

<b>DOSE ASSESSMENT FOR FORT ST. VRAIN</b>	Identifier: EPI-107 Revision*: 9 Page: 1 of 3
---	---

Emergency Management	Emergency Plan Implementing Procedures	For Additional Info: <a href="http://EDMS">http://EDMS</a>	Effective Date: 05/10/10
----------------------	---	---	--------------------------

Manual: 16E – Emergency Management – Emergency Plan  
Implementing Procedures

**USE TYPE 3**

Change Number: 329749

\*The current revision can be verified on EDMS.

## 1. PURPOSE AND SCOPE

This procedure provides guidance for assigning and verifying dose rates resulting from a radiological event at the Fort St. Vrain (FSV) Independent Spent Fuel Storage Installation (ISFSI).

Dose assessment is the process of evaluating and interpreting radiological data to form a basis to determine protective actions (PAs) for personnel and propose protective action recommendations (PARs) to the public, if necessary. Initial dose assessment is based on identifying default data, while continuing dose assessment is based on verifying dose rates.

## 2. INITIATING CONDITION

A radiological release occurs or has the potential of occurring at the FSV ISFSI.

## 3. RESPONSIBILITIES

**NOTE 1:** *Key Staffing of the Idaho National Laboratory (INL) Emergency Operations Center (EOC) and Idaho Cleanup Project (ICP) INTEC Emergency Control Center (ECC) will be activated by the request of the FSV EC.*

**NOTE 2:** *Consequence assessment information may be obtained from either the INL Emergency Operations Center (EOC) or from the INTEC ECC depending on the situation.*

3.1 FSV Emergency Coordinator (EC): The FSV EC is responsible for assigning initial default dose rates.

3.2 EOC Personnel: EOC personnel are responsible for performing dose assessment calculations and obtaining field monitoring data.

3.3 Radiological Control Personnel: Radiological control personnel, when available, are responsible for providing radiological assistance to FSV during an emergency.

<b>DOSE ASSESSMENT FOR FORT ST. VRAIN</b>	Identifier: EPI-107 Revision*: 9 Page: 2 of 3
---	---

## 4. INSTRUCTIONS

### 4.1 Initial Dose Assessment/Assignment

**NOTE:** *The default dose rate is based on the ISFSI Maximum Credible Accident of a leak of one fuel storage container in a vault module.*

4.1.1 FSV EC: Use the following initial default dose rates:

- 0.1 mRem/hr at 100 m
- 0.4 mRem/hr at the command post (CP).

**NOTE:** *FSV radiological control personnel should take measurements and report the results to the INTEC ECC or EOC personnel via the EC.*

4.1.2 FSV EC: Continue to use the default dose rates until current dose assessment results are available.

### 4.2 Continuing Dose Assessment/Assignment

4.2.1 EOC: Verify exposure rates at 100 m and at the CP as follows:

- 4.2.1.1 Obtain field monitoring data from the FSV EC.
- 4.2.1.2 Calculate doses using field monitoring team data.

**NOTE:** *Maximum source-term information is available on the dose assessment specialist computer.*

- 4.2.1.3 If additional dose assessments are needed, obtain weather data from National Weather Service (see LST-26, "INL Emergency Telephone Numbers," for the phone number of the National Weather Service), and use an appropriate dose projection tool such as the Radiological Safety Analysis Computer Code (RSAC), TurboFRMAC, HOTSPOT, other codes, or facility-specific calculations to project doses.

4.2.2 EOC: Verify the assigned 100 m and CP dose rates are more conservative than the field monitoring team data or calculated values.

4.2.3 EOC: Provide plume dose projections to the FSV EC.

<b>DOSE ASSESSMENT FOR FORT ST. VRAIN</b>	Identifier: EPI-107 Revision*: 9 Page: 3 of 3
---	---

### 4.3 Protective Actions

4.3.1 FSV EC: If the projected dose exceeds 1 rem at the CP, evacuate the FSV ISFSI in accordance with EPI-104, "Personnel Emergency Response for Fort St. Vrain," as follows:

4.3.1.1 Evacuate all FSV ISFSI personnel from the FSV ISFSI area.

4.3.1.2 Evacuate all FSV CP personnel.

4.3.1.3 Notify the FSV Power Station 1-303-620-1090 or 1-303-785-6446 of the FSV ISFSI evacuation and provide protective action recommendations.

## 5. RECORDS

Dose projection documentation

Field survey data

## 6. APPENDIXES

None