

DEEP Form 5



Connecticut Department of Energy and Environmental Protection

## OCCUPATIONAL DOSE RECORD

(Please read the instructions before completing this form)



**\*Note: Social Security Numbers must not be visible on the outside of any package sent by mail**

1. NAME (LAST, FIRST, MIDDLE INITIAL)		2. IDENTIFICATION NUMBER*		3. ID TYPE	4. SEX <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	5. DATE OF BIRTH (MM/DD/YYYY)
6. MONITORING PERIOD (MM/DD/YYYY - MM/DD/YYYY) -		7. LICENSEE		8. LICENSE or REGISTRATION NUMBER(S)	9A. <input type="checkbox"/> RECORD <input type="checkbox"/> ESTIMATE	9B. <input type="checkbox"/> ROUTINE <input type="checkbox"/> PSE
INTAKES				DOSES (in rem)		
10A. RADIONUCLIDE	10B. CLASS	10C. MODE	10D. INTAKE IN $\mu$ Ci	EFFECTIVE DOSE EQUIVALENT (FOR EXTERNAL EXPOSURES) (EDEX)	11A.	
				DEEP DOSE EQUIVALENT (FOR THE ENTIRE MONITORING PERIOD) (DDE)	11B.	
				LENS (EYE) DOSE EQUIVALENT (LDE)	12.	
				SHALLOW DOSE EQUIVALENT, WHOLE BODY (SDE, WB)	13.	
				SHALLOW DOSE EQUIVALENT, MAX EXTREMITY (SDE, ME)	14.	
				COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE)	15.	
				COMMITTED DOSE EQUIVALENT, MAXIMALLY EXPOSED ORGAN (CDE)	16.	
				<b>TOTAL EFFECTIVE DOSE EQUIVALENT (ADD BLOCKS 11A AND 15)</b> (TEDE)	17.	
				<b>TOTAL ORGAN DOSE EQUIVALENT MAX ORGAN (ADD BLOCKS 11B AND 16)</b> (TODE)	18.	
				19. COMMENTS		
20. SIGNATURE -- LICENSEE						21. DATE PREPARED

**INSTRUCTIONS PERTINENT TO THE COMPLETION OF DEEP FORM 5,  
OCCUPATIONAL DOSE RECORD FOR A MONITORING PERIOD  
(All doses should be stated in rems)**

1. Type or print the full name of the monitored individual in the order of last name (include "Jr," "Sr," "III," etc.), first name, middle initial (if applicable).

2. Enter the individual's identification number, including punctuation. This number should be the 9-digit social security number if at all possible. If the individual has no social security number, enter the number from another official identification such as a passport or work permit.

3. Enter the code for the type of identification used as shown below:

**CODE ID TYPE**

SSN U.S. Social Security Number

PPN Passport Number

CSI Canadian Social Insurance Number

WPN Work Permit Number

PADS PADS Identification Number

OTH Other

4. Check the box that denotes the sex of the individual being monitored. **CHECKING THE BOX IS OPTIONAL.**

5. Enter the date of birth of the individual being monitored in the format (MM/DD/YYYY).

6. Enter the monitoring period for which this report is filed. The format should be (MM/DD/YYYY - (MM/DD/YYYY)).

7. Enter the name of the licensee.

8. Enter the license number.

9A. Place an "X" in Record, or Estimate. Choose "Record" if the dose data listed represent a final determination of the dose received to the best of the licensee's knowledge. Choose "Estimate" only if the listed dose data are preliminary and will be superseded by a final determination resulting in a subsequent report. An example of such an instance would be dose data based on self-reading dosimeter results and the licensee intends to assign the record dose on the basis of dosimeter results that are not yet available. If the individual or an organization has indicated that the individual was monitored, but the monitoring records could not be obtained, enter "No Record" for this monitoring period.

9B. Place an "X" in either Routine or PSE. Choose "Routine" if the data represent the results of monitoring for routine exposures. Choose "PSE" if the listed dose data represents the results of monitoring of planned special exposures received during the monitoring period. If more than one PSE was received in a single year, the licensee should sum them and report the total of all PSEs.

10A. Enter the symbol for each radionuclide that resulted in an internal exposure recorded for the individual, using the format "Xx-##x," for instance Cs-137 or Tc-99m.

10B. Enter the lung clearance class as listed in Appendix B to 10 CFR Part 20.1001-2401 (D, W, Y, V, F, M, S, or O for other) for all intakes by inhalation.

10C. Enter the mode of intake. For inhalation, enter "H." For absorption through the skin, enter "B." For oral ingestion, enter "G." For injection, enter "J."

10D. Enter the intake of each radionuclide in  $\mu$ Ci.

11A. Enter the effective dose equivalent (EDEX).

11B. DDE – Enter the DDE measured at the highest point on the whole body for the entire monitoring period (e.g., year – including those time periods when EDEX was being determined using NRC- approved special dosimetry methods).

12. Enter the lens dose equivalent (LDE) recorded for the lens of the eye.

13. Enter the shallow dose equivalent recorded for the skin of the whole body (SDE, WB).

14. Enter the shallow dose equivalent recorded for the skin of the extremity receiving the maximum dose (SDE, ME).

15. Enter the committed effective dose equivalent (CEDE).

16. Enter the committed dose equivalent (CDE) recorded for the maximally exposed organ.

17. Enter the total effective dose equivalent (TEDE). The TEDE is the sum of items 11A and 15.

18. Enter the total organ dose equivalent (TODE) for the maximally exposed organ. The TODE is the sum of items 11B and 16.

19. COMMENTS: In the space provided, enter additional information that might be needed to determine compliance with limits. An example might be to enter the note that the SDE, ME was the result of exposure from a discrete hot particle. Another possibility would be to indicate that an over exposed report has been sent to NRC in reference to the exposure report.

20. Signature of the person designated to represent the licensee.

21. Enter the date this form was prepared.

**ADDITIONAL INFORMATION PERTINENT TO THE COMPLETION OF DEEP FORM 4, CUMULATIVE OCCUPATIONAL DOSE HISTORY**

This form is designed to assist a licensee to report the cumulative occupational dose history of each of its employee as required by the Department of Energy and Environmental Protection (DEEP) and the Nuclear Regulatory Commission (NRC) in accordance with R.C.S.A §22a-153-20.

**1. Definitions of Terms:** Please refer to NRC Regulatory Guide 8.34, "Monitoring Criteria and Methods to Calculate Occupational Radiation Doses" and NRC Regulatory Guide 8.40, "Methods for Measuring Effective Dose Equivalent from External Exposure" for definition of terms used in this form.

**2. Whether Disclosure is Mandatory or Voluntary and Effect on Individual of Not Providing Information:** It is voluntary that you furnish the requested information, including the Social Security number (SSN) in block #2. The Identification Number is used to assure that DEEP has an accurate and unique identifier not subject to the coincidence of similar names or birth dates among the large number of persons on who data is maintained.

**3. Completion of DEEP Form 4 and DEEP Form 5:** The licensee must complete DEEP Form 4 and DEEP Form 5 on each individual for whom personnel monitoring is required under R.C.S.A §22a-153-20. In addition, licensees shall make such records available to DEEP to inspect and copy upon request in accordance with the provisions of R.C.S.A §22a-153-20. Failure to do so may subject the licensee to enforcement action in accordance with the provisions of section 22a-6, section 53a-157b and section 22a-158c of the Connecticut General Statutes, and in accordance with any other applicable statute.

**4. Privacy Statement:** DEEP shall maintain all personal data provided hereunder in accordance with the provisions of C.G.S. §§ 4-190 through 4-197, inclusive.

The licensee is hereby made aware that information contained in DEEP's record is legally disclosable under Connecticut's Freedom of Information Act as codified in C.G.S. §§1-200 through 1-242, inclusive, only under certain circumstances and for uses permitted under Connecticut State law.

In accordance with the C.G.S. §4-193(e) the following statement is furnished to individuals who supply personal data to the Department of Energy and Environmental Protection on DEEP Form 4 and DEEP Form 5:

"The personal data collected by the Department of Energy and Environmental Protection on DEEP Form 4 and DEEP Form 5 is relevant and necessary for evaluation of the risk of exposures to radiation and radioactive material associated with licensed activities and enables DEEP to exercise its statutory responsibility to monitor and regulate the safety and health practices of its licensees. The data obtained permits a meaningful comparison of both current and long-term occupational exposure of an individual. Data on your exposure to radiation from the licensee is available to you upon your request."

**5. For More Information or Inquiries Please Contact:**

Radiation Division  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street, Hartford, CT 06106  
Email: [DEEP@LRMReg.ct.gov](mailto:DEEP@LRMReg.ct.gov)  
Telephone: 1-860-424-3029

Affirmative Action, Equal Employment Opportunity and Americans with Disabilities

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov) if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.