U.S. Nuclear Regulatory Commission



Privacy Impact Assessment Radiation Exposure Information and Reporting System (REIRS) Office of Research

Version 1.0 12/11/2023

Instruction Notes:

Please do not enter the PIA document into ADAMS. An ADAMS accession number will be assigned through the e-Concurrence system which will be handled by the Privacy Team

Template Version 2.0 (08/2023)

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Document Revision History

Date	Version	PIA Name/Description	Author
12/11/2023	1.0	REIRS Initial Release	Terry Brock

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The agency is subject to the requirements of the E-Government Act and is committed to identifying and addressing privacy risks whenever it develops or makes changes to its information systems. The questions below help determine any privacy risks related to the E-Government Act or later guidance by the Office of Management and Budget (OMB) and the National Institute of Standards and Technology (NIST).

Name/System/Subsystem/Service Name: Radiation Exposure Information and Reporting System (REIRS).

Data Storage Location (i.e., Database Server, SharePoint, Cloud, Other Government Agency, Power Platform) System files maintained on the REIRS project directory on a SQL Server at Oak Ridge Associated Universities (ORAU).

Date Submitted for review/approval: January 23, 2024.

Note: When completing this PIA do not include any information that would raise security concerns or prevent this document from being made publicly available.

1 Description

1.1 Provide the description of the system/subsystem, technology (i.e., Microsoft Products), program, or other data collections (hereinafter referred to as "project"). Explain the reason the project is being created.

REIRS serves as the central repository for all NRC radiation exposure monitoring records that are recorded and reported pursuant to Title 10 of the Code of Federal Regulations Part 20 (10 CFR 20) and Regulatory Guide 8.7. The central repository is used for the oversight of radiation protection policies and practices at NRC facilities.

There are two subsystems involved:

Subsystem 1: Radiation Exposure Information and Reporting System (REIRS) maintaining occupational exposure records reported by NRC licensees, which includes licensee employees and facility visitors.

Subsystem 2: Employee Exposure Database System (EEDS) maintaining exposure records for NRC employees monitored by NRC dosimeters. The data are collected and reported to the EEDS by the NRC Regional and Headquarter Radiation Safety Officers (RSO).

Please mark appropriate response below if your project/system will involve the following:

☐ PowerApps	□ Public Website
☐ Dashboard	☐ Internal Website
☐ SharePoint	☐ None
☐ Other	

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1.2 Does this privacy impact assessment (PIA) support a proposed new project, proposed modification to an existing project, or other situation? Select options that best apply in table below.

Mark appropriate response.

Status Options		
New system/project		
Modification to an existing system/project.		
If modifying or making other updates to an existing system/project, provide the ADAMS ML of the existing PIA and describe the modification.		
Annual Review		
If making minor edits to an existing system/project, briefly describe the changes below.		
Updated to template format		
Other (explain)		

1.3 Points of Contact: (Do not adjust or change table fields. Annotate N/A if unknown. If multiple individuals need to be added in a certain field, please add lines where necessary.)

	Project Manager	System Owner/Data Owner/Steward	ISSO	Business Project Manager	Technical Project Manager	Executive Sponsor
Name	Terry Brock					
Office/Division /Branch						
Telephone	301-415-1793					

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2 Authorities and Other Requirements

2.1 What specific legal authorities and/or agreements permit the collection of information for the project?

Provide all statutory and regulatory authorities for operating the project, including the authority to collect the information; NRC internal policy is not a legal authority. Please mark appropriate response in table below.

Mark with an "X" on all that apply.	Authority	Citation/Reference
	Statute	
	Executive Order	
\boxtimes	Federal Regulation	Title 10 of the Code of Federal Regulations Part 20 (10 CFR 20)
	Memorandum of Understanding/Agreement	The DOE REMS Project Manager has been authorized to have access to the NRC REIRS data under an inter-agency agreement between NRC and DOE. The REIRS exposure records are used to provide documentation of prior exposure as individuals transfer to the DOE or to a DOE facility, or for epidemiological research.
\boxtimes	Other (summarize and provide a copy of relevant portion)	NRC Regulatory Guide 8.7

2.2 Explain how the information will be used under the authority listed above (i.e., enroll employees in a subsidies program to provide subsidy payment).

The database of radiation exposure monitoring records serves the NRC's mission of the oversight of radiation protection practices and procedures at NRC licensees, informs the NRC on the status and trends in radiation exposure, provides a source of data for epidemiologic studies, and is the data source for the NRC's annual report on occupational radiation exposure (NUREG-0713) which disseminates information to management, licensees, international organizations, and the public.

If the project collects Social Security numbers, state why this is necessary and how it will be used.

Social Security numbers are an option for identifying the individual associated with a radiation record. Given the nature of these records, it is key that the record is assigned to the correct individual. When identification numbers are not used consistently, it is difficult to impossible to track lifetime exposure. Without another common government-issued identification number, the

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social security number is the most common identifier to coordinate the records. The individual can request a copy of their dose record, which is provided using NRC Form 4, Cumulative Occupational Dose History. With approval and authorization of the NRC REIRS Project Manager, data may be requested to be used in specific epidemiological studies.

3 Characterization of the Information

In the table below, mark the categories of individuals for whom information is collected.

Category of individual		
\boxtimes	Federal employees	
	Contractors	
\boxtimes	Members of the Public (any individual other than a federal employee, consultant, or contractor)	
\boxtimes	Licensees	
	Other	

In the table below, is a list of the most common types of PII collected. Mark all PII that is collected and stored by the project/system. If there is additional PII not defined in the table below, a comprehensive listing of PII is provided for further reference in ADAMS at the following link: PII Reference Table 2023.

Categories of Information			
\boxtimes	Name		Resume or curriculum vitae
\boxtimes	Date of Birth		Driver's License Number
	Country of Birth		License Plate Number
	Citizenship	\boxtimes	Passport number
	Nationality		Relatives Information
	Race		Taxpayer Identification Number
	Home Address		Credit/Debit Card Number
\boxtimes	Social Security number (Truncated or Partial)		Medical/health information
\boxtimes	Gender		Alien Registration Number
	Ethnicity		Professional/personal references
	Spouse Information		Criminal History
	Personal e-mail address		Biometric identifiers (facial images, fingerprints, iris scans)
	Personal Bank Account Number		Emergency contact e.g., a third party to contact in case of an emergency

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• •			
	Categorie	es of In	formation
	Personal Mobile Number		Accommodation/disabilities information
	Marital Status		
	Children Information		Other
	Mother's Maiden Name		

3.1 Describe how the data is collected for the project. (i.e., NRC Form, survey, questionnaire, existing NRC files/ databases, response to a background check).

REIRS data is reported by NRC licensees. EEDS data are provided by NRC Regional and Headquarters RSOs. Radiation exposure information is submitted to the NRC under 10 CFR 20.2206 in accordance with Regulatory Guide 8.7 reporting requirements.

Records are received in hardcopy (paper) form, electronic media (diskette or CD), and secure web transmittal.

3.2 If using a form to collect the information, provide the form number, title and/or a link.

NRC Form 5, Occupational Dose Record for A Monitoring Period.

3.3 Who provides the information? Is it provided directly from the individual or a third party.

The records maintained in REIRS are reported officially by the NRC licensees. EEDS records are provided by the NRC Regional and Headquarters RSOs. The information about an individual, other than exposure data, is originally provided by the subject individual.

3.4 Explain how the accuracy of the data collection is validated. If the project does not check for accuracy, please explain why.

Records are passed through a validation software application that identifies inconsistencies in format and content from the reporting requirements. A summary of the findings is e-mailed back to the reporting organization to verify that all records were received as expected, and to alert them to any problems with the submittal. All problems are addressed with the submitter prior to loading of the data into the database. A summary of the findings is e-mailed back to the reporting organization to verify that all records were received as expected. Total number of records and total collective dose are verified to ensure that all records were included.

3.5 Will PII data be used in a test environment? If so, explain the rationale.

REIRS does not have a test environment. The EEDS test environment has been developed with mock data.

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3.6 What procedures are in place to allow the subject individual to correct inaccurate or erroneous information?

Licensees can resubmit corrected information to the REIRS system using the same process as the annual data submittal, as specified in Regulatory Guide 8.7 reporting requirements.

4 Data Security

4.1 Describe who has access to the data in the project (i.e., internal NRC, system administrators, external agencies, contractors, public).

There is no direct access to REIRS outside of the ORAU internal network. Only ORAU REIRS project personnel authorized by the NRC REIRS Project Manager and DOE REMS Project Manager have access.

4.2 If the project/system shares information with any other NRC systems, identify the system, what information is being shared and the method of sharing.

No other system shares or access information in this system. Data being electronically submitted for REIRS/EEDS is not directly loaded into REIRS/EEDS. It is first received by ORAU REIRS personnel and then loaded into system.

4.3 If the project/system connects, receives, or shares information with any external non-NRC partners or systems, identify what is being shared.

Identify what agreements are in place with the external non-NRC partner or system in the table below.

Agreement Type		
	Contract	
	Provide Contract Number:	
	License	
	Provide License Information:	
	Memorandum of Understanding	
	Provide ADAMS ML number for MOU:	
\boxtimes	Other: Inter-agency agreement between ORISE and NRC	
	None	

4.4 Describe how the data is accessed and describe the access control mechanisms that prevent misuse.

The database server has no connection to the internet or networks outside the ORAU internal network. Only authorized ORAU personnel working on the REIRS project have access to the database. The ORAU network maintains a firewall as well as password protected to prevent unauthorized access to the network. The REIRS database server has additional security

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allowing only project personnel authorized by the Project Manager. The REIRS data are maintained in a SQL server database. Roles for authorized users are reviewed yearly.

4.5 Explain how the data is transmitted and how confidentiality is protected (i.e., encrypting the communication or by encrypting the information before it is transmitted).

The information is encrypted using Entrust or other FISMA-compliant encryption and is transmitted via e-mail or other electronic media (e.g., CD) through registered mail.

4.6 Describe where the data is being stored (i.e., NRC, Cloud, Contractor Site).

Onsite at Oak Ridge Associated Universities (ORAU).

4.7 Explain if the project can be accessed or operated at more than one location.

The EEDS database has a web-based site that is accessible to authorized NRC RSO employees which allows the RSOs to maintain the dose records for their monitored NRC employees.

The REIRS database server has no connection to the internet or networks outside the ORAU internal network.

4.8 Can the project be accessed by a contractor? If so, do they possess an NRC badge?

The REIRS database server has no connection to the internet or networks outside the ORAU internal network. Only authorized ORAU personnel working on the REIRS project have access to the database. These authorized personnel have HSP D-12 credentials.

4.9 Explain the auditing measures and technical safeguards in place to prevent misuse of data.

The REIRS database server has additional security allowing only project personnel authorized by the Project Manager. Roles for authorized users are reviewed yearly. Access is limited to authorized individuals for specific uses under the scope of work in the contract. Authorized individuals have received Privacy Act training and are aware of their responsibilities and consequences of misuse, which may include civil and criminal penalties. ORAU has received an "Authority to Operate" from DOE as a FISMA-compliant enclave. The REIRS database is managed within this enclave. Additional safeguards include:

- ORAU firewall
- •ORAU's internal network cyber security plan
- •HSP D-12 credentials required to log in to ORAU network
- •The REIRS database server is not connected to external networks
- •The REIRS server requires additional authorization within ORAU
- •The REIRS database requires user-level permissions to access the data.

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4.10 Describe if the project has the capability to identify, locate, and monitor (i.e., trace/track/observe) individuals.

No. Individuals are not tracked and observed. REIRS tracks and maintains occupational radiation exposure over the lifetime of a monitored individual.

4.11 Define which FISMA boundary this project is part of.

Hosted within the ORISE General Support System.

4.12 Is there an Authority to Operate (ATO) associated with this project/system?

Authorization Status		
	Unknown	
	If no, please note that the authorization status must be reported to the Chief Information Security Officer (CISO) and Computer Security Organization (CSO's) Point of Contact (POC) via e-mail quarterly to ensure the authorization remains on track.	
	In Progress provide the estimated date to receive an ATO. Estimated date:	
\boxtimes	Yes Indicate the data impact levels (Low, Moderate, High, Undefined) approved by the Chief Information Security Officer (CISO) Confidentiality-Moderate Integrity-Moderate Availability-Moderate	

4.13 Provide the NRC system Enterprise Architecture (EA)/Inventory number. If unknown, contact EA Service Desk to get the EA/Inventory number.

N/A.

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5 Privacy Act Determination

5.1 Is the data collected retrieved by a personal identifier?

Mark the appropriate response.

Response			
\boxtimes	Yes, the PII is retrieved by a personal identifier (i.e., individual's name, address, SSN, etc.)		
	List the identifiers that will be used to retrieve the information on the individual.		
	The primary keys/units used for retrieval and analysis of records stored in the REIRS database can be done by querying names, social security numbers, licensee name/number, and/or time periods.		
	No, the PII is not retrieved by a personal identifier.		
	If no, explain how the data is retrieved from the project.		

5.2 For all collections where the information is retrieved by a personal identifier, the Privacy Act requires that the agency publish a System of Record Notice (SORN) in the Federal Register. As per the Privacy Act of 1974, "the term 'system of records' means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some other personal identifier assigned to the individual.

Mark the appropriate response in the table below.

Response		
	Yes, this system is covered by an existing SORN. (See existing SORNs: https://www.nrc.gov/reading-rm/foia/privacy-systems.html)	
	Provide the SORN name, number, (List all SORNs that apply):	
	NRC-27 Radiation Exposure Information and Reporting System (REIRS).	
	SORN is in progress	
	SORN needs to be created	
	Unaware of an existing SORN	
	No, this system is not a system of records and a SORN is not applicable.	

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5.3 When an individual is asked to provide personal data (i.e., form, webpage, survey), is a Privacy Act Statement (PAS) provided?

A Privacy Act Statement is a disclosure statement required to appear on documents used by agencies when an individual is asked to provide personal data. It is required for any forms, surveys, or other documents, including electronic forms, used to solicit personal information from individuals that will be maintained in a system of records.

Mark the appropriate response.

Options	
	Privacy Act Statement
\boxtimes	
	https://www.reirs.com/Release_PAS.pdf (5/10/23)
	Not Applicable
	Unknown

5.4 Is providing the PII mandatory or voluntary? What is the effect on the individual by not providing the information?

A uniquely identifying number is required for data submission so the record can be associated with the individual's lifetime records. When not provided, a new identification number is created for REIRS. When this is done, the connection between the individual and his/her previous and future records is severed. If a dose history request is made, records may not be found due to inconsistent identification of the individual.

6 Records and Information Management-Retention and Disposal

The National Archives and Records Administration (NARA), in collaboration with federal agencies, approves whether records are **Temporary** (eligible at some point for destruction/deletion because they no longer have business value) or **Permanent** (eligible at some point to be transferred to the National Archives because of historical or evidential significance). Records/data and information with historical value, identified as having a "permanent" disposition, are transferred to the National Archives of the United States at the end of their retention period. All other records identified as having a "temporary" disposition are destroyed at the end of their retention period in accordance with the NARA Records Schedule or the General Records Schedule.

These determinations are made through records retention schedules and NARA statutes (44 United States Code (U.S.C.), 36 Code of Federation Regulations (CFR)). Under 36 CFR, agencies are required to establish procedures for addressing Records and Information Management (RIM) requirements. This includes strategies for establishing and managing recordkeeping requirements and disposition instructions before approving new electronic information systems or enhancements to existing systems.

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The following questions are intended to determine whether the records/data and information in the system have approved records retention schedules and disposition instructions, whether the system incorporates RIM strategies including support for NARA's Universal Electronic Records Management (ERM) requirements, and if a mitigation strategy is needed to ensure compliance.

If the project/system:

- Does not have an approved records retention schedule and/or
- Does not have an automated RIM functionality,
- Involves a cloud solution,
- And/or if there are additional questions regarding Records and Information Management
 Retention and Disposal, please contact the NRC Records staff at
 ITIMPolicy.Resource@nrc.gov for further guidance.

If the project/system has a record retention schedule or an automated RIM functionality, please complete the questions below.

6.1 Does this project map to an applicable retention schedule in NRC's Comprehensive Records Disposition Schedule (NUREG-0910), or NARA's General Records Schedules?

\boxtimes	NUREG-0910, "NRC Comprehensive Records Disposition Schedule	
	NARA's General Records Schedules	
	Unscheduled	

6.2 If so, cite the schedule number, approved disposition, and describe how this is accomplished.

System Name (include sub-systems, platforms, or other locations where the same data resides)	Radiation Exposure Information and Reporting System (REIRS)
Records Retention Schedule Number(s)	NRC NUREG 0910, version 4, Schedule 2, Part 19, Item 16 – Radiation Exposure Information System (N1-431-89-6 item1.c)
Approved Disposition Instructions	Permanent. Transfer data copy immediately on magnetic tape according to NARA technical requirements. Transfer revised data copies to the National Archives every 5 years. (Initial transfer occurred 8/24/90). Yes, Records, Property, & Relocations Team Lead determines appropriate
	schedules for records.

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Is there a current automated functionality or a manual process to support RIM requirements? This includes the ability to apply records retention and disposition policies in the system(s) to support records accessibility, reliability, integrity, and disposition.	Manual
Disposition of Temporary Records Will the records/data or a composite be automatically or	Manually
manually deleted once they reach their approved retention?	
Disposition of Permanent Records	Use a secure FTP with a link provided by NARA. Provided in
Will the records be exported to an approved format and transferred to the National Archives based on approved retention and disposition instructions?	an electronic format.
If so, what formats will be used?	
NRC Transfer Guidance (Information and Records Management Guideline - IRMG)	

Note: Information in *Section 6, Records and Information Management-Retention and Disposal,* does not need to be fully resolved for final approval of the privacy impact assessment.

7 Paperwork Reduction Act

The Paperwork Reduction Act (PRA) of 1995 requires that agencies obtain an Office of Management and Budget (OMB) approval in the form of a "control number"—before promulgating a paper form, website, surveys, questionnaires, or electronic submission from 10 or more members of the public. If the data collection is from federal employees regarding work-related duties, then a PRA clearance is not necessary.

7.1 Will the project be collecting any information from 10 or more persons who are not Federal employees?

Yes.

7.2 Is there any collection of information addressed to all or a substantial majority of an industry (i.e., Fuel Fabrication Facilities or Fuel Cycle Facilities)?

Yes-licensees that are required to report annual to REIRS include nuclear power reactors, industrial radiographers, and manufacturing/distribution licensees.

7.3 Is the collection of information required by a rule of general applicability?

Yes.

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Note: For information collection (OMB clearances) questions: contact the NRC's Clearance Officer. Additional guidance can be found on the NRC's internal Information Collections Web page at: https://intranet.nrc.gov/ocio/33456.

STOP HERE - The remaining pages will be completed by the Privacy Officer, Records Management, and Information Collections Team.

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8 Privacy Act Determination

Project/System Name: Radiation Exposure Information and Reporting System (REIRS).

Submitting Office: Office of Research.

Privacy Officer Review

	Review Results	Action Items
	This project/system does not contain PII.	No further action is necessary for Privacy.
	This project/system does contain PII ; the Privacy Act does NOT apply, since information is NOT retrieved by a personal identifier.	Must be protected with restricted access to those with a valid need-to-know.
\boxtimes	This project/system does contain PII; the Privacy Act does apply.	SORN is required- Information is retrieved by a personal identifier.

Comments:

Covered by System of Records Notice - NRC-27 Radiation Exposure Information and Reporting System (REIRS) Records.

Reviewer's Name	Title
Signed by Hardy, Sally on 02/14/24	Privacy Officer

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9 OMB Clearance Determination

NRC Clearance Officer Review

	Review Results	
	No OMB clearance is needed.	
	OMB clearance is needed.	
\boxtimes	Currently has OMB Clearance. Clearance No. Form 4-3150-0005, Form 5 3150-0006	

Comments:

Reviewer's Name	Title
Signed by Cullison, David on 02/05/24	Agency Clearance Officer

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10 Records Retention and Disposal Schedule Determination Records Information Management Review

Review Results	
	No record schedule required.
	Additional information is needed to complete assessment.
	Needs to be scheduled.
\boxtimes	Existing records retention and disposition schedule covers the system - no modifications needed.

Comments:

Reviewer's Name	Title
Signed by Dove, Marna on 02/12/24	Sr. Program Analyst, Electronic Records Manager

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11 Branch Chief Review and Concurrence

Review Results	
	This project/system does not collect, maintain, or disseminate information in identifiable form.
\boxtimes	This project/system does collect, maintain, or disseminate information in identifiable form.

I concur with the Privacy Act, Information Collections, and Records Management reviews.

Signed by Feibus, Jonathan on 02/14/24

Cyber Information Security Officer Cyber Information Security Division Office of the Chief Information Officer

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ADDITIONAL ACTION ITEMS/CONCERNS

Name of Project/System:		
Radiation Exposure Information and Reporting	· · · · · · · · · · · · · · · · · · ·	
Date CSB received PIA for review:	Date CSB completed PIA review:	
January 23, 2024	February 14, 2024	
Action Items/Concerns:		
Coning of this DIA will be musicled to		
Copies of this PIA will be provided to:		
Caroline Carusone		
Director		
IT Services Development and Operations Division		
Office of the Chief Information Officer		
Garo Nalabandian		
Deputy Chief Information Security Officer (CISO)		
Office of the Chief Information Officer		