

## PRIVACY IMPACT ASSESSMENT

Please submit your responses to your Liaison Privacy Official

[http://intranet.epa.gov/privacy/pdf/lpo\\_roster.pdf](http://intranet.epa.gov/privacy/pdf/lpo_roster.pdf).

If you need further assistance contact Marlyn Aguilar, at [aguilar.marlyn@epa.gov](mailto:aguilar.marlyn@epa.gov) or (202) 566-0012.

<b>System Name: Superfund Enterprise Management System (SEMS)</b>		
<b>Preparer:</b> William Bushee	<b>Office:</b> OSWER/OSRTI/RMD	
<b>Date:</b> 11 September 2017	<b>Phone:</b> 703.603.8963	
<b>Reason for Submittal:</b> New PIA____ Revised PIA____ Annual Review__X__ Rescindment ____		
<b>This system is in the following life cycle stage(s):</b> Operations & Maintenance (O&M)		
Definition <input type="checkbox"/>	Development/Acquisition <input type="checkbox"/>	Implementation <input type="checkbox"/>
Operation & Maintenance <input type="checkbox"/> Rescindment/Decommissioned <input type="checkbox"/>		
<p><b>Note: Note: New and Existing Systems require a PIA annually, when there is a significant modification to the system or where privacy risk has increased to the system. For examples of significant modifications, see <u>OMB Circular A-130, Appendix 1, Section (c) (1) (a-f)</u>.</b></p> <p><b>The PIA must describe the risk associated with that action. For assistance in applying privacy risk see <u>OMB Circular No. A-123, Section VII (A) (pgs. 44-45)</u>.</b></p>		

### Provide a general description/overview and purpose of the system:

The SEMS database application supports the electronic capture, imaging, indexing, and tracking of records which document investigation, cleanup, and enforcement activities at potential and existing hazardous waste sites, as mandated by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, known collectively as CERCLA.

SEMS is a key EPA asset used to meet responsibilities of Federal agencies, Congress, and the Public in Superfund site remediation and cleanup, and emergency response support. It addresses the Agency's performance gap for capturing, preserving, and disseminating legislatively mandated Superfund documents and records. SEMS is an electronic repository of Superfund documents routinely used to disseminate records in response to Freedom of Information Act (FOIA) requests, Administrative Records (ARs), and for litigation support. SEMS advances e-Government by providing reliable and easily accessible documents to citizens for use in making more informed decisions in their communities. Beneficiaries of content exported from SEMS include citizens, States, Tribes, Congress, and the business community.

A fundamental objective of SEMS was to evolve the primary Superfund data collection, reporting and tracking modules— Site Management (SM) and Records Management (RM) into one single integrated system, leveraging the capabilities and strengths of the predecessor systems while eliminating the redundant design features, data collection efforts and maintenance activities. The result is a one stop source for Superfund data collection and tracking activities. The decision to move forward in the integration of existing core Superfund Management systems into a single SEMS was chosen to close the performance gap for capturing, preserving and disseminating legislatively mandated Superfund documents and records.

As SEMS progresses through its lifecycle, additional modules will be added that enable geo-locational representation, permit retrieval of analytical data, and offer new customer user interfaces. SEMS will reduce redundancies by consolidating Superfund site level searches, sharing information sources, and simplifying site searches – all within a single system. SEMS will also take advantage of enterprise architecture components such as the EPA Enterprise Architecture (EA) and service oriented architectures as it matures.

SEMS will provide better service to citizens by establishing strong information management controls, cross-platform search functionalities, and efficient content delivery. SEMS will form a flexible and adaptive technological framework in support of program decision making and lines of business.

## **Section 1.0 Authorities and Other Requirements**

### **1.1 What specific legal authorities and/or agreements permit and define the collection of information by the system in question?**

- CERCLA, as amended by SARA – The Comprehensive Environmental Response, Compensation, and Liability Act (Public Law 96-510), and the Superfund Amendments and Reauthorization Act (SARA-Public Law 99-499)
- CWA, as amended by OPA – 1972 Clean Water Act, amended by Office of Public Affairs (OPA), NCP 40 CFR Part 300.
- Executive Order 12777 – Delegate Presidents authority for responding to discharges of oil and hazardous substances under the CWA and OPA to the EPA and US Coast Guard
- Executive Order 12580 and 13016 - Further delegated authority to releases of hazardous substances under CERCLA to the EPA, USCG, DoD, DOE, and other federal agencies.
- OMB Memorandum 99-18, *Privacy Policies on Federal Websites*, June 1999.
- OMB Memorandum M-03-22: *Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002*.
- OMB Memorandum 99-05: Attachment A: *Privacy and Personal Information in Federal Records* and Attachment B: *Instructions for Complying with the Presidents Memorandum of May 14, 1998, "Privacy and Personal Information in Federal Records."*
- Government Paperwork Elimination Act (GPEA), Public Law 105-277, Title XVII, October 21, 1998.
- The Paperwork Reduction Act of 1995, Public Law 104-13, May 1995.
- The Privacy Act of 1974, Public Law: 93-579, September 1975.

**1.2 Has a system security plan been completed for the information system(s) supporting the system?**

Yes

**1.3 If the information is covered by the Paperwork Reduction Act (PRA), provide the OMB Control number and the agency number for the collection. If there are multiple forms, include a list in an appendix.**

No- we collect data internally concerning sites, and not from the public.

## **Section 2.0 Characterization of the Information**

*The following questions are intended to define the scope of the information requested and/or collected, as well as reasons for its collection.*

**2.1 Identify the information the system collects, uses, disseminates, or maintains (e.g., data elements, including name, address, DOB, SSN).**

SEMS will contain data/information that supports program activities and decisions regarding cleaning up specific Superfund sites and is intended to provide repositories of or access point to a variety of program data including site management, cost recovery, site financial information, enforcement actions, and supporting documentation.

**2.2 What are the sources of the information and how is the information collected for the system?**

Information that will be captured in SEMS is derived from a variety of sources, including existing programmatic records, Agency staff and contractors, civil investigators, attorneys, and the like. As the SEMS solution will be integration of existing Superfund systems and their respective information, the information may include correspondence, reports, laboratory analyses, FOIA requests and responses, photographs, technical drawings, maps, and digital audio/video clips that are specific to the Superfund, Brownfields, Emergency Response and Prevention, Cost Recovery, Enforcement and other delegated/non-delegated EPA programs with ties to the Superfund program.

Those with responsibilities for site cleanup and management submit data and records to the system. Those with such responsibilities include site assessors, remedial project managers, on scene coordinators, enforcement officers, attorneys, financial analysts, and others. The data come from a wide variety of sources.

**2.3 Does the system use information from commercial sources or publicly available data? If so, explain why and how this information is used.**

No

## **2.4 Discuss how accuracy of the data is ensured.**

SEMS ensures data is accurate through the following:

- Annual data control entry plans are submitted to provide a consistent plan for entering and maintaining current, complete, consistent and accurate data in Superfund systems and relevant and timely data to the public.
- Cross checking data entered through reports
- Deploy business intelligence tools to review data
- Assign data sponsors that understand and review segments of the data regularly through analysis and reporting

## **2.5 Privacy Impact Analysis: Related to Characterization of the Information**

*Discuss the privacy risks identified for the specific data elements and for each risk explain how it was mitigated. Specific risks may be inherent in the sources or methods of collection, or the quality or quantity of information included.*

### **Privacy Risk:**

The privacy risks related to the characterization of the information include risks regarding enforcement sensitive information and planning information.

### **Mitigation:**

- Access to the system is extremely limited to EPA staff and contractors working on Superfund related work. No one is provided access to the application without a need-to-know and approval of supervisor via user form.
- Accounts are assigned from EPA Headquarters who have personal knowledge of each individual's need to access the information in the system.
- There is a privacy/warning notice that is displayed on each login.
- Each user must log in with a user name and password each time they access the system.

## **Section 3.0 Uses of the Information**

*The following questions require a clear description of the system's use of information.*

### **3.1 Describe how and why the system uses the information.**

SEMS information will be used in a variety of ways, including but not limited to: research, enforcement and compliance, litigation support, responses to Congressional and FOIA requests, public participation in the Superfund process, electronic archiving, cost recovery, disaster recovery, and support of the program/Agency mission.

### **3.2 How is the system designed to retrieve information by the user? Will it be retrieved by personal identifier? Yes\_\_\_ No\_X\_. If yes, what identifier(s) will be used. (A personal identifier is a name, social security number or other identifying**

*symbol assigned to an individual, i.e. any identifier unique to an individual. Or any identifier that can be linked or is linkable to an individual.)*

### **3.3 If the system retrieves information by personal identifier, what types/elements of information about the user are being retrieved?**

PII is not deliberately collected for tracking in SEMS, however PII may be contained in some documents stored in the document repository. Such data can be retrieved only by full text search criteria. Personal identifiers can be retrievable in SEMS unless they have been permanently redacted from the electronic file, though no specific search fields for PII exist. The system is designed to capture information about sites, not individuals, therefore users will primarily retrieve information by Site Name or EPA Site Identification Number.

### **3.4 What Privacy Act System of Records Notice(s) (SORN(s)) apply to the information?**

SEMS currently has a SoRN (EPA-69)

### **3.5 Does the system use technology to conduct electronic searches, queries, or analyses in an electronic database to discover or locate a predictive pattern or an anomaly? If so, state how EPA plans to use such results.**

No

### **3.6 Privacy Impact Analysis: Related to the Uses of Information**

*Describe any types of controls that may be in place to ensure that information is handled in accordance with the uses described above.*

#### **Privacy Risk:**

The key controls to assure that information is handled in accordance with its prescribed use include:

#### **Technical Class Controls**

- Access Controls:
  - ✓ Account Management
  - ✓ Access Enforcement
  - ✓ Separation of Duties
  - ✓ Least Privilege
  - ✓ Unsuccessful Login Attempts
  - ✓ System Use Notification
  - ✓ Session Lock
  - ✓ Supervision and Review -Account Management
- Audit Controls:
  - ✓ Auditable Events

- ✓ Audit Analysis, Monitoring, and Reporting
- Identification and Authentication

#### Management Class Controls

- Security Planning, Policy, and Procedures
  - ✓ Rules of Behavior
- Systems and Services Acquisition Policy and Procedures
  - ✓ Software Usage Restrictions
  - ✓ Security Engineering Principles

#### Operational Class Controls

- Security Awareness and Training Policy and Procedures
  - ✓ Security Awareness
  - ✓ Security Training

Implementation of these controls is documented in the SEMS System Security Plan that addresses all of the areas identified above, including how Superfund employees are granted system access based upon their organizational role and need to know, authorizing officials, technical aspects of authentication management, software use and engineering, and the auditing of access files to ensure the protection of data maintained by OSRTI.

#### **Mitigation:**

OSRTI is required to address continual statutory and Agency-level requirements to substantiate that its handling of information is compliant. From a technical perspective, continuous monitoring requirements provide assurance that privacy-applicable controls are consistent with SEMS Certification and Accreditation.

## **Section 4.0 Notice**

*The following questions seek information about the system's notice to the individual about the information collected, the right to consent to uses of information, and the right to decline to provide information.*

### **4.1 How does the system provide individuals notice prior to the collection of information? If notice is not provided, explain why not.**

Individuals' information has not been included in the system. In the future, if personal information is to be collected from individuals, such as when compiling contact lists resulting from public meetings, privacy notices will be provided to the public as appropriate. Such information will be flagged as confidential upon entry in SEMS and will not be released to the public.

### **4.2 What opportunities are available for individuals to consent to uses, decline to provide information, or opt out of the collection or sharing of their information?**

N/A - SEMS does not collect information on individuals.

### **4.3 Privacy Impact Analysis: Related to Notice**

*Discuss how the notice provided corresponds to the purpose of the project and the stated uses. Discuss how the notice given for the initial collection is consistent with the stated use(s) of the information. Describe how the project has mitigated the risks associated with potentially insufficient notice and opportunity to decline or consent.*

The predominant privacy risk lies in improper disclosure. All EPA employees and contractor staff are aware of penalties regarding improper use of information per training materials and Rules of Behavior. No information is intentionally collected on individuals.

## **Section 5.0 Access and Data Retention by the system**

*The following questions are intended to outline the access controls for the system and how long the system retains the information after the initial collection.*

### **5.1 Do the systems have access control levels within the system to prevent authorized users from accessing information they don't have a need to know? If so, what control levels have been put in place? If no controls are in place why have they been omitted?**

Yes, users are assigned roles and privileges by the system administrator in the regions who manage and control access to the various applications, modules, and forms in SEMS. The System Administrator role will determine which users have access to the SEMS applications, and within an application, which forms, functions, and reports a user can access. Before a user is granted access, they must complete a new user form and signed by their supervisor. Staff are then assigned particular roles, and through these roles assignments, they acquire rights "permissions" to perform particular functions.

### **5.2 Are there other components with assigned roles and responsibilities within the system?**

No

### **5.3 Who (*internal and external parties*) will have access to the data/information in the system? If contractors, are the Federal Acquisition Regulations (FAR) clauses included in the contract (24.104 Contract clauses; 52.224-1 Privacy Act Notification; and 52.224-2 Privacy Act)?**

EPA Employees and contractors. While there is EPA policy that contracts should include the reference FAR clause, the SEMS owner cannot currently guarantee that every contractor in every capacity is working from a contract that has incorporated this guidance. If that is a requirement then we will need to conduct a full contractor access review.

### **5.4 What procedures are in place to determine which users may access the**

## **information and how does the system determine who has access?**

Before a user is granted access, they must complete a new user form and signed by their supervisor. Staff are then assigned particular roles, and through these roles assignments, they acquire rights “permissions” to perform particular functions.

### **5.5 Explain how long and for what reason the information is retained. Does the system have an EPA Records Control Schedule? If so, provide the schedule number.**

Because SEMS information is used for cost recovery purposes, information is retained for a 30 year period. The RCS is 0052, 0061, and 1036.

### **5.6 Does a records retention schedule approved by the National Archives and Records Administration (NARA) exist?**

A new record control schedule has not yet been issued for this system. However, in cooperation with NARA, a schedule is under development. It will closely mirror the retention schedules for paper Superfund records. Superfund records are subject, almost universally, to a 30-year retention period. Exceptions include FOIA requests and responses with a 3-year retention period, vital records (such as Records of Decision) and the Hurricane Katrina and Rita records, with permanent retention schedules.

### **5.7 Privacy Impact Analysis: Related to Retention**

*Discuss the risks associated with the length of time data is retained. How were those risks mitigated? The schedule should align with the stated purpose and mission of the system.*

- Residual privacy risks are mitigated by limited access to the data, non-portability of the data and controlled storage of the data in controlled facilities.
- Retention of application-specific data is required to meet business and organizational requirements for this particular information system. The risks associated with retaining application-specific information are mitigated by the record schedules.
- Employ least privilege principles to data access
- Review Audit logs to ensure data is not intentionally deleted or altered

## **Section 6.0 Information Sharing**

*The following questions are intended to describe the scope of the system information sharing external to the Agency. External sharing encompasses sharing with other federal, state and local government, and third-party private sector entities.*



**6.1 Is information shared outside of EPA as part of the normal agency operations? If so, identify the organization(s), how the information is accessed and how it is to be used, and any agreements that apply.**

Information is routinely shared outside the Agency to the public through two mechanisms:

- Public submits a FOIA request through the FOIA office and tracked through FOIAonline or
- Disseminating information via EPA public websites. The basic steps to publish content to the EPA website are:
  - ✓ Subject Matter Experts (SMEs) adding/updating content
  - ✓ Reviewer assesses, and approves or rejects updates
  - ✓ Publishers advertises content to the public web

Information shared with DOJ for litigation purposes, have a special process and are championed by an attorney. The current process is as follows:

- ✓ Request comes in from DOJ to the EPA.
- ✓ An Email is generated identifying the program office and all internal POCs associated with the request
- ✓ Identify potential data sources and criteria - Criteria includes people, topics and themes associated with the complaint
- ✓ Perform EnCase search and review results and next steps
- ✓ Gather results and encrypt information on CD
- ✓ Attorney distributes information to DOJ

Process is governed by the EPA information collection policy - Collection and Retention Procedures for Electronically Stored Information (ESI) Collected Using E-Discovery Tools (EPA Classification No.: CIO 2155-P-3.0)

**6.2 Describe how the external sharing noted in 6.1 is compatible with the original purposes of collection in the SORN noted in 3.4.**

The information shared/disseminated is to provide the public with information regarding Superfund sites in their area, and can be used for research and/or general purposes.

**6.3 Does the agreement place limitations on re-dissemination?**

No

**6.4 Describe how the system maintains a record of any disclosures outside of the Agency.**

SEMS is an internal application with no public access. Information is reviewed prior to releasing data to the web for public consumption.

## **6.5 How does the system review and approve information sharing agreements, MOUs, new uses of the information, new access to the system by organizations within EPA and outside?**

Generally, all MOUs/ISAs are reviewed and renewed every three years. A meeting is setup between the participating EPA offices to identify and make changes to the documents. After the changes are agreed to, the documents are revised and routed through the signature chain (branch chief, division director, office director, ISO, IMO and SIO) for approval.

Currently, OSRTI has an MOU/ISA with the Office of Office of the Chief Financial Officer (OCFO), Office of Technology Solutions (OTS) for a connection between Superfund Cost Recovery Package and Imaging Online System (SCORPIOS) and SEMS.

## **6.6 Privacy Impact Analysis: Related to Information Sharing**

*Discuss the privacy risks associated with the sharing of information outside of the agency. How were those risks mitigated?*

Privacy Impact Analysis: Given the **internal sharing**, discuss what privacy risks were identified and how they were mitigated.

The fundamental privacy risk lies in unauthorized disclosure based on methods of sharing. The two methods and the mitigation of potential risks are as follows:

- ✓ Information delivered by courier or hand-carried is subject to media labeling controls. Transport of this information is subject to EPA controls for media transport.
- ✓ E-mail is subject to the Agency's infrastructure security controls., and
- ✓ Where appropriate, Memorandum of Understanding/Interconnection Security Agreement is in place

Privacy Impact Analysis: Given the **external sharing**, what privacy risks were identified and describe how they were mitigated.

The predominant privacy risk attributable to sharing data with the public lies in a breach to confidentiality. To mitigate this risk OSRTI has instituted several technical, operational and management controls. Secure transfer protocols are deployed in the transmission of information to the web.

## **Section 7.0 Redress**

*The following questions seek information about processes in place for individuals to seek redress which may include access to records about themselves, ensuring the accuracy of the information collected about them, and/or filing complaints.*

### **7.1 What are the procedures that allow individuals to access their information?**

N/A - Information is not collected directly from individuals

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

N/A

**7.3 How does the system notify individuals about the procedures for correcting their information?**

N/A

**7.4 Privacy Impact Analysis: Related to Redress**

*Discuss what, if any, redress program the project provides beyond the access and correction afforded under the Privacy Act and FOIA.*

N/A - Individuals' information has not been included/collected in the system.

## **Section 8.0 Auditing and Accountability**

*The following questions are intended to describe technical and policy based safeguards and security measures.*

**8.1 How does the system ensure that the information is used in accordance with stated practices in this PIA?**

Users of the application are required to take the annual SEMS security training and acknowledge the rules of behavior. The training covers CBI/PII, how to protect the information, and the implication for releasing the information. The training also covers general IT security topics.

**8.2 Describe what privacy training is provided to users either generally or specifically relevant to the system/collection.**

All authorized users of the SEMS application are required to take an annual security training identifying the user's role and responsibilities for protecting the Agency's information resources, as well as, consequences for not adhering to the policy.

**8.3 Privacy Impact Analysis: Related to Auditing and Accountability**

The following in-place auditing measures and technical safeguards are applied to prevent misuse of data. OSRTI constantly evaluates new technologies and procedures to enhance these capabilities. These controls include:

- Authenticator/Password Management -- Application and monitoring of initial distribution, composition, history, compromise, and change of default authenticators.
- Account Management -- Application and monitoring of account establishment, activation, modification, disabling, removal (including unnecessary/defunct accounts) and review, all of which support implementation of need-to-know.
- Access Enforcement -- Application and monitoring of access privileges.
- Least Privilege -- Provision of the minimum tools required for a user to perform his/her function.
- Unsuccessful Login Attempts – SEMS automatically locks the account until released by a System Administrator when the maximum number of unsuccessful attempt is exceeded.
- Audit trails are generated by the SEMS application. The audit trails facilitate intrusion detection and are a detective control for identifying data misuse. SEMS is also configured to protect audit information and tools from unauthorized access, modification and deletion. Audit notifications are generated in response to pre-specified triggers.