

**ENVIRONMENTAL PROTECTION AGENCY  
SUPPORTING STATEMENT**

**1. IDENTIFICATION OF INFORMATION COLLECTION**

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Radon Emissions from Operating Mill Tailings (40 CFR Part 61, Subpart W) (Renewal); EPA ICR Number 2464.03, OMB Control Number 2060-0706

**1(b) Short Characterization/Abstract**

On January 17, 2017, the Environmental Protection Agency (EPA) issued final revisions to the radon emission standards for 40 CFR Part 61, Subpart W (82 FR 5142). Included in the final revisions is a requirement that owners and operators of uranium recovery facilities maintain specific records pertaining to the design, construction and operation of the uranium tailings impoundments, both conventional and non-conventional, and heap leach piles. These records will be retained at the facility and contain information regarding the approved design of the impoundments and/or heap leach pile, including, but not limited to, all tests performed that prove the liner is compatible with the material(s) being placed on the liner. For non-conventional impoundments this requirement also includes written and digital photographic records showing compliance with the requirement to maintain liquid in the impoundment such that any solid materials in the impoundment are not visible above the liquid level. Both the retention of design documents required for all impoundments and the records generated during inspections to meet the liquid retention requirement for non-conventional impoundments were new requirements for collection of information that is not covered under the already existing ICR for radionuclide NESHAPs (EPA Number 1100.16, OMB Number 2060-0191).

Information collected as part of this ICR is used by the EPA to ensure that public health continues to be protected from the hazards of airborne radionuclides. If the information were not

collected, it is unlikely that a violation of these standards would be identified and, thus, there would be no corrective action initiated to bring the facilities back into compliance. Compliance is demonstrated through inspection. All facilities are required to maintain their records for the operational lifetime of the facility, as specified in 40 CFR 61.255. In some cases, they also report their results to EPA.

## **2. NEED FOR AND USE OF THE COLLECTION**

### **2(a) Need/Authority for the Collection**

In the context of the Clean Air Act (42 USC 1857), Section 114 authorizes the Administrator of EPA to require any person who owns or operates any emission source or who is subject to any requirements of the Act to:

- Establish and maintain records;
  - Make reports, install, use, and maintain monitoring equipment or method;
  - Sample emissions in accordance with EPA-prescribed locations, intervals and methods;
- and
- Provide information as may be requested.

### **2(b) Practical Utility/Users of the Data**

EPA's regional offices use the information collected to ensure that public health continues to be protected from the hazards of radionuclides by compliance with health-based standards and/or Generally Available Control Technology (GACT).

EPA's compliance monitoring activities vary widely. EPA could issue a letter requesting information about compliance or could conduct a full scale investigation if a compliance problem is identified, including on-site inspections.

When EPA first learns of a compliance problem, EPA attempts to remedy the problem by holding informal discussions with the owner/operator of the source. If it is not possible to remedy the problem informally, formal action is taken. EPA's Clean Air Act Compliance Enforcement Guidance Manual identifies the Agency's informal and formal enforcement operating procedures.

### **3. NON DUPLICATION, CONSULTATIONS AND OTHER COLLECTION CRITERIA**

#### **3(a) Non duplication**

In accordance with 40 CFR Part 61, the specific information requested by this ICR is not currently collected by any other office within the EPA or any other governmental agency.

#### **3(b) Public Notice Required Prior to ICR Submission to OMB**

The EPA published a Federal Register notice on August 20, 2020, to request comments on specific aspects of this ICR with a 60-day comment period (85 FR 51427). Comments received were reviewed to determine whether the burden estimates should be revised. See Section 3(c) for discussion of comments and interactions with respondents.

#### **3(c) Consultations**

Following the publication of the notice in the Federal Register, the EPA reached out directly to all respondents under Subpart W. Facility representatives were emailed on September 24, 2020, and provided with a set of questions to guide their response to the ICR. Four respondents provided written responses, and these responses are included in the docket (EPA-HQ-OAR-2020-0403). The responses indicated that the facilities' compliance procedures work generally as the Agency expected, and that the actual burden to the facilities may be less than the Agency's estimates. Three facilities reported success in submitting photographs for compliance purposes,

while one facility reported significant resources spent to overcome technical issues with the computer system. The Agency recognizes that there were some initial technical limitations with the digital photographic submission system, which were resolved. The Agency will work directly with the facility to try to address the issues that it has encountered.

### **3(d) Effects of Less Frequent Collection**

Respondents are required to collect digital photographs of liquid levels in impoundments at least weekly and submit them to the Agency at least monthly. This provides sufficient frequency for the Agency to ensure that compliance is maintained, or corrective actions taken in a timely manner. Extended periods of exposed uranium byproduct material could result in excessive emissions of radon to the atmosphere.

### **3(e) General Guidelines**

This ICR meets OMB's collection guidelines. Reporting on a monthly basis allows the Agency to respond to potential increases in radon emissions. Records consisting of impoundment design and construction documents, written observation of impoundment liquid levels, and digital photographs are to be maintained for the operational lifetime of the facility, as specified in 40 CFR 61.255.

### **3(f) Confidentiality**

This section does not apply because this ICR does not request information of confidential nature.

### **3(g) Sensitive Questions**

This section is not applicable because this ICR does not request sensitive information.

## **4. THE RESPONDENTS AND THE INFORMATION REQUESTED**

#### **4(a) Respondents/North American Industrial Classification System (NAICS) Codes**

The NAICS Code associated with the activity of the respondents is:

Uranium-Radium-Vanadium Ore Mining - 212291

#### **(b) Information Requested and Respondent Activities**

Descriptions of the reporting and record keeping requirements are listed below.

#### **4(b) Information Requested**

##### *(i) Reporting*

##### **Subpart W - Uranium Mill Tailings**

The owners or operators of operating non-conventional impoundments are required to submit digital photographs collected during compliance inspections to the Subpart W Impoundment Photographic Reporting system (SWIPR) under Section 61.255. Digital photographs documenting the presence of liquids in non-conventional impoundments such that solid materials are not visible above the liquid level are to be collected at least weekly and uploaded to SWIPR at least monthly. Daily inspections of impoundments are required by the Nuclear Regulatory Commission (NRC). Written observations and digital photographs documenting liquid levels can be collected in conjunction with these customary and usual business practices.

##### *(ii) Recordkeeping*

The owner or operator of the uranium recovery facility must maintain records that confirm the approved design and operating procedures for the conventional impoundment(s), non-conventional impoundment(s) and heap leach pile(s). Included in these records shall be the results of liner compatibility tests and written and digital photographic records confirming that

liquid has been maintained in non-conventional impoundments such that no solid material is visible above the liquid level. This documentation should be sufficient to allow an independent auditor to verify the accuracy of the determination made concerning the facility's compliance with the standard. These records must be kept at the mill or facility for the operational lifetime of the facility and, upon request, be made available for inspection by the Administrator, or his/her authorized representative.

**5. THE INFORMATION COLLECTED -- AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT**

**5(a) Agency Activities**

Information being collected is pursuant to Federal regulation. Agency activities consist of reviewing owner or operator photographic submissions and maintaining files.

**5(b) Collection Methodology and Management**

The Office of Radiation and Indoor Air and the EPA regional offices have planned and allocated resources for the efficient and effective management and use of this information.

Records must be maintained documenting the approved design and operating procedures for the conventional impoundment(s), non-conventional impoundment(s) and heap leach pile(s). Included in these records shall be the results of liner compatibility tests and written and digital photographic records confirming that liquid has been maintained in non-conventional impoundments such that solid materials are not visible above the liquid level. This documentation should be sufficient to allow an independent auditor to verify the accuracy of the determination made concerning the facility's compliance with the standard. Verification of data is accomplished by review of digital photographs of liquid in non-conventional impoundments.

These records must be kept at the site of the facility for the operational lifetime of the facility and, upon request, be made available for inspection by the Administrator, or the Administrator's authorized representative. EPA regional office staff may perform periodic on-site inspections to determine if compliance with the regulatory standards is being maintained, including review of records.

### **5(c) Small Entity Flexibility**

For purposes of assessing the impacts of this ICR on small entities, small entity is defined as: (1) a small business whose company has less than 250 employees and is primarily engaged in leaching or beneficiation of uranium, radium or vanadium ores as defined by NAICS code 212291; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise, which is independently owned and operated and is not dominant in its field.

Of the 9 facilities identified, 5 are owned by small businesses. Three of the six facilities that have been documenting the liquid level in non-conventional impoundments are owned by small businesses. The inspections to determine the liquid retention requirement for non-conventional impoundments can be created and stored during the daily inspections of the tailings and waste retention systems required by the NRC (and Agreement States) under the inspection requirements of 10 CFR 40, Appendix A, Criterion 8A. Therefore, no small organizations or small governmental entities have been identified that would be adversely impacted by the proposed ICR.

### **5(d) Collection Schedule**

Collection of the information required will begin when the facility enters into operational status, with the documentation of design and construction of impoundments. Inspections and recordkeeping of impoundment liquid levels shall begin when non-conventional impoundments are first used to manage uranium byproduct material or tailings and shall be performed daily, during the inspections required by 10 CFR Part 40, Appendix A, Criterion 8A. Digital photographs to document the liquid level in non-conventional impoundments are to be taken at least weekly. Monthly submission of digital photographs to the SWIPR system is required; if the SWIPR system is not available, photographs must be maintained at the facility and made available upon request.

## **6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION**

### **6(a) Estimating Respondent Burden**

The annual burden for this collection of information is estimated to average 283 hours for compliance with requirements to maintain liquids in non-conventional impoundments and 12 hours for a facility to retain records related to design and construction of impoundments and heap leach piles. There are currently six facilities with non-conventional impoundments subject to the liquid retention requirements, and a total of nine facilities, all of which must maintain design and construction records.

### **Maintaining liquid in non-conventional impoundment**

It is estimated that management will spend two hours annually to remain familiar with the regulatory provision, and five hours per year to acquire any necessary equipment. It is estimated that it will take one technical staff person one day to be trained to record the required information, and one person to provide training. The Agency estimates that it will take one hour



to perform the inspection and record the required information, and inspections will be conducted on 240 work-days per year. It is estimated that it will take clerical staff 20 hours per year to submit digital photographs and maintain written and digital photographic records. Six facilities will generate and submit these records annually, since three of the facilities subject to Subpart W do not have non-conventional tailings impoundments. This estimated burden is included in Table 1, Burden and Cost to Meet Liquid Retention Requirement for Non-conventional Impoundments.

### **Maintaining design/construction records**

Design and construction records are assumed to cost nothing to generate, since they were required as part of the application for construction/modification required under Subpart A of 40 CFR Part 61. It is estimated that two hours of management time per facility will be required annually to retain familiarity with the regulatory provision, and that ten hours of clerical time per facility per year will be sufficient to store and maintain the records at the facility so that they are accessible. It is estimated that nine facilities are subject to Subpart W and will maintain these records. Burden and cost are shown in Table 2, Burden and Cost to Meet Design and Construction Record Requirements for All Impoundments.

### **6(b) Estimating Respondent Costs**

#### ***(i) Estimating Labor Costs***

Burden and costs estimates have been calculated separately for these collections. Respondent labor rates are based on “mean” values from the May 2019 data of the US Department of Labor, Bureau of Labor Statistics (BLS) for the mining industrial sector. These national industry-specific occupational employment and wage estimates are calculated with data collected from employers of all sizes, in metropolitan and non-metropolitan areas in every State

and the District of Columbia, in NAICS 212200 - Metal Ore Mining. Mean hourly rates were then adjusted to represent total compensation, using the BLS estimate that wages in this sector represent 67.2% of total compensation. These rates are then increased by 150% to account for overhead and adjusted by 0.664% to account for inflation from BLS May 2019 dollars (most recent data available) to June 2020 dollars. The labor key is as follows: Management (Mgmt) (\$103/hr) was based on the General & Operations Managers (11-1021) (Occupation Code 11-1021) in the metal ore mining sector in the BLS data. Technical (Tech) (\$64/hr) was based on the average of three technical groups (environmental engineers, mining and geological engineers, and environmental scientists) (Occupation Codes 17-2081, 17-2151, and 19-2040, respectively) in the mining sector. Clerical (Cler) (\$31/hr) was based on the Office and Administrative Support Occupations Group (Occupation Code 43-9000) in the metal ore mining sector in the BLS data.

***(ii) Estimating Capital and Operations and Maintenance Costs***

**Maintaining liquid in non-conventional impoundment**

It is estimated that the equipment required for documenting the liquid level through digital photographic records will cost \$300 for each facility. Afterwards, there are no O&M costs associated with conducting these inspections and submitting reports.

**Maintaining design/construction records**

A startup cost of \$100 per facility is assumed for establishing appropriate storage for existing impoundment design and construction records. Afterwards, there are no O&M costs associated with maintaining these records, only annual labor costs to do so.

**Table 1: Burden and Cost to Meet Liquid Retention Requirement for Non-conventional Impoundments**  
**Information Collection**    **Hours and Costs Per Respondent**    **Maintain Liquid in Impoundment**    **Total Hours and Costs**  
**Activity**

Subpart W-- Uranium Mill Tailings	Manager (\$/hr)	Technical (\$/hr)	Clerical (\$/hr)	Respond (hrs/yr)	Labor cost (year/respond)	Capital/Startup cost	O & M Cost	Number of Respond	Total hours/yr	Total Labor cost/yr
	\$103	\$64	\$34							
Read and understand the regulatory provision (Mgmt)	2			2	\$206			6	12	\$1,236
Acquire Instrumentation (Mgmt)	5			5	\$515	\$300		6	30	\$3,090
Train technician to perform inspection (Mgmt./Tech)	8	8		16	\$1,339			6	96	\$8,032
Perform inspection to determine presence of liquid (Tech.)		240		240	\$15,440			6	1440	\$92,640
<b>Record Keeping</b>										
File and maintain data (Clerical/Tech)		10	10	20	\$983			6	120	\$5,900
<b>TOTAL</b>	15	258	10	283	\$18,483	\$300		6	1698	\$110,898
<b>Assumptions:</b> 1. Capital/start up cost: 6 facilities x \$300 = \$1,800 2. Annual cost (O & M): 6 facilities x \$0 = \$0										

**Table 2: Burden and Cost to Meet Design and Construction Record Requirements for All Impoundments**  
**Information Collection    Hours and Costs Per Respondent – Design Plans Retention    Total Hours and Costs**  
**Activity**

Subpart W-- Uranium Mill Tailings	Manag er (\$/hr)	Technic al (\$/hr)	Cleric al (\$/hr)	Respon d (hrs/yr)	Labor cost (year/respon d)	Capital/ Startup cost	O & M Cos t	Numbe r of Respon d	Total hours/ yr	Total Labor cost/yr
	\$103	\$64	\$34							
Read and understand the regulatory provision (Mgmt)	2			2	\$206			9	18	\$1,854
<b>Record Keeping</b>										
File and maintain data (Clerical)			10	10	\$340	\$100		9	90	\$3,060
<b>TOTAL</b>	2	0	10	12	\$546	\$100		9	108	\$4,914.00
Assumptions: 1. Capital/start up cost: 9 facilities x \$100 = \$900 2. Annual cost (O & M): 9 facilities x \$0 = \$0										

### **6(c) ESTIMATED AGENCY BURDEN AND COST**

The burden to the EPA is only for reviewing the information collected by the regulated community to ensure that they meet the requirements of the regulations, as well as continuing maintenance (assuming no enhancements) of the SWIPR system for electronic submittal of digital photographs documenting the liquid level in non-conventional impoundments. Since the Agency reviews the design and construction records of impoundments at the time of the initial application, the Agency does not revisit those records routinely and there is no annual burden to the Agency associated with those records being maintained at the facility.

The estimated agency burden and costs are as shown in Table 3 below. There is an O&M burden of 50 hours of Agency staff time and 47 hours of contractor time to maintain the electronic reporting system used by facilities to submit digital photographs from their daily inspections. Maintenance of this system is independent of the number of respondents. It is estimated that 6 hours of Agency technical staff time and 4 hours of Agency clerical staff time are required per reporting facility annually to review submitted reports. This information is submitted monthly by the six facilities with non-conventional impoundments.

Agency salaries were found in 2020 General Schedule Salary Table. Uranium recovery facilities in the respondent universe are located in Regions 7 and 8, so the average locality pay for those locations was used (Lenexa, KS and Denver, CO). The data for review of reports for compliance was based on the salary scale for GS-13, step 5 (Tech), with a multiplier of 1.6 to include overhead; this resulted in \$85/hr. For the Clerical category, the salary scale for a GS-9, step 5 (Cler) was used with a multiplier of 1.6 to account for overhead; this resulted in \$48/hr. In addition, development and maintenance of the system for electronic submittal of digital

photographs is estimated to involve a GS-14, step 1, using locality pay for Washington, D.C.

Using the 1.6 multiplier, this resulted in \$93/hr.

**Table 3: Burden and Cost to the Agency**

<b>AGENCY</b>	O&M Burden Hours	O&M Cost	Annual Burden Hrs per Respondent	Annual Costs per Respondent
Develop and maintain electronic system for submission of digital photographs (\$93/hr agency staff; \$97/hr contractor)	50 (Agency) 47 (Contract)	\$9,209	0	\$0
Review reports for compliance verification (Tech @\$85/hr)			6	\$510
File reports (Cler @\$48/hr)			4	\$192
<b>SUB-TOTAL</b>		\$9,209	10	\$749
<b>TOTAL for 6 respondents</b>			<b>60</b>	<b>\$13,421</b>

**6(e) Bottom Line Burden Hours and Cost Tables**

	Number of Respondents	Number of Activities	Total Hours Per Year	Total Labor Cost Per Year	Total Annual Capital Costs*	Total Annual O&M Costs
Maintain Liquid	6	5	1698	\$110,898	\$0	\$0
Design/Operating Plan Retention	3	2	108	\$4,914	\$0	\$0
<b>TOTAL</b>	9	7	1806	\$115,812	\$0	\$0

\* Capital/startup costs shown in earlier tables are not annual costs. There are not expected to be annual capital costs associated with this ICR.

**Reasons for Change in Burden:** The primary reason for the reduction in burden

estimates from the ICR currently approved by OMB is an adjustment in the size of the respondent universe. The initial ICR approved at the time of the 2017 rulemaking (82 FR 5142) included a larger universe of potential respondents based on the overall state of the uranium production industry. Many of those facilities remain in some phase of licensing and development and the EPA does not anticipate that any new facilities will become subject to the reporting and recordkeeping requirements during this ICR renewal period. The Agency has also made a minor adjustment in the estimated number of hours to read and become familiar with the requirements. The change in estimated burden on the Agency primarily results from the transition of the SWIPR system from a start-up to an operations-and-maintenance mode. Based on consultations and comments received on the draft ICR, the Agency believes that its burden estimates are reasonable, if somewhat conservatively high. For example, this ICR estimates 240 hours per year for each facility to perform and document inspections of liquid levels. The highest burden reported by a facility was 180 hours per year, and other facilities reported as little as 12 hours per year spent collecting photographs. Likewise, the Agency estimates 20 hours of burden annually for reporting and record-keeping. Three facilities reported on the order of 6 hours spent annually, while one facility which experienced issues with the online reporting system reported 24-36 hours annually. The responses gave a wide range of values for the equipment used to collect photographs, but in all four cases the facility used previously existing equipment, rather than purchasing new equipment to comply with the updated regulatory requirements. Given the range of responses from reporting facilities, the Agency finds its estimates and assumptions to be conservative but reasonable.

### **Burden Statement**

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID EPA-HQ-OAR-2020-0403, which is available for public viewing at the Air and Radiation Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Office of Indoor Air and Radiation Docket is (202) 566-1742. An electronic version of the public docket is available through [www.regulations.gov](http://www.regulations.gov). Use [regulations.gov](http://www.regulations.gov) to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the



public docket that are available electronically. Once in the system, select “search,” then key in the docket ID number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID EPA-HQ-OAR-2020-0403 and OMB Control Number 2060-0706 in any correspondence.