§ 840.2 Procedures.

(a) DOE may initiate, on its own motion, the making of a determination as to whether or not there has been an extraordinary nuclear occurrence. In the event DOE does not so initiate the making of a determination, any affected person, or any person with whom an indemnity agreement is executed may petition DOE for a determination of whether or not there has been an extraordinary nuclear occurrence. If DOE does not have, or does not expect to have, within 7 days after it has received notification of an alleged event, enough information available to make a determination that there has been an extraordinary nuclear occurrence, DOE will publish a notice in the FEDERAL REGISTER setting forth the date and place of the alleged event and requesting any persons having knowledge thereof to submit their information to DOE.

(b) When a procedure is initiated under paragraph (a) of this section, the principal staff which will begin immediately to assemble the relevant information and prepare a report on which the DOE can make its determination will consist of the Directors or their designees of the following Divisions or Offices: Office of Nuclear Safety, Office of Operational Safety, Office of Health and Environmental Research, the General Counsel or his designee, and a representative of the program division whose facility or device may be involved.

§ 840.3 Determination of extraordinary nuclear occurrence.

If the DOE determines that both of the criteria set forth in §840.4 and §840.5 have been met, it will make the determination that there has been an extraordinary nuclear occurrence. If the DOE publishes a notice in the FEDERAL REGISTER in accordance with §840.2(a) and does not make a determination within 90 days thereafter that there has been an extraordinary nuclear occurrence, the alleged event will be deemed not to be an extraordinary nuclear occurrence. The time for the making of a determination may be extended by DOE by notice published in the FEDERAL REGISTER.

§ 840.4 Criterion I—Substantial discharge of radioactive material or substantial radiation levels offsite.

DOE will determine that there has been a substantial discharge or dispersal of radioactive material offsite, or that there have been substantial levels of radiation offsite, when as a result of an event comprised of one or more related happenings, radioactive material is released from its intended place of confinement or radiation levels occur offsite and either of the following findings are also made:

(a) DOE finds that one or more persons offsite were, could have been, or might be exposed to radiation or to radioactive material, resulting in a dose or in a projected dose in excess of one of the levels in the following table:

<table>
<thead>
<tr>
<th>Critical organ</th>
<th>Dose (rems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid</td>
<td>30</td>
</tr>
<tr>
<td>Whole Body</td>
<td>20</td>
</tr>
<tr>
<td>Bone Marrow</td>
<td>20</td>
</tr>
<tr>
<td>Skin</td>
<td>60</td>
</tr>
<tr>
<td>Other organs or tissues</td>
<td>30</td>
</tr>
</tbody>
</table>

Exposures from the following types of sources of radiation shall be included:

(1) Radiation from sources external to the body;

(2) Radioactive material that may be taken into the body from its occurrence in air or water; and

(3) Radioactive material that may be taken into the body from its occurrence in food or on terrestrial surfaces.

(b) DOE finds that—

(1) Surface contamination of at least a total of any 100 square meters of offsite property has occurred as the result of a release of radioactive material.
from a production or utilization facility or device and such contamination is characterized by levels of radiation in excess of one of the values listed in column 1 or column 2 of the following table, or

(2) Surface contamination of any offsite property has occurred as the result of a release of radioactive material in the course of transportation and such contamination is characterized by levels of radiation in excess of one of the values listed in column 2 of the following table:

**TOTAL SURFACE CONTAMINATION LEVELS**

<table>
<thead>
<tr>
<th>Type of emitter</th>
<th>Column 1—Offsite property</th>
<th>Column 2—Other offsite property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha emission from transuranic isotopes</td>
<td>3.5 microcuries per square meter</td>
<td>0.35 microcuries per square meter</td>
</tr>
<tr>
<td>Alpha emission from isotopes other than transuranic isotopes</td>
<td>35 microcuries per square meter</td>
<td>3.5 microcuries per square meter</td>
</tr>
<tr>
<td>Beta or gamma emission</td>
<td>40 millirads/hour 1 cm (measured through not more than 7 milligrams per square centimeter of total absorber)</td>
<td>4 millirads/hour 1 cm (measured through not more than 7 milligrams per square centimeter of total absorber)</td>
</tr>
</tbody>
</table>

1 The maximum levels (above background), observed or projected, 8 or more hours after initial deposition.

§ 840.5 Criterion II—Substantial damages to persons offsite or property offsite.

(a) After DOE has determined that an event has satisfied Criterion I, DOE will determine that the event has resulted or will probably result in substantial damages to persons offsite or property offsite if any of the following findings are made:

(1) DOE finds that such event has resulted in the death or hospitalization, within 30 days of the event, of five or more people located offsite showing objective clinical evidence of physical injury from exposure to the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material; or

(2) DOE finds that $2,500,000 or more of damage offsite has been or will probably be sustained by any one person, or $5 million or more of such damage in the aggregate has been or will probably be sustained, as the result of such event; or

(3) DOE finds that $5,000 or more of damage offsite has been or will probably be sustained by each of 50 or more persons, provided that $1 million or more of such damage in the aggregate has been or will probably be sustained, as the result of such event.

(b) As used in paragraphs (a) (2) and (3) of this section “damage” shall be that arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material, and shall be based upon estimates of one or more of the following:

(1) Total cost necessary to put affected property back into use.

(2) Loss of use of affected property.

(3) Value of affected property where not practical to restore to use.

(4) Financial loss resulting from protective actions appropriate to reduce or avoid exposure to radiation or to radioactive materials.

**PART 850—CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM**

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