

SECTION 6. REPORTING CRITERIA.

The following are the reporting criteria, categorized into 10 major groups and appropriate subgroups related to DOE operations. This list provides a minimum set of requirements necessary to develop local procedures and report occurrences applicable to local operations. Categorization of occurrences must be done at the criterion level.

Site/contractor corrective action programs will manage actions for important events that do not meet the ORPS reporting herein (as well as Significance Category 4 occurrences, whose corrective actions are not managed through ORPS).

The reporting of safeguards and security events is addressed by DOE ~~N-471.3M 470.4-1 Chg 1~~ [Safeguards and Security Program Planning and Management, Reporting of Events of Security Concern](#). Such events are no longer reported in ORPS unless they involve other consequences that met the ORPS reporting criteria presented herein.

This Manual does not absolve the cognizant parties from making required reports to other agencies.

6.1 Major Criteria Groups. The 10 major groups of categorized occurrences are as follows.

- Group 1 - Operational Emergencies
- Group 2 - Personnel Safety [and Health](#)
- Group 3 - Nuclear Safety Basis
- Group 4 - Facility Status
- Group 5 - Environmental
- Group 6 - Contamination/Radiation Control
- Group 7 - Nuclear Explosive Safety
- Group 8 - Transportation
- Group 9 - Noncompliance Notifications
- Group 10 - Management Concerns/Issues

6.2 Categorizing Instructions

1. An event can meet multiple reporting criteria that establish it as an occurrence. **All of the specific reporting criteria applicable for an occurrence must be identified.** Some criteria are “secondary” in that they complement other reporting criteria that require occurrence reporting. In these cases, all of the applicable criteria must be recorded. Each criterion is denoted by its Group, Subgroup (if applicable), and sequence number (#). Thus, for example, the violation of a safety limit is denoted as Group 3, Subgroup A, Sequence (1) or “3A(1).”

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2. The reporting criteria presented below list a specific Significance Category (SC) for each criterion, between the sequence number (#) and the criterion text. Significance Categories are designated as “OE” for Operational Emergencies, “R” for recurring occurrences, or 1, 2, 3, or 4. Thus, for example, the Significance Category for a Stop Work Order issued by a DOE office, criterion 4B(1), is SC 2.
3. Operational Emergencies, Significance Category 1, and some other occurrences in lesser significance categories require prompt notification to the DOE HQ OC. **Asterisks (*) next to the significance categories below denote those occurrences requiring prompt notification to the DOE HQ OC.** Section 5.3.2 of this Manual defines the prompt notification requirements.
4. DOE O 151.1A describes initiating events that are considered Operational Emergencies. DOE O 225.1A defines when Type A or B accident investigations should be initiated. While some Operational Emergencies and some other ORPS occurrences involve conditions that would be sufficient to initiate accident investigations, criterion 10(1) herein will report the actual initiation of Type A or B accident investigations.

6.3 Occurrence Reporting Criteria

Group 1 - Operational Emergencies

SC Criterion

- (1) *OE An Operational Emergency not needing further classification, as defined in DOE [O 151.1A1C](#), Chapter 5, Paragraph 2.
- (2) *OE An Alert, as defined in DOE [O 151.1A1C](#), Chapter 5, Paragraph 3a.
- (3) *OE A Site Area Emergency, as defined in DOE [O 151.1A1C](#), Chapter 5, Paragraph 3b.
- (4) *OE A General Emergency, as defined in DOE [O 151.1A1C](#), Chapter 5, Paragraph 3c.

Group 2 - Personnel Safety and Health

Subgroup A Occupational Illnesses/Injuries

SC Criterion

- (1) *1 Any occurrence due to DOE operations resulting in a fatality or terminal injury/illness. For fatalities caused by overexposures, the

intent of this criterion is to report those caused by acute rather than chronic effects.

- (2) *1 Any single occurrence requiring in-patient hospitalization of three or more personnel.

- (3) 2 Any single occurrence resulting in an occupational injury that requires in-patient hospitalization for 5 days or more, commencing within 7 days from the date the injury was received.

Note: This criterion is similar to one of the thresholds for initiating a Type B accident investigation. If such an investigation is begun, the event should be reported under Criterion 10(1), as well as under this criterion if the injury so warrants.

- (34) 2 Any single occurrence resulting in three or more personnel having Days Away, Restricted or Transferred (DART) cases per 29 CFR Part 1904.7.

- (45) *2 Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists, whichever is lower, and that requires the administration of medical treatment beyond simple first aid on the same day as the exposure. [See "Personnel Exposure" in Definitions in this manual. 29 CFR 1904.7(b)(5)(i) and (ii) define "medical treatment" and "first aid."]

- (56) 3 Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists. [See "Personnel Exposure" in Definitions in this manual.]

- (67) 3 Any single occurrence resulting in a serious occupational injury. A serious occupational injury is an occupational injury that:
- (a) Requires in-patient hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received;
 - (b) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose, or a minor chipped tooth);
 - (c) Causes severe hemorrhages or severe damage to nerves, muscles, or tendons;

- (d) Damages any internal organ;
- (e) Causes (1) a concussion or (2) loss of consciousness due to an impact to the head, or
- (ef) Causes second- or third-degree burns, affecting more than five percent of the body surface.

Subgroup B Fires/Explosions

SC Criterion

- (1) *1 Any unplanned fire ~~or explosion~~ within primary confinement/containment boundaries ~~for of a nuclear or hazardous material within a facility, except a small fire that self-extinguishes in 10 minutes or less.~~

[Note: Facility specific documents need to define what constitutes the primary confinement/containment boundary.]

- (2) *2 Any unplanned fire ~~or explosion~~ in a nuclear facility that: activates a fire suppression system (e.g., halon discharge, sprinkler heads activating), is extinguished by a fire department, or disrupts normal facility operations.

- a) Activates a fixed fire suppression system (e.g., halon or sprinkler heads), or
- b) Is extinguished manually using fire protection equipment, or
- c) Disrupts normal operations in the facility, or
- d) Is a small fire within primary confinement/containment that self-extinguishes in 10 minutes or less.

[Note: The activation or degradation of Safety Class and Safety Significant fire suppression systems are addressed by Group 4 Criteria.]

- (3) *3 Any unplanned fire ~~or explosion~~ in a non-nuclear facility that
 - a) Activates a fixed fire suppression system, or
 - b) Takes longer than 10 minutes to extinguish following the arrival of fire protection personnel, or
 - c) Disrupts normal operations in a high hazard facility.

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- (4) *4 Any wild land fire (e.g., forest fire, grassland fire) or other fire outside of a DOE facility that has the potential to threaten the facility.

Subgroup C Explosions

SC Criterion

- (1) *1 Any unplanned explosion within primary confinement/containment boundaries of a nuclear facility.

[Note: Facility specific documents need to define what constitutes the primary confinement/containment boundary.]

- (2) *2 Any unplanned explosion in a nuclear facility that disrupts normal operations in the facility.

- (3) *3 Any unplanned explosion in a non-nuclear facility that disrupts normal operations in the facility.

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Subgroup CD Hazardous Electrical Energy Control

SC Criterion

- (1) 2 Any personal contact (burn, shock, etc.) with a hazardous electrical energy source. Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or disturbance of a previously unknown or mislocated hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas) resulting in a person contacting (burn, shock, etc.) hazardous energy.

- (2) 3 Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in theAny unexpected discovery of an uncontrolled hazardous electrical energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.

- (3) 3 Failure to follow a prescribed hazardous electrical energy control process (e.g., lockout/tagout).

Subgroup E Hazardous Energy Control (Other)

SC Criterion

- (1) 2 Any personal contact (burn, injury, etc.) with a hazardous energy source (e.g., electrically powered mechanical hazards, steam, pressurized gas).
- (2) 3 Any unexpected discovery of an uncontrolled hazardous energy source (e.g., electrically powered mechanical hazards, steam, pressurized gas, etc.). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.
- (3) 3 Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout).

Group 3 - Nuclear Safety Basis

Subgroup A Technical Safety Requirement and Other Hazard Control Violations (excluding nuclear criticality)

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[Note: Report nuclear criticality events under Group 3, Subgroup C below]

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SC Criterion

- (1) *1 Any violation of a Hazard Category 1, 2, or 3 nuclear facility's Technical Safety Requirement (or Operational Safety Requirement) Safety Limit.

[Note: Safety Limits are high-level Technical Safety Requirement controls, used infrequently across the DOE Complex. As defined in 10 CFR 830.3, a Safety Limit is a limit on process variables associated with those safety class physical barriers, generally passive, that are necessary for the intended facility function and that are required to guard against the uncontrolled release of radioactive materials.]
- (2) 2 Any violation or noncompliance of a Hazard Category 1, 2, or 3 nuclear facility's Technical Safety Requirement (or Operational Safety Requirement) Limiting Control Setting, Limiting Condition for Operation, Administrative Control, or Surveillance Requirement.

Exception: An event consisting solely of a surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function. (See separate criterion for late surveillance tests below.)

- (3) 3 Any violation or noncompliance of a hazard control specified in a Hazard Category 1, 2, or 3 nuclear facility's DOE approved Documented Safety Analysis [issued pursuant to 10 CFR 830.204 and including Basis for Interim Operation (BIO), etc.], or DOE issued Safety Evaluation Report that are not addressed by Criteria 3A(1) and 3A(2).

Exceptions:

- (a) An event consisting solely of a violation of a safety management program (e.g., quality assurance, personnel training) cited in the Documented Safety Analysis.
- (b) An event consisting solely of a surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function. (See separate criterion for late surveillance tests below.)
- (4) 43 An event consisting solely of a surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function.

Subgroup B Documented Safety Analysis Inadequacies

- | <u>#</u> | <u>SC</u> | <u>Criterion</u> |
|----------|-----------|--|
| (1) | 2 | Determination of a positive Unreviewed Safety Question (USQ) that reveals a currently existing inadequacy in the documented safety analysis [e.g., Safety Analysis Report (SAR) or Basis for Interim Operation (BIO)]. |
| (2) | 3 | Declaration of a potential inadequacy of the documented safety analysis (a potential positive USQ), per 10 CFR 830.203(g). |

[\[Note: When a potential inadequacy of a documented safety analysis is found, this would be initially reported under Criterion 3B\(2\). If further analysis results in a positive USQ determination, then the occurrence report should be updated to recategorize it under Criterion 3B\(1\).\]](#)

Subgroup C Nuclear Criticality Safety Control Violations

SC Criterion

- (1) *1 A loss of multiple nuclear criticality process-condition controls, where processes include operation, transport, and storage of fissionable materials, such that no valid controls are available to prevent a criticality accident.
- (2) 2 A loss of one or more nuclear criticality process-condition controls such that an accidental criticality is possible from the loss of an additional process-condition control, where processes include operation, transport, and storage of fissionable materials.
- (3) 2 Any violation or noncompliance of a Hazard Category 1, 2, or 3 nuclear facility's Technical Safety Requirement (or Operational Safety Requirement) related to a nuclear criticality Limiting Control Setting, Limiting Condition for Operation, Administrative Control, or Surveillance Requirement.
- Exception: An event consisting solely of a nuclear criticality surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function. (See separate criterion for late surveillance tests below.)
- (4) 3 Any event consisting solely of a nuclear criticality surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function.

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Group 4 - Facility Status

[Note: The criteria below apply to both nuclear and non-nuclear facilities, where applicable. However, criteria specific to Safety Class or Safety Significant Structures, Systems, or Components would apply only to nuclear facilities.]

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Subgroup A Safety Structure/System/Component Degradation

- | # | SC | Criterion |
|-----|----|---|
| (1) | 3 | Performance degradation of any Safety Class or Safety Significant Structure, System, or Component (SSC) that prevents satisfactory performance of its design function when it is required to be operable. |
| (2) | 4 | Performance degradation of any Safety Class SSC when not required to be operable. |

Subgroup B Operations

- | # | SC | Criterion |
|-----|----|---|
| (1) | *2 | <u>A formal change of operational mode or curtailment of work or processes) directed by a DOE Field Element Manager or Contracting Officer for safety reasons (e.g., Aa Stop Work Order), issued by a DOE office.</u> |
| (2) | 2 | Actuation of a Safety Class Structure, System, or Component (SSC), or its alarms, resulting from an actual unsafe condition. Spurious alarms (e.g., due to electronic noise, radon/thoron decay) should not be reported. |
| (3) | 3 | Actuation of a Safety Significant Structure, System, or Component (SSC), or its alarms, resulting from an actual unsafe condition. Spurious alarms (e.g., due to electronic noise, radon/thoron decay) should not be reported. |
| (4) | 3 | Any facility evacuation, not including other than a precautionary evacuation <u>or an evacuation due to false alarms or spurious alarms (e.g., due to electronic noise, radon/thoron decay), in response to an actual event.</u> If the event fell under another reporting criterion, then evacuation should be reported as well by noting multiple reporting criteria for the single occurrence. |

- (5) ~~43~~ A ~~facility operational reportable~~ event caused by deviating from a written procedure or ~~by~~ using an inadequate procedure, ~~and which resulting resulted~~ in an adverse effect on safety, such as:
- a. an inadvertent ~~automated~~ facility or operations shutdown (i.e., a change of operational mode or curtailment of work or processes),
 - b. a ~~manual~~ facility or operations shutdown due to alarm response procedures,
 - c. an inadvertent process liquid transfer, or
 - d. an inadvertent release of hazardous material from its engineered containment.

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- (6) *43 A ~~temporary stop of a work activity facility or operations shutdown (i.e., a change of operational mode or curtailment of work or processes)~~ directed by ~~contractor line~~ management for safety reasons ~~and for which approval from contractor line management will be required to resume work.~~

- ~~(7) *3 A temporary stop of a work activity directed by a DOE employee (other than a Field Element Manager or Contracting Officer) for safety reasons.~~

- ~~(78) 4 A facility or site stand-down resulting from safety reasons reportable as an occurrence or occurrences.~~

[Note: This is a secondary reporting criterion and does not require a separate occurrence report.]

- ~~(89) 4 Any event or condition that would prevent immediate facility or offsite emergency response capabilities.~~

Subgroup C Suspect/Counterfeit and Defective Items or Material

[Note: Include the detailed information identified in Section 5.4.1.g]

SC Criterion

- (1) 3 Discovery of any suspect/counterfeit item or material found in a Safety Class or Safety Significant Structure, System, or Component (SSC).

A suspect item or material is one whose documentation, appearance, performance, material, or other characteristics may have been misrepresented by the vendor, supplier, distributor, or manufacturer. A counterfeit item or material is one for which

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sufficient evidence exists that deliberate misrepresentation has occurred.

- (2) 4 Discovery of any suspect/counterfeit item or material other than office supplies, office equipment, or household products.
- (3) 4 Discovery of any defective item or material, other than a suspect/counterfeit item or material, in any application whose failure could result in a loss of safety function, or present a hazard to public or worker health and safety.

A defective item or material is any item or material that does not meet the commercial standard or procurement requirements as defined by catalogues, proposals, procurement specifications, design specifications, testing requirements, contracts, or the like. It does not include parts or services that fail or are otherwise found to be inadequate because of random failures or errors within the accepted reliability level.

Group 5 - Environmental

Subgroup A Releases

- | <u>#</u> | <u>SC</u> | <u>Criterion</u> |
|----------|-----------|--|
| (1) | *2 | Any release (onsite or offsite) of a hazardous substance, material, waste, or radionuclide from a DOE facility, that is above permitted levels and exceeds the reportable quantities specified in 40 CFR 302, DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION , or 40 CFR 355, EMERGENCY PLANNING AND NOTIFICATION . |
| (2) | 2 | Any discharge release (onsite or offsite) that exceeds 100 gallons of oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. For operations involving oil field crude or condensate, any discharge of not exceeding 100 barrels or more is reportable need not be reported under this criterion. |
| (3) | <u>43</u> | Any release (onsite or offsite) of a hazardous substance, material, waste, or radionuclide from a DOE facility that is above permitted levels and exceeds 50 percent of the reportable quantities specified in 40 CFR 302 or 40 CFR 355, unless the release is allowed under an applicable permit . |

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- (4) 4 Any release (onsite or offsite) of a hazardous substance, material, waste, or radionuclide from a DOE facility that must be reported to outside agencies in a format other than routine periodic reports. (However, oil [or antifreeze solution](#) spills of less than 10 gallons and with negligible environmental impact need not be reported in ORPS. [For operations involving oil field crude or condensate, any discharge not exceeding 100 barrels need not be reported under this criterion.](#))

Subgroup B Ecological and Cultural Resources

SC Criterion

- (1) 2 Any occurrence causing significant impact to any ecological [or cultural](#) resource for which DOE is a trustee (e.g., destruction of a critical habitat, damage to an historic/archeological site, damage to wetlands).

Group 6 - Contamination/Radiation Control

Subgroup A Loss of Control of Radioactive Materials

[\[Note: The criteria in Subgroup 6A do not apply to surface radioactive contamination on property. Surface radioactive contamination is addressed by the criteria in Subgroup 6B.\]](#)

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SC Criterion

- (1) 2 Identification of [offsite property containing radioactive material derived from radioactive material offsite due to](#) DOE operations/activities that exceeds applicable DOE-approved authorized limits (pursuant to DOE O 5400.5). ~~This applies to items/areas consisting of radioactive material. This does not apply to items with surface radioactive contamination. See Criterion 6B(1) below for criteria for identification of items with surface radioactive contamination.~~
- (2) 2 Loss of radioactive material that exceeds 100 times the quantities specified in 10 CFR Part 835, Appendix E (excluding consumer products such as smoke detectors), or loss of accountability of such material for more than 24 hours. The 24-hour time period begins when the loss of accountability is discovered.
- (3) 3 Loss of radioactive material which exceeds 1 times and no greater than 100 times the quantities specified in 10 CFR Part 835, Appendix E (excluding consumer products such as smoke

detectors) or loss of accountability of such material for more than 24 hours. The 24-hour time period begins when the loss of accountability is discovered.

Subgroup B Spread of Radioactive Contamination

SC Criterion

- (1) 2 Identification of radioactive contamination offsite due to DOE operations/activities that exceeds applicable DOE-approved authorized limits (pursuant to [DOE-5400.5DOE O 5400.5 CHG 2](#)) or, if there are none, the values found in 10 CFR Part 835, Appendix D.

[Note: All releases of property containing or potentially containing residual radioactivity are subject to requirements in [DOE-5400.5DOE O 5400.5 CHG 2](#). Compliance with 10 CFR Part 835, Appendix D values does not necessarily satisfy the requirements in [DOE-5400.5DOE O 5400.5 CHG 2](#).]

- (2) 2 Identification of onsite radioactive contamination greater than 100 times the total contamination values in 10 CFR 835 Appendix D and that is found outside of the following locations: Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiological Buffer Areas, ~~and~~ areas controlled in accordance with 10 CFR 835.1102(c), and any non-posted area that is under the continual observation and control of an individual empowered to implement access and exposure control measures. For tritium, the reporting threshold is 100 times the removable contamination values in 10 CFR Part 835, Appendix D.

[Notes:

- (a) This does not apply to contamination from residual radioactive material meeting applicable DOE-approved authorized limits.
- (b) This also does not apply to legacy radioactive contamination, which will be reported under a separate criterion below.
- (c) The exclusion from reporting contamination in a Radiological Buffer Area applies only when the area has been established next to a Contamination Area, High Contamination Area or Airborne Radioactivity Area and its exit requirements have adopted guidance from Article 338.2 of DOE-STD-1098-99.†

[\(d\) This does not apply to items and containers handled and stored onsite that meet DOT limits specified in 49 CFR 173.443.](#)

- (3) 3 Identification of onsite radioactive contamination greater than 10 times the total contamination values in 10 CFR 835 Appendix D and that is found outside of the following locations: Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiological Buffer Areas, ~~and~~ areas controlled in accordance with 10 CFR 835.1102(c), [and any non-posted area that is under the continual observation and control of an individual empowered to implement access and exposure control measures](#). For tritium, the reporting threshold is 10 times the removable contamination values in 10 CFR Part 835, Appendix D.

[Notes:

- (a) This does not apply to contamination from residual radioactive material meeting applicable DOE-approved authorized limits.
- (b) This also does not apply to legacy radioactive contamination, which will be reported under a separate criterion below.
- (c) The exclusion from reporting contamination in a Radiological Buffer Area applies only when the area has been established next to a Contamination Area, High Contamination Area or Airborne Radioactivity Area and its exit requirements have adopted guidance from Article 338.2 of DOE-STD-1098-99.]

[\(d\) This does not apply to items and containers handled and stored onsite that meet DOT limits specified in 49 CFR 173.443.\]](#)

- (4) 4 Identification of onsite legacy radioactive contamination greater than 10 times the total contamination values in 10 CFR 835 Appendix D and that is found outside of the following locations: Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiological Buffer Areas, ~~and~~ areas controlled in accordance with 10 CFR 835.1102(c), [and any non-posted area that is under the continual observation and control of an individual empowered to implement access and exposure control measures](#). For tritium, the reporting threshold is 10 times the removable contamination values in 10 CFR Part 835, Appendix D.

[Notes:

- (a) Legacy radioactive contamination is radioactive contamination resulting from historical operations that are unrelated to current activities.
- (b) This does not apply to contamination from residual radioactive material meeting applicable DOE-approved authorized limits.
- (c) The exclusion from reporting contamination in a Radiological Buffer Area applies only when the area has been established next to a Contamination Area, High Contamination Area or Airborne Radioactivity Area and its exit requirements have adopted guidance from Article 338.2 of DOE-STD-1098-99.]

Subgroup C Radiation Exposure

- | <u>#</u> | <u>SC</u> | <u>Criterion</u> |
|----------|-----------|---|
| (1) | *1 | Determination of a dose that exceeds the limits specified in 10 CFR Part 835, Subpart C, Occupational Radiation Protection or DOE O 5400.5, Chapter II, Item 1 [i.e., 100 mrem Total Effective Dose Equivalent (TEDE) for offsite exposures to a member of the public]. |
| (2) | 2 | Any unmonitored exposure estimated to exceed that exceeds the values for providing personnel dosimeters and bioassays as stated in 10 CFR 835.402(a) or 10 CFR 835.402(c) and the failure to provide the monitoring addressed by those requirements. |
| (3) | 3 | Any single occupational exposure that exceeds an expected exposure or dosimetry result by: (1) 500 mrem Committed Effective Dose Equivalent (CEDE), or (2) the greater of 10 percent or 100-mrem effective dose equivalent due to external exposure. |
| (4) | 3 | Determination of an estimated annual dose that exceeds 10 mrem Total Effective Dose Equivalent (TEDE) for offsite exposures to a member of the public from air pathways only. |

Subgroup D Personnel Contamination

- | <u>#</u> | <u>SC</u> | <u>Criterion</u> |
|----------|-----------|---|
| (1) | *2 | Any occurrence requiring offsite medical assistance for contaminated personnel, including transporting a person to an |

offsite medical facility or bringing offsite medical personnel onsite to perform treatment or decontamination.

- (2) 2 Identification of personnel or clothing contamination offsite due to DOE operations that exceeds the values for total contamination found in 10 CFR Part 835, Appendix D. For tritium use the values for removable contamination found in 10 CFR Part 835, Appendix D.
- (3) 43 Any onsite contamination of personnel or clothing (excluding ~~site-provided protective~~ clothing provided by the site for radiological protection) that exceeds 10 times the values for total contamination identified in 10 CFR Part 835, Appendix D. The contamination level must be based on direct measurement and not averaged over any area. This criterion does not apply to tritium contamination.

Group 7 - Nuclear Explosive Safety

- | # | SC | Criterion |
|-----|----|---|
| (1) | *1 | Damage to a nuclear explosive that results in a credible threat to nuclear explosive safety. |
| (2) | 2 | The unauthorized introduction of electrical energy into a nuclear explosive. |
| (3) | 2 | The unauthorized compromise of a nuclear explosive safety feature when installed on a nuclear explosive. |
| (4) | 2 | Inadvertent substitution of a nuclear explosive for a nuclear explosive-like assembly (NELA) or vice versa. |
| (5) | 2 | A violation of a nuclear explosive safety rule (NESR). |
| (6) | 2 | Damage to a training unit during training operations indicative of a hazard to a nuclear explosive. |
| (7) | 3 | The use of uncertified personnel or unauthorized equipment/tooling during a nuclear explosive operation. |
| (8) | 3 | A violation of the two-person concept of operations. |
| (9) | 3 | Revocation of the Personnel Assurance Program (PAP) <u>Human Reliability Program (HRP)</u> certification of an individual (for cause). |

Group 8 - Transportation

- | # | SC | Criterion |
|-----|----|--|
| (1) | *1 | Any offsite transportation incident involving hazardous materials that would require immediate notice pursuant to 49 CFR Part 171.15, namely: <ul style="list-style-type: none">(a) As a direct result of hazardous materials:<ul style="list-style-type: none">(i) A person is killed,(ii) A person receives injuries requiring hospitalization,(iii) Estimated property damage exceeds \$50,000,(iv) An evacuation of the general public occurs lasting 1 hour or more,(v) One or more transportation arteries or facilities are closed or shut down for 1 hour or more, or(b) Fire, breakage, spillage, or suspected radioactive contamination occurs involving shipment of radioactive materials, or(c) Fire, breakage, spillage, or suspected contamination occurs involving shipment of infectious substances (etiologic agents), or(d) There has been a release of a marine pollutant in a quantity exceeding 450 liters (119 gallons) for liquids or 400 kilograms (882 pounds) for solids, or(e) The operational flight pattern or routine of an aircraft is altered. |
| (2) | 3 | Any offsite transport of hazardous material, including radioactive material, whose quantity or nature (e.g., physical or chemical composition) is different than intended, such that the receiving organization's operations were impacted/disrupted or the transport resulted in the initiation of corrective actions by the originating organization. |
| (3) | 43 | Any onsite transport of hazardous material, including radioactive material, whose quantity or nature (e.g., physical or chemical composition) is different than intended, such that the receiving organization's operations were impacted/disrupted or the transport |

resulted in the initiation of corrective actions by the originating organization.

- (4) 4 Any packaging or transportation activity involving the onsite release of radioactive materials, etiologic agents, hazardous substances, hazardous waste, or marine pollutants.

Group 9 - Noncompliance Notifications

SC Criterion

- (1) 3 Any enforcement action (other than associated with the Price Anderson Amendment Act) involving 10 or more cited violations, ~~and~~ or an assessed fine of \$10,000 or more.

[Note: This criterion applies to the enforcement action as initially received from the regulator. Thus the enforcement action would still be reportable even if the fine is later reduced below \$10,000 or the number of violations reduced below 10.]

- (2) 4 Any written notification from an outside regulatory agency that a site/facility is considered to be in noncompliance with a schedule or requirement (e.g., Notice of Violation, Notice of Intent to Sue, Notice of Noncompliance, Warning Letter, Finding of Violation, Finding of Alleged Violation, Administrative Order, or a similar type of notification or enforcement action).

Group 10 - Management Concerns/ and Issues

SC Criterion

- (1) 2 Any event resulting in the initiation of a Type A or B accident investigation as categorized by DOE O 225.1A, *Accident Investigation*.

[Note: This reporting criterion may raise the significance category of an occurrence already reported under separate criteria. Multiple reporting criteria should be noted-assigned when appropriate.]

- (2) 1-4[†] An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or DOE/contractor line management to be ~~of a~~ safety ~~significance~~ or of concern for that facility or other facilities or activities in the DOE complex. The significance category assigned to the management concern should be based on an evaluation of the potential risks and planned or anticipated corrective actions.

~~One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken.~~

~~[† Note: An SC 1 occurrence report requires Follow the Prompt Notification requirements identified in the Occurrence Reporting Model (Section 11).]~~

(3) 1-43[†] ~~A near miss to an otherwise ORPS reportable event, where something physically happened that was unexpected or unintended and significant consequences were avoided only by chance. The near miss resulted from either:~~

- ~~a) no controls or no protective equipment in place to prevent more severe consequences, or~~
- ~~b) ineffective controls or protective equipment.~~

~~The significance category assigned to the near miss should be based on an evaluation of the potential risks and planned or anticipated corrective actions.~~

~~A near miss, where no barrier or only one barrier prevented an event from having a reportable consequence. One of the four significance categories should be assigned to the near miss, based on an evaluation of the potential risks and the corrective actions taken.~~

~~[† Note: An SC 1 occurrence report requires Follow the Prompt Notification requirements identified in the Occurrence Reporting Model (Section 11).]~~

(4) 1-3[†] ~~A noncompliance by omission or commission with worker safety and health requirements that, if not corrected immediately, could result in serious injury (e.g., working at heights without proper fall protection; failure to use proper PPE for electrical work; employee working in improperly shored/sloped trench or excavation). The significance category assigned to the noncompliance should be based on an evaluation of the potential risks and planned or anticipated corrective actions.~~

~~[† Note: Follow the Prompt Notification requirements identified in the Occurrence Reporting Model (Section 11).]~~

(45) *4 Any occurrence that may result in a significant concern by affected state, tribal, or local officials, press, or general population; that could damage the credibility of the Department; or that may result in inquiries to Headquarters.

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(56) *4 Any occurrence of such significant immediate interest to offsite personnel and organizations that it warrants prompt notification to the DOE Headquarters Operations Center (DOE HQ OC), and which is not already designated elsewhere in this set of reporting criteria to have prompt notification [denoted by having an asterisk (*) next to the significance category].