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# RADIATION PROTECTION SURVEILLANCE & ASSESSMENT PROGRAM

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**Revision 0**

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## 1. PURPOSE AND SCOPE

### 1.1. Purpose

This procedure provides information guidelines for the Commercial Services Radiation Protection Surveillance and Assessment Program.

### 1.2. Scope

This procedure applies to radiation protection activities conducted at Commercial Services field projects under EnergySolutions Radioactive Materials License No. 39-35044-01 issued by the Nuclear Regulatory Commission (the mobile license). In some instances, projects are so small or limited in scope that some areas of the Surveillance and Assessment Programs do not apply.

This procedure is for the exclusive use of EnergySolutions for implementing Commercial Services field projects. Requirements herein are applicable only to Commercial Services and not to other operational entities of EnergySolutions.

## 2. REFERENCES

- 2.1. *Standards for Protection Against Radiation*, Title 10, Code of Federal Regulations, Part 20 (10 CFR 20), Nuclear Regulatory Commission (NRC)
- 2.2. EnergySolutions LLC, CS-RS-PG-001, *Commercial Services Radiation Protection Program*
- 2.3. EnergySolutions LLC, ES-QA-PR-002, *Quality Assurance Surveillances*
- 2.4. EnergySolutions LLC, ES-AD-PR-008, *Condition Reports*
- 2.5. EnergySolutions LLC, NRC Radioactive Material License No. 39-35044-01
- 2.6. EnergySolutions LLC, CS-AD-PR-002, *Commercial Services Project Records*
- 2.7. EnergySolutions LLC, ES-AD-PR-005, *First Notifications*

## 3. GENERAL

### 3.1. Definitions

- 3.1.1 *Corrective Actions* – Actions taken to improve areas of poor performance or to eliminate causes of adverse trends in performance indicators identified during the surveillance or assessment processes.

3.1.2 *Radiation Protection Surveillance* – Project-specific reviews and observations of operational radiation protection, to evaluate the effectiveness of the Radiation Protection Program (RPP) and personnel performance as measured against procedures, policies, industry standards and regulatory requirements. Radiation Protection Surveillances are conducted in-house by Commercial Services Radiation Protection personnel on an as-needed basis.

3.1.3 *Radiation Protection Assessment* – an annual review of the Commercial Services Radiation Protection Program (RPP) content and implementation performed by the Commercial Services Radiation Safety Officer or qualified designee. Radiation Protection Assessments provide a systematic approach for the review of key indicators and key activities performed under the EnergySolutions Radioactive Materials License, and may result in improvements to the quality of Radiation Protection activities

## **3.2. Responsibilities**

### **3.2.1 Project Manager**

The Project Manager (PM) is responsible for ensuring that the proper procedures and programs are implemented on the project site as required by customer agreements and contracts. The PM is also responsible for supporting Radiation Protection Surveillances, developing and submitting corrective actions, as needed, and implementing immediate Corrective Actions, if needed, within his or her scope of authority.

### **3.2.2 Commercial Services Radiation Safety Officer**

The Commercial Services Radiation Safety Officer (RSO) is responsible for oversight, development and implementation of the Radiation Protection Surveillance and Assessment Programs. The RSO or a designee will normally perform portions or all of project-specific Surveillances, as agreed upon with the PM. The RSO or qualified designee will perform portions or all of the annual Radiation Protection Assessment. The RSO will generate an annual RPP status report and present it to the Commercial Services Radiation Safety Committee.

### **3.2.3 Employees**

Employees are responsible for proper use and compliance with the procedures that implement the Radioactive Material license requirements and the Commercial Services RPP.

## **3.3. Precautions and Limitations**

None

### 3.4. **Records**

3.4.1 Radiation Protection Surveillance Reports

3.4.2 Radiation Protection Assessment Reports

3.4.3 Condition Reports, if applicable

3.4.4 First Notifications, if applicable

## 4. **REQUIREMENTS AND GUIDANCE**

### 4.1. **Radiation Protection Surveillance Program**

4.1.1 Project-specific Radiation Protection Surveillances should focus on the 12 main functional areas of Radiation Protection shown on Attachment 5.1, and should include observation or review of the following areas or documents:

- Observation of field radiological activities such as Health Physics technicians performing surveys and project personnel monitoring themselves for contamination.
- Documentation such as instrument use logs, and source logs, which are not normally routed to supervision for a formal review.
- Inspection reports issued by regulatory agencies.
- Radiation protection audits, assessments or surveillances and any corrective actions taken.
- Reports of non-conformances, non-compliances, defects or deviations related to Radiation Protection.
- Radiological Condition Reports.
- First Notification Reports applicable to licensed activities performed under the D&D license.
- Occupational radiation exposure (individuals and project totals).
- Bioassay results for Commercial Services personnel performing license work.
- Commercial Services ALARA Committee meeting minutes, including ALARA goals.
- Post-Project Records Checklists for projects performed under the D&D License.

4.1.2 Surveillances may be recorded on Attachment 5.2, Surveillance Report, or an equivalent form.

4.1.4 Problems identified on the Surveillance Report should be reviewed by the PM and RSO against the criteria for initiating a Condition Report. Even if a Condition Report is not required, the observations from the surveillance should be considered to identify potential improvements to the project operations, project procedures or Radiation Protection procedures.

#### **4.2 Radiation Protection Program Assessments**

4.2.1 The Radiation Protection Assessment is an annual review of the Commercial Services Radiation Protection Program by the RSO or designee.

4.2.2 The Assessment involves a review of key activities in an area of the RPP to 1) verify compliance with regulations, license requirements, established policies and procedures; 2) identify and correct unsatisfactory performance and programmatic weaknesses; and 3) identify areas for improvement. The annual review should include project-specific Radiation Protection Surveillances that have taken place during the year, Commercial Services First Notifications and Condition Reports related to Radiation Protection and related Corrective Actions, and a summary of the current status of the RPP and the D&D license.

4.2.3 A Radiation Protection Assessment Summary report will be prepared by the RSO and presented to the Commercial Services Radiation Safety Committee. Any changes needed to the RPP or the license may be reviewed by the committee.

### **5 ATTACHMENTS AND FORMS**

Attachment 5.1 - Radiation Protection Surveillance Program Functional Areas

Attachment 5.2 - Radiation Protection Surveillance Report

Attachment 5.3 - Radiation Protection Assessment Areas

## **Attachment 5.1**

### **Radiation Protection Surveillance Program Functional Areas**

Radiation Protection Surveillances should include a review of the following functional areas:

1. Radiation Protection Program Administration
2. Personnel Monitoring Program
3. ALARA Program
4. Radiation/Hazardous Work Permit Program
5. Radiation Protection Survey Program
6. Respiratory Protection Program
7. Radioactive Materials Control Program
8. Unconditional Release Program
9. Contamination Control Program
10. Radiation Protection Instrumentation Program
11. Environmental Monitoring Program
12. Radioactive Waste Management

**Attachment 5.2**

**Radiation Protection Surveillance Report**

RADIATION PROTECTION SURVEILLANCE REPORT	
Project: _____ Date: _____	
Functional Area Reviewed: _____	
Documents Reviewed	Observations
<i>Actions Taken:</i>	
<i>Signatures:</i>	
Performed By _____	Date: _____
Reviewed By (PM) _____	Date: _____
Reviewed By (RSO) _____	Date: _____



### **Attachment 5.3**

#### **Radiation Protection Assessment Areas**

The Radiation Protection Assessment should include a review of the following:

- Radiation Protection Surveillance Reports and any corrective actions taken.
- First Notification and Condition Reports applicable to licensed activities performed under the D&D License and any corrective actions taken. These should include nonconformance, noncompliance, defects or deviations related to the RPP.
- Inspection reports issued by regulatory agencies.
- A summary of occupational radiation exposures for Commercial Services Projects personnel performing license work (individual and project totals).
- A summary of bioassay results for Commercial Projects personnel performing license work.
- Commercial Services Projects ALARA goals versus actual exposures.
- Post-Project Records Checklists (CP-AD-105) related to Radiation Protection for projects performed under the D&D License.