter before approaching the incident site.

3.3.4.4 Obtain current information from on scene personnel.

3.3.4.5 Coordinate response efforts prior to approaching the material.

3.3.4.6 Ask for a shipping manifest if applicable.

3.3.4.7 Establish a 2mR/hr. exclusion zone around the material if not already done.

- Note that is worse case incidents, like a radiological dispersal device or a nuclear detonation, the HP may suggest a 10 mR/hr, 10 R/hr, or other applicable exclusion zone.

3.3.4.8 Determine who may enter the exclusion zone and under what conditions.

3.3.5 Document the following, as it occurs:

- Date and time of all major activities related to the incident.
- Model and serial numbers of all instruments used.
- Calibration date of all instruments used.
- Names of responders.
- A physical description of the incident site.
- Location or orientation of any materials.
- Background radiation levels.
- Survey results.
- Amount of material present.
- Any markings or inscriptions associated with the material.
- Disposition of the material.
- Names, phone numbers, and addresses of all individuals involved, for follow-up when performed.

3.3.6 Determine if material needs packaging. If the material must be bagged, double bag the material. Survey the outer surfaces of packaging for contamination prior to transport and take appropriate precautions should external contamination be measured.

3.3.7 After the material has been safely packaged or ensured to be in safe condition, do the following:

3.3.7.1 Determine best location for temporary storage.

3.3.7.2 Ensure that decontamination issues are addressed.

3.3.7.3 Initiate attempt to locate owner of material.

3.3.7.4 Contact the RCPD or designee for direction and authorization for management of the material (see Attachment 3.2-3 Impoundment Guidelines.)

3.3.7.5 If no owner can be found, notify the RCPD or designee and inquire whether or not to impound the item. Disposal options will be investigated at this time.

3.3.8 Unless being transported in a state vehicle, materials being transported for analysis or storage must be packaged to meeting Department of Transportation (DOT) requirements.

3.4 Report

3.4.1 The HP assigned to the incident should prepare a report within 30 days documenting all information gathered, the disposition of the material, and a list of all the parties involved. The report is required for all incident response, including phone consultation for reportable incidents. If a report cannot be completed within the 30 days, the RCPD or designee may approve an extension

3.4.2 Provide a copy of the report to the S/HP and RCPD.

3.4.3 The S/HP shall assure the quality and completeness of the report and ensure that a copy of the report, analysis results, and all notes and related paperwork are properly filed in accordance with SA-300. This report and any subsequent follow-up reports should be utilized to forward data to NMED and to the NRC in accordance with SA-300 “Reporting of Materials Events” as well as any other federal, state, or local agency, as necessary.

3.4.4 Input incident data to the local NMED and forward event reports to the NRC, as necessary. For more information on reporting events, see Attachment 3.2-4 Procedure for Reporting Events.

3.5 Follow-up

3.5.1 In consultation with the RCPD, or designee, determine if any whole-body counts, bioassays, or personnel dose determination are warranted, and if medical assistance is required or referral to Oak Ridge Radiation Emergency Assistance Center (REAC/TS) for analysis is necessary. See

NRC Inspection Manual Chapter 1360 'Use of Physicians and Scientific Consultants in the Medical Consultant Program" for guidance.

3.5.2 In consultation with the S/HP, determine if training or information for any individuals involved in the incident is warranted.

3.5.3 In consultation with the S/HP determine the need for a follow-up inspection and/or any enforcement actions against the licensee. This incident should be addressed during the next routine inspection. If it is determined that enforcement actions are required, refer to RMCPP 2.5 Enforcement, Escalated Enforcement, and Administrative Actions.

3.5.4 Ensure a copy of the incident report is in the licensee file and make notification to the appropriate RMCP staff, as necessary.

3.5.5 Make notifications to appropriate federal and state agencies specified in section 5.0, including the NRC and NMED within the appropriate time period of any new information and status of event including final close of the event.

3.5.6 In consultation with S/HP and RCPD, determine the need to notify other licensees of the problem if a known or possible general fault is involved that could affect those licensees.

3.5.7 If a cease-and-desist order was issued or a source impounded, the RCPD should coordinate with the IDHS General Counsel to ensure applicable requirements are met.

4.0 RECORDS

4.1 Records include completed attachments from this procedure, other documents related to incidents and NMED-related documents.

4.2 Efforts will be made to maintain records primarily in an electronic form. Those that are paper will be scanned electronically and may be kept as paper or shredded after determination as to what is best for the particular record and its form for regulatory purposes.

5.0 COMMUNICATING EVENTS TO THE APPROPRIATE STATE AND FEDERAL AGENCIES

5.1 Events and allegations may be reported to the Indiana Radioactive Materials Control Program at 301 W. Washington St E-208, Indianapolis, IN 46204, via email at RMCP@dhs.in.gov, or via the IDHS Watchdesk at (317)233-6615.

5.2 US. NRC Region 3, 2056 Westings Ave Suite 400 Naperville, IL 60563-2657.

5.3 NRC Headquarters Operation Officer (HOO) (301) 816-5100.

5.4 U.S. EPA Region 5, 77 W. Jackson Blvd, Chicago, IL 60604, (312) 353-2000.

5.5 Oak Ridge Institute for Science and Education, Radiation Emergency Assistance Center/Training Site (ORISE REAC/TS) (865) 576-1005.

6.0 Attachments to RMCPP 3.2

Attachment 3.2-1 Radiological Incident Notification Form

Attachment 3.2-2 Radiological Incident Response Question & Answer Sheet

Attachment 3.2-3 Impoundment Guidelines
Attachment 3.2-4 Procedure for Reporting Events
Attachment 3.2-5 Examples of Reportable Events
Attachment 3.2-6 Event Reporting Schedule

Indiana Department of Homeland Security
Radioactive Materials Control Program

ATTACHMENT #3.2-1
Radioactive Materials Control Program
Radiological Incident Notification Form

NAME: _____

TITLE: _____

RADIOLOGICAL INCIDENT NOTIFICATION FORM

Contact Information	Incident Number: _____
Name: _____	Notification Date/Time: _____
Incident Reported By: _____	On-site Contact: _____
Title/Organization: _____	Title/Organization: _____
Phone Number: _____	Phone Number: _____

Location of Incident (Include Directions):

_____
_____
_____
_____

Description of Incident:

_____
_____
_____
_____
_____
_____

Radiation Assessment:

1. Why do you believe radioactive material is involved?

_____
_____
_____

2. Describe the radioactive material including packaging.

_____
_____
_____

3. Did you observe any writing or inscriptions on the materials?

_____
_____
_____

4. Are shipping papers available?

_____
_____
_____

5. Are there any indications of a possible spread of contamination based on meter readings, broken source housing, leaking packaging, etc.?

6. Has the source or contaminated area been isolated or access to the area restricted?

7. What other agencies or personnel are involved?

Additional Comments:

Indiana Department of Homeland Security
Radioactive Materials Control Program

ATTACHMENT #3.2-2
Radioactive Materials Control Program
Radiological Incident Response Question and Answer Sheet

NAME: _____

TITLE: _____

RADIOLOIGICAL INCIDENT RESPONSE QUESTION AND ANSWER SHEET

What is a radiological incident?

A radiological incident is an emergency involving radioactive materials. Examples of radiological incidents include situations where radioactive materials are lost, stolen, or involved in a transportation accident. In most cases, radiological incidents can be successfully resolved by emergency responders with state assistance.

What state assistance is available to respond to a radiological incident?

The Indiana Department of Homeland Security, Radiation Program, is available on a 24-hour basis to support and advise emergency responders during an incident involving radioactive materials. IDHS emergency response resources include highly trained personnel and specialized radiation monitoring equipment. IDHS Radiation Program staff can be quickly dispatched to provide assistance remotely, and if needed, on-site assistance at the scene of a radiological incident.

How are radioactive materials regulated to minimize public risk?

Radioactive materials are stringently regulated by state and federal government agencies by licensing or registration. Devices and products containing radioactive materials are required to incorporate safety features that minimize the exposure risk to the public from a radiological incident.

What should I do if involved in a radiological incident?

Remain calm. Follow instructions given by on-scene officials. Indiana Department of Homeland Security Radiation staff will quickly assess the situation and recommend any further actions. Most radiological incidents do not result in harmful levels of radiation exposure to the public.

Where can I get more information?

Indiana Department of Homeland Security, Radiation Programs - RMCP@dhs.in.gov

Center for Disease Control and Prevention - https://www.cdc.gov/nceh/radiation/emergencies/index.htm

Nuclear Regulatory Commission - https://www.nrc.gov/about-nrc/emerg-preparedness/prepare-for-radiological-emerg.html

Indiana Department of Homeland Security
Radioactive Materials Control Program

ATTACHMENT #3.2-3
Radioactive Materials Control Program
Impound Guidelines

NAME: _____

TITLE: _____

IMPOUNDMENT GUIDELINES

Management will consider the following questions before approving a request to impound radioactive materials.

Regulatory Control:

- Are the radioactive materials under the direct control and responsibility of a licensee?
- Are the materials in a controlled location?
- Are the materials directly and negatively impacting public health and safety?
- Is there a possible public perception problem with the current location?

Physical/Chemical Form:

- What is the isotope and physical/chemical form of the material?
- Are other hazardous or explosive materials involved?
- What is the activity of the material?

Physical Condition:

- Are the materials intact, crushed, leaking, or damaged in some way?
- Are the materials concentrated or dispersed over a large area?
- Are the materials separate or part of a larger device?

Amount:

- What is the volume of the material?

Transportation:

- Can the material be transported safely?

Waste Management:

- Does managing the material involve simple storage or is any processing involved in disposing of the materials?

Alternatives:

- Are there any safe and reasonable alternatives to the State impounding the material?
- Is there a temporary storage location and responsible party available?

Indiana Department of Homeland Security
Radioactive Materials Control Program

ATTACHMENT #3.2-4
Radioactive Materials Control Program
Procedure for Reporting Events

NAME: _____

TITLE: _____

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 ≥ 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 threated) ≥ TEDE of 25 rem (0.25 Sv), or lens dose equivalent ≥ 75 rem (0.75 Sv), or shallow dose equivalent to the skin or extremities ≥ 250 (2.5 Gy)	10 CFR 20.2202(a)(1)
Release where an individual could have an intake ≥ 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 pubic 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)

Indiana Department of Homeland Security
Radioactive Materials Control Program

ATTACHMENT #3.2-5
Radioactive Materials Control Program
Event Reporting Schedule for Agreement States

NAME: _____

TITLE: _____

IMMEDIATE

REPORTABLE EVENT NOTIFICATION	AGREEMENT STATE REPORTING SCHEDULE TO NRC	REPORTING METHODS TO NRC[4]
Significant reportable events requiring **immediate notification (i.e., within 4 hours or less[2])** by Agreement State licensees.	Agreement States should report to NRC immediately of notification by an Agreement State licensee	Report initial information to the **NRC Operations Centers[5] (301) 816-5100** FAX#:(301) 816-5151 Email: HOO.HOC@nrc.gov

24 HOURS

Significant reportable events requiring notification within **24 hours or less, or next calendar day**, by Agreement state licensees.	Agreement States should report to NRC within 24 hours of notification by an Agreement State licensee.	Report initial information to the **NRC Operations Centers[5] (301) 816-5100** FAX#:(301) 816-5151 Email: HOO.HOC@nrc.gov
Events involving **theft or terrorist** activities should be reported to the **FBI[3]**.	Agreement States should consider reporting to the FBI within 24 hours of notification.	Report initial information to the **NRC Operations Centers[5] (301) 816-5100** FAX#:(301) 816-5151 Email: HOO.HOC@nrc.gov

5 to 60 DAYS

5 to 60 days reportable events requiring **greater** than 240hour notification by	Agreement States should provide 5 to 60-day notification within the same	NMED Local Agreement State Software or NMED website at https://nmed.inl.gov/ or

Agreement state licensee and event follow-up reports.	timeframe licensees must report the event to the Agreement States, and any follow-up reports should be provided in a timely manner[6].	Mail: U.S. NRC, Branch Chief of RMSB/MSSA, Mail Stop T-8-E24, Washington, DC 20555

VOLUNTARY

Lost, stolen, or abandoned sources reported to the Agreement and Non-Agreement States that are non-AEA or unlicensed material and not covered by the above two categories.	Voluntary reporting by the Agreement States and Non-Agreement States.[7]	NMED website at https://nmed.inl.gov/ or Mail: U.S. NRC, Branch Chief of RMSB/MSSA, Mail Stop T-8-E24, Washington, DC 20555

[1]Privacy Act Information – Personal or confidential information should not be included in event descriptions (e.g., names, personal addresses, or-social security-numbers.)

[2]For example, events involving lost, actual or attempted theft, sabotage, or diversion of radioactive materials or devices containing "high-risk" sources in quantities greater than or equal to the quantities of concern (i.e., quantities greater than or equal to Category 2 sources listed in the International Atomic Energy Agency's Code of Conduct and as outlined in reporting requirements in 10 CFR Part 20.2201.)

[3]A revision to the U.S. Code assigns lead responsibility for material events involving possible theft or terrorist activities to the Federal Bureau of Investigation (FBI).

[4]Sample fax to the NRC Operations Center is available in Appendix D of FSME procedure SA-300.

[5]The NRC Operations Center staff will promptly notify the appropriate Region Duty Officer (RDO) and Headquarters staff of Agreements State events. Therefore, no separate notification to other NRC staff by an Agreement State is necessary.

[6]An example of the minimum basic event information required for a complete record is provided in Appendix E of SA-300.

[7]Voluntary reporting is a joint national effort of the NRC and the Conference of Radiation Control Program Directors (CRCPD) to track certain non-AEA, unlicensed or non-reportable AEA lost and found radioactive material.

Indiana Department of Homeland Security

Radioactive Materials Control Program

Radioactive Materials Control Program Procedure 3.3, Revision 0

Scrap Yard Incident Response

Prepared By: Date:

Reviewed By: Date:

Approved By: Date:

Effective Date:

Revision	Date	Description of Changes
0		

Table of Contents

1.0 PURPOSE

1.1 Applicability
1.2 References
1.3 Definitions

2.0 RESPONSIBILITIES

2.1 On-call Radiation Program Staff members
2.2 Assigned Radiation Program Staff member
2.3 Radiation Control Program Director (RCPD)

3.0 PROCEDURE

3.1 Initial Notification
3.2 Determining Use of DOT Exemption
3.3 On-Scene Response
3.4 Report
3.5 Follow-up

4.0 RECORDS

4.1 Incident file

5.0 ATTACHMENTS TO RMCPP 3.3

None

Scrap Yard Incident Response

1.0 PURPOSE

1.1 Applicability

1.1.1 Applies to all Indiana Department of Homeland Security Radiation Program staff responding to a scrap yard incident involving real or suspected radioactive materials.

1.1.2 Describes options for determining the appropriate type of response to a scrap year incident by Radiation Program (RP) staff.

1.1.3 Addresses preparations for a site response to a scrap yard incident.

1.1.4 Describes appropriate radiation detection instruments and other equipment potentially required for use during a site response to a scrap yard incident.

1.1.5 Describes safety precautions for RP staff and other responders during a site response effort to a scrap yard incident.

1.1.6 Establishes guidelines for managing, including impounding radioactive material that is, or could be, a threat to public health and safety.

1.2 References

1.2.1 Indiana Radioactive Materials Control Program Rules

1.2.2 U.S. DOT Special Permit SP 10656

1.2.3 SA-300 “Reporting Material Events”

1.3 Definitions

1.3.1 Agency: The Radioactive Materials Control Program (RMCP) of the Indiana Department of Homeland Security.

1.3.2 Radiation Program: All IDHS radiation focused staff; includes both Radioactive Materials Control Program (RMCP) staff and Radiation Response staff (i.e., REP Coordinator, Radiological Transportation/RND Program Manager, and Emergency Preparedness Specialist)

1.3.3 U.S. DOT Special Permit SP 10656: (Also called “DOT Exemption” form) is a form signed by the authorized Radiation Program staff that authorizes the one-way transportation in commerce of (rail or motor vehicle) shipments of scrap metal and related metal recycled material which have been found, during or at the conclusion of transportation, or during inspection of the shipment following receipt, to contain unexpected and unidentified radioactive material or contamination

2.0 RESPONSIBILITIES

2.1 On-call Radiation Program Staff members

2.1.1 Receive initial notification from the scrap facility, via the Watchdesk, of potential discovery of radioactive material.

2.1.2 Complete all immediate documentation required, including, but not limited to, DOT SP 10656, instructions to scrap yard, etc.
2.1.3 If warranted due to public health and safety, provide immediate response to incidents involving radioactive materials, as directed by the RCPD or designee.
2.1.4 If necessary, notifies the NRC and inputs report into NMED.

2.2 Assigned Radiation Program Staff member

2.2.1 Conducts on-site response.
2.2.2 Determines appropriate remedial action of any identified radioactive material.
2.2.3 Determines if notifications should be made to the NRC within the time period specified in RMCPP 3.2 Incident Response and Attachment 3.2-4 Procedure for Reporting Events.
2.2.4 Coordinate landfill disposal with Indiana Department of Environmental Management, if appropriate.
2.2.5 Ensures a complete report is prepared documenting the incident response, including all notes, pictures, forms, surveys, and analysis results.

2.3 Radiation Control Program Director (RCPD)

2.3.1 Final authority within the RMCP for radiological incident response activities (conflict resolution)
2.3.2 Requests legal assistance, if required.
2.3.3 Requests federal assistance, if required.

3.0 PROCEDURE

3.1 Initial Notification

3.1.1 If a radiation portal monitor, or hand-held detector, at a scrapyard detects radiation, the scrap yard will notify IDHS RP staff via the IDHS Watchdesk at (317) 233-6615.
3.1.2 IDHS RP will assign two individuals to provide on-call support for all radiological incidents 27/7/365. Radiation Response will provide the primary on-call individual and the RMCP will provide the secondary on-call individual. Response staff will provide response for any unknown radioactive materials; RMCP staff will provide response to any know licensed material and will provide assistance to the Response staff for any unknown radioactive material.
3.1.3 Once notification is received, obtain as much of the following information as possible:

- Caller's name, affiliation, and location
- Phone number where caller can be reached.
- Location of the incident
- Overall description of the incident, including any injuries.

- Indications that radioactive material is involved.
- Any writing or inscription on visible materials.
- Radiation readings on sides of vehicle and in driver compartment containing scrap, or other survey results.
- Type of survey instrumentation used.
- Other agencies or personnel involved.

3.1.4 Determine the level of immediate response required. Factors that should be considered include:

- Likelihood of health and safety concerns such as significant personnel radiation exposure or personal or environmental contamination.
- Location of incident.
- Impact of facility (i.e., ability to secure material and maintain safety of workers and the public).
- Potential for exposure or contamination.
- Security of storage area.
- Media interest
- Involvement of other responders.
- Request for specific type of assistance.
- Training and experience of scrap yard personnel.

3.1.5 Advise the caller on proper measures to limit exposure and minimize the spread of contamination (e.g., isolate vehicle, do not disturb load, etc.)
Note: People should not handle contaminated or high exposure rate materials unless trained, qualified and aware of the hazards. If there is any doubt, isolate the material until Radiation Program staff or other authorities can attend the materials safely.

3.2 Determining Use of U.S. DOT Special Permit SP 10656

3.2.1 Ask the scrap yard if they will accept or reject the load containing potential radioactive materials.

3.2.2 Issue a U.S. DOT Special Permit SP 10656 to the shipper that allows transportation of the load back to point of origin or another pre-designated location.

3.2.2.1 Radiation readings are needed for SP 10656 form.

3.2.2.2 The reading may be supplied by scrap yard personnel or others if RP staff believe they are accurate.

3.2.2.3 The Special Permit is available from the Conference of Radiation Control Program Directors (CRCPD) at: https://crcpdpro.wpenginepowered.com/document/dot-10656-fillable-form/

3.2.3 If warranted, the on-call staff member schedules a site visit to the scrap facility, point of origin, or the designated location by Radiation Program staff to assess the incident.

3.3 On Scene Response

3.3.1 If possible, a minimum of two people should respond to a scrap yard incident including a member of the RP staff.

3.3.2 Prior to use, all instruments shall be battery and source checked and have a current calibration. Obtain the following equipment:

- Appropriate survey instrumentation.
- An instrument capable of field identification of unknown isotopes.
- Personally assigned dosimetry.
- Cellular phone
- Other instruments and supplies, as necessary.

3.3.3 Upon arrival:

3.3.3.1 Obtain current information from facility personnel.

3.3.3.2 Turn on exposure rate instruments before approaching.

3.3.3.3 Wear safety equipment (boots, hard hat, gloves), as necessary.

3.3.3.4 Wear contamination clothing, as appropriate.

3.3.3.5 Perform radiation surveys.

3.3.3.6 Establish a 2mR/hr. exclusion zone if required and not already done.

3.3.3.7 Determine who may enter the exclusion zone and under what conditions.

3.3.4 Determine level of resources needed.

3.3.4.1 IF RP resources are available to resolve the incident, evaluate the scrap load, determine the cause of alarm, and advise the facility, as appropriate.

3.3.4.2 If RP resources are unavailable:

3.3.4.2.1 Advise the facility to obtain the services of a health physics contractor to investigate the load, determine cause of alarm, and assist with radioactive material management.

3.3.4.2.2 Inform contractor to provide results of investigation to the Indiana Department of Homeland Security Radiation Programs at hazmat@dhs.in.gov.

3.3.5 Document the following:

- Date and time of all major activities related to the incident.
- Model and serial numbers of all instruments used.
- Calibration date of all instruments used.
- Names of responders.
- A physical description of the incident site.
- Location or orientation of any materials.
- Background radiation levels.
- Survey results.
- Activity of material.

- Amount of material present.
- Any markings or inscriptions associated with the material.
- Disposition of the material.
- Names, phone numbers, and addresses of all individuals involved, in case follow-up is required.

3.3.6 If radioactive material is removed from the load, determine if material needs packaging. If it does, double bag the material and incorporate any other US DOT transportation packaging requirements.

3.3.7 After the material has been safety packaged or ensured to be in safe condition, do the following:

3.3.7.1 Determine best location for temporary storage.

3.3.7.2 Ensure that decontamination issues are addressed.

3.3.7.3 Initiate attempt to locate owner of material.

3.3.7.4 Contact the RCPD or designee for direction and authorization for management of the material (see Attachment 3.2-3 Impoundment Guidelines.)

3.3.7.5 If no owner can be found, notify the RCPD or designee and inquire whether or not to impound the item. Disposal options will be investigated at this time.

3.3.8 Materials being transported for analysis or storage must be packaged to meet US DOT requirements.

3.4 Report

3.4.1 The report shall be prepared within 15 days of the notification, documenting all information gathered, the disposition of the material, and a list of parties involved. The report is required for scrap yard incidents response, including phone consultation for reportable incidents.

3.4.2 Provide a copy of the report to RCPD.

3.4.3 The RCPD or designee shall ensure that a copy of the report, analysis results, and all notes and related paperwork are properly filed.

3.4.4 If required, input incident data to the Nuclear Materials Events Database (NMED) and forward event reports as specified in Appendix A of SA-300 "Reporting Materials Events."

3.5 Follow-up

3.5.1 Replace all inventories supplies used from the response kit.

3.5.2 In consultation with RCPD or designee, determine if any whole-body counts, bioassays, or personnel dose determinations are warranted.

3.5.3 In consultation with RCPD or designee, determine if training or information for any individuals involved in the incident is warranted.

3.5.4 If appropriate, obtain copy of reports by any health physics contractors involved in the incident.

3.5.5 If the owner is a IDHS Radioactive Materials Control Program licensee, consult with the RCPD and the S/HP to determine if a follow up inspection and/or any enforcement actions against the licensee. The next inspection should address this item. If it is determined that enforcement actions are required, refer to RMCPP 2.5 Enforcement, Escalated Enforcement, and Administrative Actions.

3.5.6 In consultation with the RCPD, if the owner is found and not an IDHS RMCP licensee, determine need to notify the appropriate regulatory agency.

3.5.7 Ensure that any notifications required to be made to any federal, state, and local agencies are made within the appropriate time period, updated of any new information and notified of the final close.

4.0 RECORDS

4.1 RMCPP 3.2 Attachment 3.2-1 Radiological Incident Notification Form

4.2 Local NMED Database: Provide an electronic NMED report to the NMED contractor by using the local NMED Agreement State software from the NMED website or following the upload function instructions on the NMED website.

4.3 As much as possible, records should be electronically filed. Where possible, paper records should be scanned to be filed electronically.

5.0 Attachments to RMCPP 3. 3

None

4.7.2 Procedures for Identifying Significant Events and Submittals for Entry into the Nuclear Material Event Database

The State of Indiana has modeled its procedures for identifying significant events and submittals for entry into the Nuclear Medical Event Database (NMED) on the SA-300 Handbook Nuclear Material Event Reporting in the Agreement State. This is done in RMCPP 3.4 Nuclear Material Event Database (NMED) Input, which is attached in this section of the application. It describes how Indiana will generate event reports and submit them to NMED within required time frames and as required by regulation. Responsibilities are assigned for the completion of reports and for ensuring the quality of reports. Criteria are included for identifying abnormal occurrences that are reportable, and guidance is provided for notification, follow-up and closeout of reports.

Indiana Department of Homeland Security

Radioactive Materials Control Program

Radioactive Materials Control Program Procedure 3.4, Revision 0

Nuclear Material Events Database (NMED) Input

Prepared By: Date:

Reviewed By: Date:

Approved By: Date:

Effective Date:

Revision	Date	Description of Changes
0		

Table of Contents

1.0 PURPOSE

2.0 Background

3.0 Responsibilities

3.1 Senior Health Physicist (S/HP)

4.0 Reporting Events Requiring Notification Within 24 Hours

4.1 NMED Record for Events Reported within 24 hours
4.2 5 to 30-Day Event Reporting
4.3 Reporting Follow-up Event Information
4.4 Radiological Emergency Response Assistance Available to the States
4.5 Voluntary Reporting of Lost, Stolen and Abandoned Sources
4.6 Reporting Theft or Terrorist Activity

5.0 Closing and Completing Events

5.1 Events Closed in NMED
5.2 Record Completed in NMED

6.0 Agreement State Safety Reviews of Material Event Reports

6.1 Agreement State Review of Material Events for Safety Significance and Generic Assessment
6.2 Actions Agreement State May Take after Review of Significant Events

7.0 Abnormal Occurrence Guidelines and Criteria

Nuclear Materials Event Database (NMED) Input

1.0 PURPOSE

To provide guidance for Indiana Department of Homeland Security (IDHS) Radioactive Materials Control Program (RMCP) licensing and inspection personnel on the proper reporting requirements for incidents involving lost, stolen, misplaced, orphan or damaged sources, medical events, and other incidents involving radioactive material to the NRC via the Nuclear Material Events Database (NMED). All RMCP staff members involved with the reporting of events to NMED shall use the guidance of SA-300 "Handbook on Nuclear Material Events Reporting in the Agreement States"

2.0 BACKGROUND

From SA-300 "At the request of the Conference of Radiation Control Program Directors (CRCPD), the Nuclear Material Events Database (NMED)…captures voluntary reports on lost and stolen events, for any type of nuclear material, as well as situations that cannot be specifically tied to a reporting requirement (such as 'found' sources that were not reported lost, materials contaminated with radioactive material, and landfill alarm trips). The reported information aids in understanding why the events occurred and in identifying actions to help ensure public and occupational safety and security and improves the overall effectiveness of the NRC and Agreement State regulatory programs."

Guidance is provided on:

1. Reporting events requiring notification within 24 hours to the NRC Operations Center;
2. Providing 5 to 30-day notification and follow-up event information;
3. A schedule for event reporting;
4. Reporting formats; and
5. Providing event information for events meeting the abnormal occurrence (AO) criteria.

   Note: An accident or event will be considered an AO if it involves a major reduction in the degree of protection of public health or safety, security, and/or the environment. This type of incident or event would have a moderate or severe impact and could include, but need not be limited to the following:

   1. *Moderate exposure to, or release of, radioactive material licensed by or otherwise regulated by the RMCP;*
   2. *Major degradation of essential safety-related equipment; or*

3. *Major deficiencies in design, construction, or use of management controls for facilities or radioactive material licensed by or otherwise regulated by the RMCP.*

3.0 Responsibilities

3.1 Senior Health Physicist (S/HP)

3.1.1 Follow the procedures contained in Section 4.0 of this procedure to report events into the Nuclear Material Events Database (NMED) within the required reporting timeframe.

3.1.2 If unavailable, designate a member of the RMCP to provide notice to the Nuclear Regulatory Commission in accordance with Section 4.0 of this procedure.

3.1.3 Track and amend NMED entries for existing events, closed events, and provide follow up information as requested by the NRC.
Note: reports of events should be made to the NRC by a qualified radioactive materials inspector or licensed reviewer whenever possible. All qualified radioactive materials inspectors and license reviewers will have access to NMED.

4.0 REPORTING EVENTS REQUIRING NOTIFICATION WITHIN 24 HOURS

The RMCP shall report events requiring notification within 24 hours to the NRC Operations Center Headquarters Operations Officer (HOO). Information should be initially reported to the HOO by telephone at (301) 816-5100. Follow-up information for the event may also be provided to the HOO by fax at (301) 816-5151 or by email at HOO.HOC@nrc.gov.

4.1 NMED Record for Events Reported Within 24 Hours

The NMED contractor uses the initial event notification (EN) information, which was provided to the NRC Operations Center from the Department, to establish a record in the national NMED database. The NMED contractor will reference the IDHS event reporting identification number in the record. The RMCP event report identification number will be reflected in the “Reference” field of the NMED record and will be used to ensure any subsequent updates are correctly associated with the initial event record. In addition, each event entered into NMED is assigned a unique NMED item number.

4.2 5 to 30-Day Event Reporting

The RMCP shall report events that require reporting within 5 to 30 days to the NRC. These reports may be provided in writing by mail or electronically. NRC staff encourages Agreement States to electronically report these events using

the local NMED Agreement State software or the document “Upload” program on the NMED website.

A. Assign Event Report Identification Number
   The IDHS event report identification number should appear on all reports, including preliminary, initial notification reports (e.g., EN’s), and any follow-up reports. The event report identification number should consist of the two-letter state agency ID (IN), two-digit year corresponding to the reporting year, and a sequentially assigned four-digit ID number. The event report identification number should be referenced by the IDHS for all telephone, electronic, or written notifications involving each specific event. The S/HPs will keep a log of event reports up to date.
B. Basic Event Information
   Appendix C of SA-300 provides a listing of the minimum event information that should be provided. When submitting an initial event report, provide as much information as known at the time the report is prepared regarding the items listed in the Appendix.
C. Electronic Reporting to NMED
   The RMCP may provide an electronic NMED report to the NMED contractor by using the NMED Agreement State software, which may be downloaded from the NMED website, or by using the document “Upload” function on the NMED website.
D. Access to NMED
   A search of the nationally collected data is available on the NMED website with several drop-down, point-and-click menus available. To obtain access to NMED, contact the NRC NMED Project manager at NMEDNRC@nrc.gov.
E. Written Event Reports
   Written event reports should be sent to the Branch Chief, RMSB at the address listed in Appendix B of SA-300. Reports should be provided in an optical character recognition (OCR) format. Include an event report cover page for all written event information provided to the NRC.
   Department personnel should refrain from providing information that is considered confidential (e.g., personal privacy, proprietary, or security related information, including sensitive unclassified non-safeguards information (SUNSI)). If such information is required to describe the event, the RMCD should provide a bracketed copy of the information that deletes such information.

4.3 Reporting Follow-up Event Information

Follow-up information for NMED reports (e.g., providing additional information regarding initial event reports) should provide the results of the investigation as to what, where, when and how the event or conditions occurred. The following items should be provided when reporting follow-up information:

4.3.1 On a monthly basis, follow up reports through the closeout of the event should be provided in writing to the Radioactive Materials Safety Branch Chief at the address listed in Appendix B of SA-300 or electronically to the NMED contractor via the NMED website. A complete event report should include all investigative information obtained through closeout of the event.

4.3.2 When providing follow-up event information, provide document(s), or clear reference to documents on file that the RMCP used to generate the NMED event report (e.g., a licensee inspection report dated mm/dd/yyyy), if applicable and appropriate.

4.3.3 Provide any follow-up event information that revises earlier information or provides additional information on a given event to ensure a complete historical record.

4.4 Radiological response Assistance Available to the States

The RMCP may request radiological emergency response assistance by contacting the NRC's Operation Center. The Federal Government, upon request, has the capability to provide assistance to state in responding to radiological emergencies. Under the National Response Framework, the NRC is the coordinating agency for domestic incident management for incidents involving nuclear materials or facilities licensed by the NRC or Agreement States.

4.5 Voluntary Reporting or Lost, Stolen and Abandoned Sources

The RMCP should follow the guidelines provided above in section 3.2, "5 to 30-Day Reporting" to report any lost, stolen, and abandoned non-Atomic Energy Act and unlicensed material.

4.6 Coordination with Indiana Department of Health

Upon notice of a reportable medical event, the RMCP will coordinate to investigate with the Indiana Department of Health, as required.

4.7 Reporting Theft or Terrorist Activity

The U.S. Federal Bureau of Investigation (FBI) notification should be considered if an event involves the possibility of theft or terrorist activities. The RMCP will promptly notify the NRC Operations Center (i.e, the HOO) after contacting the appropriate Local Law Enforcement Agency (LLEA) and/or the FBI in cases involving actual or attempted theft, sabotage, or diversion of radioactive material containing quantities greater than or equal to the quantities of concern of radioactive material as indicated in Appendix A of SA-300. The RMCP should consider notifying the FBI or LLEA in all cases of actual theft, sabotage, or diversion and possible terrorism of radioactive materials, regardless of the quantity of radioactive material involved. This includes intentional use of radioactive material that could be used in an unauthorized malevolent manner that could lead to serious consequences. The RMCP should coordinate with the NRC, their communication with other local, Federal and State agencies, to ensure that shared information is accurate and consistent. Based on health and safety significance the RMCP should also consider the issuance of a press release. If it is not clear whether and event should be categorized as a possible theft or terrorist activity, the RMCP should contact the NRC Headquarters Operations Center for assistance in determining if the event should be reported.

If an event involves suspicious activity involving the possibility of theft, sabotage, or diversion, or the actual or attempted theft, sabotage, or diversion of Category 1 or Category 2 licensed material, as defined in Appendix A of 10 CFR 37, the RMCP shall promptly notify the NRC's Operation Center at (301) 816-5100 within 4 hours of the event notification, after contacting the appropriate local law enforcement authority.

5.0 CLOSING AND COMPLETING EVENTS

5.1 Events Closed in NMED

The RMCP should notify the NMED contractor when the event record has been officially closed (i.e., no further follow-up is planned and/or no additional information is expected). The RMCP should ensure that the record contains all pertinent technical information, including follow-up information before closing the record.

5.2 Record Compete in NMED

A “complete record” refers to an NMED record that contains a specified minimum set of information. This minimum set of information is defined in Appendix C of SA-300 and may also be found on the NMED website under “Help.” Once the minimum information is provided, the NRC/NMED contractor marks the NMED record as “complete.” A “complete” record still remains open in NMED until the RMCP has indicated the record should be closed.

6.0 AGREEMENT STATE SAFETY REVIEWS OF MATERIAL EVENT REPORTS

6.1 Agreement State Review of Material Events for Safety Significance and Generic Assessment.

The RMCP should review events occurring in Indiana, or related to products registered or licensed in Indiana, to identify any event that may involve generic concerns or issues or could have significant impact on public health and safety, security, and/or the environment. Events that warrant such a review include but are not limited to:

A. Multiple occurrences of an event (e.g., medical events, overexposures, lost or stolen sources of concern), or
B. A single occurrence of a significant or serious event (e.g., deaths, loss of organ function, significant release to the environment), or
C. Events involving possible generic concerns or issues (e.g., equipment malfunctions, equipment failures, inadequate user procedures software problems), or
D. Consequences or causal factors not previously seen in the event assessment process.

6.2 Actions Agreement States May Take after Review of Significant Events

Events identified as having a significant potential risk to public health and safety, security, and/or the environment may receive additional RMCP or NRC management review. The RMCP should continue to follow-up and review material events through the closure of the event, which includes checking to see that the final report information has been entered into NMED. Based on potential risks identified as a result of event review and analyses, the RMCP may take actions to reduce potential risks identified as a result of issuing safety-related notifications to licensees. The RMCP is encouraged to share with the NRC and other states any findings, assessments, or trending studies. These can be forwarded to the NMED Project Manager for posting on the

NMED website, or distribution in the NMED newsletter and/or Agreement State Letter.

7.0 ABNORMAL OCCURRENCE GUIDELINES AND CRITERIA

RMCP staff should routinely screen events against the Abnormal Occurrence (AO) criteria as part of their routine program. Section 208 of the Energy Reorganization Act of 1974 defines an AO as an unscheduled incident or event that the NRC has determined to be significant from the standpoint of public health or safety. The RMCP will follow SA-300 Section 9 “Abnormal Occurrence Guidelines and Criteria” to routinely screen events against the AO criteria as part of the routine incident response. Any events identified as potential Abnormal Occurrences should be reported to the NRC in accordance with SA-300.