

**U.S. Nuclear Regulatory Commission  
Privacy Impact Assessment  
for the  
Nuclear Material Events Database (NMED)**

**Date:** January 23, 2007

**A. GENERAL SYSTEM INFORMATION**

1. Provide brief description of the system:

**NMED exists as a collection point of essential information regarding nuclear material events such as: medical mis-administration, personnel radiation overexposure, losses of radioactive material, release of licensed material, and other materials incidents. NMED takes event information from numerous sources and consolidates it into one national, central repository.**

2. What agency function does it support?

**Public Health and Safety**

3. Describe any modules or subsystems, where relevant, and their functions.

**The NMED master database is the central repository of all nuclear material events data from all states. The NMED contractor, Idaho National Laboratory (INL), is responsible for the data entry and maintenance of NMED. INL staff monitor the various event sources and enter the event data into the master database. They also load event data from files sent from the Agreement States. General users can access a view-only version of the NMED data over the Internet via an INL maintained website. Access is limited to Federal and State regulatory entities, and in some cases their direct contractors. Typical general users are: NRC staff, Agreement and non-Agreement State staff and other federal agency staff (DOE, Customs).**

4. Points of Contact:

Project Manager	Office/Division/Branch	Telephone
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Business Project Manager	Office/Division/Branch	Telephone
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Technical Project Manager	Office/Division/Branch	Telephone
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Executive Sponsor	Office/Division/Branch	Telephone
<b>Charles L. Miller</b>	<b>FSME</b>	<b>301-415-7197</b>

5. Does this Privacy Impact Assessment (PIA) support a proposed new system or a proposed modification to an existing system?

a. ☐ New System ☐ Modify Existing System ☒ Other (Explain)

**\* This PIA is prepared to support documentation and certification and accreditation efforts for the existing NMED system, not a modification of that system.**

b. If modifying an existing system, has a PIA been prepared before?

**NO**

(1) If yes, provide the date approved and ADAMS accession number.

## **B. INFORMATION COLLECTED AND MAINTAINED**

*(These questions are intended to define the scope of the information requested as well as the reasons for its collection. Section 1 should be completed only if information is being collected about individuals. Section 2 should be completed for information being collected that is not about individuals.)*

### **1. INFORMATION ABOUT INDIVIDUALS**

a. Does this system collect information about individuals?

**NMED doesn't maintain information specifically about individuals. NMED describes nuclear materials event scenarios, and there are often people involved (e.g., licensee staff, medical patients, members of the public, emergency response personnel like firefighters, police, etc), but the focus of the information in NMED would be as it pertains to the event and what occurred, rather than as it pertains to specific individuals. References to people involved in the events would be referenced by job title (e.g., the RSO, the radiographer) or by generic label (e.g., "the female patient", "a member of the public"). Part of the process for coding information into NMED is to ensure that Privacy Act information is not included in the database. Examples would include: "the RSO recovered the material in the laundry", "the authorized user was not present during the procedure", or "the patient received a dose of 20 millirem**

**to an unintended organ”. NMED also contains administrative information related to authorized users of the system (e.g., name, company, ID, user settings, and level of user rights).**

- (1) If yes, what group(s) of individuals (e.g., Federal employees, Federal contractors, licensees, general public) is the information about?
- b. What information is being maintained in the system about individuals (describe in detail)? **N/A**
- c. Is the information being collected from the subject individuals? **N/A**
  - (1) If yes, what information is being collected from the individuals?
- d. Will the information be collected from 10 or more individuals who are **not** Federal employees? **N/A**
  - (1) If yes, does the information collection have OMB approval?
    - (a) If yes, indicate the OMB approval number:
- e. Is the information being collected from internal files, databases, or systems? **N/A**
  - (1) If yes, identify the files/databases/systems and the information being collected.
- f. Is the information being collected from an external sources(s)? **N/A**
  - (1) If yes, what is the source(s) and what type of information is being collected?
- g. How will this information be verified as current, accurate, and complete? **N/A**
- h. How will the information be collected (e.g. form, data transfer)? **N/A**
- i. What legal authority authorizes the collection of this information? **N/A**
- j. What is the purpose for collecting this information? **N/A**

## **2. INFORMATION NOT ABOUT INDIVIDUALS**

- a. What type of information will be maintained in this system (describe in detail)?

NMED maintains information on important characteristics of a nuclear material event. This includes: Basic Event Data - detailed description of the event, event date, discovery date, report date; Reporting Party - company name, address, license number (if a licensee); Additional Involved Party - company name, address, license number (if a licensee); Site of Event - site name, state; Event Category - type of event, suspected cause; Equipment Involved - model, make, serial number, isotope type and amount; Reporting Requirements - how reported, regulation governing the report; Contributing Factors / Corrective Actions - steps taken to correct the problem; Event Document List - list of documents that provided the event information.

- b. What is the source of this information? Will it come from internal agency sources and/or external sources? Explain in detail.

Data is obtained from both internal and external sources. Internal sources include NRC public website (event notifications, preliminary notifications, morning reports), PARS (inspection reports, licensee incident reports), and emails from NRC staff providing updated information to events. External sources include information submitted by the Agreement States, publicly available reports from IAEA and DOT, and emails/data files/hard copies from Agreement State staff providing updated information to events.

- c. What is the purpose for collecting this information?

NMED exists as a collection point of essential information regarding nuclear material events such as: medical mis-administration, personnel radiation overexposure, losses of radioactive material, release of licensed material, and other materials incidents. It serves as a source of operation experience information.

**C. USES OF SYSTEM AND INFORMATION**

*(These questions will identify the use of the information and the accuracy of the data being used.)*

1. Describe all uses made of the information.

NMED is the NRC inventory of nuclear materials events, identifying what the event entailed and what took place during and after the incident. NMED provides the Agreement States a convenient way to track local events. NMED also provides access over the web for other users who may need access to the data on nuclear materials events. Further, NMED provides easy look-up of nuclear materials events information through search and filtering capabilities and through standard reports.

2. Is the use of the information both relevant and necessary for the purpose for which the system is designed?

**Yes.**

3. Who will ensure the proper use of the information?

**Users of the system would be responsible for ensuring proper use of the data obtained from the system. The Technical Project Manager would be responsible for proper access to and storage of the data itself.**

4. Are the data elements described in detail and documented?

**Yes**

- a. If yes, what is the name of the document that contains this information and where is it located?

**A data dictionary exists for NMED, and is maintained by the NMED contractor.**

5. Will the system derive new data or create previously unavailable data about an individual through aggregation from the information collected?

**No, NMED does not contain nor does it create data about individuals.**

- a. If yes, how will aggregated data be maintained, filed, and utilized?
- b. How will aggregated data be validated for relevance and accuracy? **N/A**
- c. If data are consolidated, what *controls* protect it from unauthorized access, use, or modification? **N/A**

6. How will the information be *retrieved* from the system (be specific)?

**Information can be viewed online using search functions, or printed using standard report formats. Search functions can be performed on most of the data fields (except administrative fields).**

7. Will this system provide the capability to identify, locate, and monitor (e.g., track, observe) individuals?

**No.**

- a. If yes, explain.

(1) What controls will be used to prevent unauthorized monitoring? **N/A**

8. Describe the report(s) that will be produced from this system.

**There are two basic report formats in NMED: a basic listing of NMED records meeting the search requirement (one line per record, containing only basic information), and a more detailed report of the records meeting the search requirement (containing either a pre-set subset of the fields, or a full set of the fields, in an easy to read format). In addition, there is a specialized summary report available to a limited set of users. There are administrative reports viewable online available only to the NMED system administrators.**

- a. What are the reports used for?

**Evaluation or counting of the events that meet the search requirements. The need driving the evaluation may differ depending on the users need. The online administrative reports are used to maintain smooth operation of the system.**

- b. Who has access to these reports?

**All users with access to the system have access to the two basic report types. A limited set of users have access to the specialized reports. The administrative reports viewable online are available only to the NMED system administrators.**

**D. RECORDS RETENTION AND DISPOSAL**

*(These questions are intended to establish whether the information contained in this system has been scheduled, or if a determination has been made that a general record schedule can be applied to the information contained in this system. Reference NUREG-0910, "NRC Comprehensive Records Disposition Schedule.")*

1. Has a retention schedule for this system been approved by the National Archives and Records Administration (NARA)? **No.**
  - a. If yes, list the disposition schedule.
2. Is there a General Records Schedule (GRS) that applies to information in this system? **No.**
  - a. If yes, list the disposition schedule.
3. If unscheduled, what are your retention requirements for the information maintained in this system? How long must the material be maintained to meet your programmatic needs?

**The information is maintained for the lifetime of the database. Data is not archived or deleted after a period of time, since the purpose is to provide**

an historical collection of data over the widest time period possible, in order to assess recurring issues and trends.

**E. ACCESS TO DATA**

**1. INTERNAL ACCESS**

- a. What organizations (offices) will have access to the information in the system?

**Any NRC office can have access - primary users include FSME, NMSS, OE, and the Regions.**

(1) For what purpose? **See responses to A.3, B.2.c, C.1 and C.8.a.**

(2) Will access be limited? **See responses to C.8.b.**

- b. Will other systems share or have access to information in the system?

**No.**

- c. How will information be transmitted or disclosed?

**Search criteria is transmitted to an INL server via internet through an https site, and results are transmitted back to the user via internet.**

- d. What controls will prevent the misuse (e.g., unauthorized browsing) of information by those having access?

**There wouldn't be unauthorized browsing by those having access because the access is controlled via password, thereby making the browsing authorized.**

- e. Are criteria, procedures, controls, and responsibilities regarding access documented?

**Not documented in a formal document.**

(1) If yes, where?

**Informal documentation exists via email, and a response to a member of the public denying access.**

**2. EXTERNAL ACCESS**

- a. Will external agencies/organizations/public share or have access to the information in this system?

**Yes.**

(1) If yes, who.

**Access to the system is limited to Federal and State regulatory entities, and in some cases their direct contractors. Typical external users are: Agreement and non-Agreement State staff and other federal agency staff (DOE, Customs). Individuals not authorized to have access to the system, have access to the information via the FOIA process.**

b. What information will be shared/disclosed and for what purpose?

**See answer to C.6 for how shared (via internet). See responses to A.3, B.2.c, C.1 and C.8.a. for purpose.**

c. How will this information be transmitted/disclosed? **See answer to E.1.c.**

#### **F. TECHNICAL ACCESS AND SECURITY**

1. Describe security controls used to limit access to the system (e.g., passwords). Explain.

**IDs and passwords are issued to each individual user. Passwords are required to be changed periodically and annual verification of authorized users is performed. The system itself is on a https site.**

2. Will the system be accessed or operated at more than one location (site)?

**The master system itself is not actually accessed. A copy of the master system is queried via a website interface.**

a. If yes, how will consistent use be maintained at all sites?

3. Which user group(s) (e.g., system administrators, project manager, etc.) have access to the system?

**Current user groups through the website interface are: general (having access to the standard searches and support information, having view only rights), specialized (aka NUREG, having access to some additional specialized search functions, having view only rights), and administrator (having access to all areas of the website interface, having write-access to the limited administrative data and having view only to the remainder).**

4. Will a record of their access to the system be captured?

**Yes**



- a. If yes, what will be collected?

**User info (as recorded for that ID in the system), login status (OK, ID rejected, PW rejected), and access date/time..**

5. Will contractors have access to the system?

**Yes, the NMED support contractor, INL.**

- a. If yes, for what purpose?

**For system maintenance and database updating.**

- Ensure that the following Federal Acquisition Regulation (FAR) clauses are referenced in all contracts/agreements/purchase order where a contractor has access to a Privacy Act system of records to ensure that the wording of the agency contracts/agreements/purchase order make the provisions of the Privacy Act binding on the contractor and his or her employees:
  - 52.224-1 Privacy Act Notification.
  - 52.224-2 Privacy Act.

6. What auditing measures and technical safeguards are in place to prevent misuse of data?

7. Are the data secured in accordance with FISMA requirements?

**Unknown at this time. NMED was established prior to the implementation of the FISMA requirements, and is currently involved in a full Certification and Accreditation development and review under the NRC CISSS contract.**

- a. If yes, when was Certification and Accreditation last completed?

**PRIVACY IMPACT ASSESSMENT REVIEW/APPROVAL**  
(For Use by OIS/IRSD/RFPSB Staff)

**System Name:** Nuclear Material Events Database (NMED)

**Submitting Office:** Office of Federal and State Materials and Environmental Management Programs (FSME)

**A. PRIVACY ACT APPLICABILITY REVIEW**

☒ Privacy Act is not applicable.

☐ Privacy Act is applicable. Currently covered under System of Records, NRC- . No modification to the system notice is required.

☐ Privacy Act is applicable. Creates a new system of records. FOIA/PA Team will take the lead to prepare the system notice.

☐ Privacy Act is applicable. Currently covered under System of Records, NRC- . Modification to the system notice is required. FOIA/PA Team will take the lead to prepare the following changes:

**Comments:**

The NMED is a collection point of essential information regarding nuclear material events. NMED describes nuclear materials event scenarios. People may be involved in these events but they are not identified. They would be captured as licensee staff, medical patients, members of the public, emergency response personnel (like firefighters, police), etc. The focus of the information in NMED would be the event and what occurred, rather than how it pertains to specific individuals. No personally identifying information about an individual is maintained in this system.

Reviewer's Name	Title	Date
Sandra S. Northern	Privacy Program Officer	February 13, 2007

**B. INFORMATION COLLECTION APPLICABILITY DETERMINATION**

☐ No OMB clearance is needed.

☐ OMB clearance is needed.

☒ Currently has OMB Clearance. Clearance No. 3150-0178

**Comments:**

NMED exists as a collection point of essential information regarding nuclear material events such as: medical mis-administration, personnel radiation overexposure, losses of radioactive material, release of licensed material, and other materials incidents. NMED takes this event information and consolidates it into one national, central repository. NRC regulations require NRC licensees to report any incidents and events involving the use, transportation and security of radioactive byproduct material, and source material. Agreement State licenses are also required to report these events to their individual Agreement State regulatory authorities under compatible Agreement State regulations, and NRC requests that the Agreement States provide information to NRC on the initial notification, response actions, and follow-up investigations on events involving the use of nuclear materials regulated pursuant to the Atomic Energy Act. The event information is provided in a uniform electronic format, for assessment and identification of any facilities/site specific or generic safety concerns that could have the potential to impact public health and safety.

The information gathered by the NMED system is considered a collection of information under the Paperwork Reduction Act of 1995, and is covered under OMB Clearance Number 3150-0178.

Reviewer's Name	Title	Date
Christopher J. Colburn	Senior Technical Assistant	February 16, 2007

**C. RECORDS RETENTION AND DISPOSAL SCHEDULE DETERMINATION**

☐ No record schedule required.

☒ Additional information is needed to complete assessment.

☐ Needs to be scheduled.

☐ Existing records retention and disposition schedule covers the system - no modifications needed.

☐ Records retention and disposition schedule must be modified to reflect the following:

**Comments:**

Further review and discussion will be required. However, this further review does not preclude moving forward with the certification of this system.

Reviewer's Name	Title	Date
Jeff Bartlett	Senior Records Analyst	03/06/07

#### D. BRANCH CHIEF REVIEW AND CONCURRENCE

  X   Does not constitute a Privacy Impact Assessment required by the E-Government Act of 2002.

Does constitute a Privacy Impact Assessment required by the E-Government Act of 2002 and requires approval of the Director, IRSD.

CONCUR IN REVIEW:           /RA/           Date 03/06/2007

Margie Janney, Chief  
Records and FOIA/Privacy Services Branch

**E. DIVISION DIRECTOR APPROVAL OF PRIVACY IMPACT ASSESSMENT**

(If required, refer to D. above.)

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John J. Linehan, Director, Information and Records Services Division

**TRANSMITTAL OF PRIVACY IMPACT ASSESSMENT/  
PRIVACY IMPACT ASSESSMENT REVIEW RESULTS**

<b>To:</b> <b>Charles L. Miller, Director</b> <b>Office of Federal and State Materials and Environmental Management Programs</b>	
Name of System: <b>Nuclear Material Events Database (NMED)</b>	
Date RFPSB received PIA for review: <b>January 29, 2007</b>	Date RFPSB completed PIA review: <b>March 6, 2007</b>
<b>Noted Issues:</b>  No Privacy Act issues.  The information gathered by the NMED system is considered a collection of information under the Paperwork Reduction Act of 1995, and is covered under OMB Clearance Number 3150-0178.  Further review and discussion will be required to complete the records management assessment. However, this further review does not preclude moving forward with the certification of this system.	
Margaret A. Janney, Chief Records and FOIA/Privacy Services Branch Office of Information Services	Signature/Date: <b>/RA/</b> <b>03/06/2007</b>
<i>Copies of this PIA will be provided to:</i>  <i>James C. Corbett, Director</i> <i>Business Process Improvement and Applications Division</i> <i>Office of Information Services</i>  <i>Kathy L. Lyons-Burke, CISSP</i> <i>Senior IT Security Officer (SITSO)/Chief Information Security Officer (CISO)</i> <i>Office of Information Services</i>	