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Administrative Procedure

PRC-PRO-SH-409

Industrial Hygiene Monitoring, Reporting and Records Management

Revision 3, Change 2

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USQ Screen Number:

- Solid Waste Operations Complex : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Olsen, Ashley
- Canister Storage Building/Interim Storage Area : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Covey, Lori
- Central Plateau Surveillance and Maintenance : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Olsen, Ashley
- Waste Encapsulation Storage Facility : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Covey, Lori
- 100 K Facility : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Williams, James
- Less Than HazCat 3 : Excluded from USQ
Exclusion Reason:

- Plutonium Finishing Plant : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Danna, Marc
- Transportation : Excluded from USQ
Exclusion Reason:
N/A per Appendix B, Table B-2

CHANGE SUMMARY**Description of Change**

Provide clarification in section 3.6 regarding form review signatures.

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1.0 INTRODUCTION

1.1 Purpose

This procedure describes the requirements that personnel must follow for planning, documenting, reporting, and managing industrial hygiene records by using the Site Wide Industrial Hygiene Database (database), commonly called SWIHD.

1.2 Scope

This procedure addresses the following industrial hygiene monitoring, reporting, and record management requirements:

- Using standardized collection methods to obtain a complete exposure record in accordance with the Occupational Safety and Health Administration (OSHA) recordkeeping and retention requirements: 29 CFR 1910.1020, "Access to employee exposure and medical records," and substance specific standards contained in 29 CFR 1910 and 1926.
- Implementing record retention requirements in 10 CFR 851, *Worker Safety and Health Program*.
- Communicating validated monitoring results to line management, employees, and occupational medicine.
- Validating accuracy of Occupational Safety and Industrial Hygiene (OS&IH) information entered on confined space identification forms and entry permits.
- Implementing mechanism for PRC-MP-MS-003, *Integrated Safety Management System/Environmental Management System Description (ISMSD)*, elements "Identify Hazards, Environmental Impacts and Environment, Safety and Health (ES&H) Requirements" and "Perform Work within Controls."

This procedure does **not** cover the following:

- Medical monitoring results which are forwarded to the employee's manager from the Occupational Medical provider to be given to the employee.

All changes to the forms associated with this procedure must be coordinated through CH2M HILL Plateau Remediation Company (CHPRC) OS&IH Programs to assure compliance with requirements for "managed forms" established by PRC-PRO-IRM-112, *Forms Control*.

1.3 Applicability

This Level 2 Management Control Procedure is applicable to CHPRC employees. This procedure applies to the monitoring and sampling evaluations and data identified, collected and generated by personnel to assess actual or potential hazards and work place exposures from personal, direct reading, area, bulk, and wipe samples, including the subsequent reporting, retention, and retrieval of data using the database.

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For subcontractor work requiring monitoring and sampling, the subcontractor may collect samples utilizing their own personnel and equipment. The subcontractor can collect the information on their own forms if they contain the same information that the approved forms contain. However, the data collected must be retained in the database. This will be accomplished by generating a Generic survey in the database and attaching electronic copies of the forms used to capture the sampling event details. Oversight will be provided by a CHPRC Industrial Hygienist (IH) working on the project.

1.4 Implementation

This procedure is effective upon publication.

2.0 RESPONSIBILITIES

2.1 Project Industrial Hygienist

Ensure the surveys are performed consistent with the planning, data collection, and reporting process described in this procedure. Also reviews laboratory data, evaluates the data to identify potential further actions, and assures notification and survey closure actions are completed.

2.2 Occupational Safety & Industrial Hygiene (OS&IH) Programs

Establish, maintain, and manage CHPRC interface with the database. Maintain and manage the records storage, handling, and access control of the submitted active and in-process records. Provide oversight of records generated by the IH and Industrial Hygiene Technician (IHT) personnel.

2.3 Peer Reviewer

Review data entry to the database by a Surveyor to assure accurate translation of field collected information. This review is optional and not intended to replace any review necessary by the Project IH to fulfil those responsibilities.

2.4 Surveyor

Perform and document industrial hygiene surveys under the guidance of the Project IH consistent with the process described in this procedure.

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3.0 PROCESS

Planning, documenting, reporting, and managing survey records using the database involves the following steps:

- Receive user access and operation briefing from OS&IH Programs. Document the briefing in 600241, *Industrial Hygiene Qualification Card* or IHT on-the-job training (OJT).
- Perform field work and track information.
- Process data collected through the *Open, Ready, Review, and Complete* phases as the survey status progresses.

3.1 Monitoring/Sampling Plans

A monitoring/sampling plan may be documented through a monitoring/sampling plan or an exposure assessment. These may be utilized as reference instructions for data collection and as a means to record characterization or sampling strategies for the historical record. For purposes of implementing the database, a monitoring/sampling plan may be a physical document, project form, or just a category description to manage the data.

Actionee	Step	Action
IH	1.	PROVIDE OS&IH Programs the number, title, author, and effective start date of the plan or revised plan.
OS&IH Programs	2.	ENTER the title and number of the plan available in the database.

3.2 Database Unavailability

Follow these steps if the database be unavailable to initiate a survey to support sampling or monitoring. Site Forms listed in section 4.1 within this procedure are for field use pending data entry into the database. If an existing method or form does not meet the field use needs, the Project IH must coordinate with OS&IH Programs to ensure that an acceptable format is used. The survey is to be initiated in the database within two working days of the sampling event.

Actionee	Step	Action
		<i>NOTE: A temporary survey ID number is created using two digits for the year, a dash, the organization designation (i.e., PFP, DWF&RS, S&GRP, PTS), followed by a two digit unique survey number in the example format 15-PFP01.</i>
Project IH or Surveyor	1.	GENERATE a temporary Survey ID number to uniquely identify the sampling event on hard copy forms.
	2.	GENERATE a unique sample number for each sample and blank that includes the survey number, followed by a dash, followed by a three digit unique number.
	3.	GENERATE a survey in the database once available to include information as depicted on the hard copy forms.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Surveyor	4.	PLACE the temporary Survey ID number first in the database title field followed by the descriptor for the sampling event.
	5.	ATTACH electronic copies of all handwritten and back-up paperwork to the survey in the database.
	6.	PLACE temporary assigned sample number(s) within the location details of the associated database generated number(s) or within the comments section of the survey.
	7.	COMPLETE additional steps following appropriate survey process in section 3.3 of this procedure.

3.3 Surveys

The database does not represent the record material. It is used as a means to collect and access the data. The completed survey, sent to long term retention storage, is the record material. If the database fields or structure are modified to enhance collection, uniform reporting, and/or statistical analysis, it is not considered changing records. If data is modified in the database such that it would alter the meaning of the record, then revisions to the records must be made.

All equipment and calibration standards shall be within calibration and expiration dates. When equipment fails to function within established parameters for pre and post use functional tests, it is the duty of the Project IH to evaluate the impact that deviations from these requirements may have on the validity of the data. This evaluation shall be documented in the comments or Out of Tolerance sections of the Survey, as appropriate.

The database surveys need to be completed in a consistent manner and time frame. Direct reading, heat, generic, and noise surveys should be completed no more than 10 working days after the survey date. Air, surface, and bulk surveys should be completed no more than 10 working days after the receipt of the final results. Extensions to this requirement can only be given by the Project OS&IH Manager or their designee in the area where the work is being conducted, and only in writing.

3.3.1 Air Sampling Surveys

The process for documenting air sampling surveys using the database is described in this section.

Survey and port numbers are generated by the database. Each sample number must be added as a sequential number in the pump tab screen starting with the number 001.

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Actionee	Step	Action
Surveyor	1.	INFORM the Sample Management and Reporting (SMR) group of pending sampling.
	2.	NOTIFY the project Radiological Control for pending sample clearance. Clearance must be obtained for samples without concern if they are taken in radiologically controlled areas.
	3.	VERIFY the instrument's calibration dates are current. <ul style="list-style-type: none"> • <u>IF</u> there are discrepancies with dates, <u>THEN CONTACT</u> Industrial Hygiene Equipment Services (IHES).
	4.	TRANSCRIBE field data into the appropriate fields in the database.
	5.	PRINT the Chain of Custody (COC) from the database. <ul style="list-style-type: none"> • DO NOT MODIFY the sample numbers on the COC. • COMPLETE the control account charge number (CACN).
	6.	RETAIN a signed copy when the samples are relinquished to the SMR group.
	7.	CHANGE survey status from Open to Ready.
Project IH	8.	REVIEW survey information for accuracy.
	9.	CHANGE survey status from Ready to Reviewed.
OS&IH Programs	10.	POPULATE the database with the laboratory results as they are received. <ul style="list-style-type: none"> • ATTACH Final Lab Report to the survey in the database.
Project IH or IH Manager	11.	REVIEW the laboratory results. <ul style="list-style-type: none"> • PERFORM blank corrections as needed within the database Exposure Summary section. • VERIFY the exposure measurement data in association to the occupational exposure limit (OEL) if the sampling is personal monitoring. <p><i>NOTE: Steps 12, 13, and 14 only apply to surveys with personal exposure samples. Time limits for OSHA agent letter distribution are presented in Appendix B.</i></p>
	12.	REVIEW personal notification and, if applicable, representative letter(s), making modifications as needed.
	13.	SAVE changes.

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Actionee	Step	Action
Project IH or IH Manager	14.	ATTACH letter(s) and any additional records to the survey (i.e., sample plans, final reports).

NOTE: Completing the survey will automatically distribute the notification and representative letters to the respective email addresses with a copy to the Site Occupational Medical Contractor.

15. COMPLETE the survey in the database.

3.3.2 Direct Reading Instrument Monitoring Surveys

This section describes the process for documenting direct reading instrument (DRI) monitoring surveys using the database. Survey numbers are automatically generated within the database.

Actionee	Step	Action
Surveyor	1.	VERIFY the instrument's calibration dates are current. <ul style="list-style-type: none"> • <u>IF</u> there are discrepancies with dates, <u>THEN CONTACT IHES.</u>
	2.	TRANSCRIBE field data into the database.
	3.	Change survey status from Open to Reviewed.
Project IH or IH Manager	4.	COMPLETE the survey in the database.

3.3.3 Surface/Bulk Sampling Surveys

The process for documenting Surface/Bulk Sampling Surveys using the database is described in this section. Survey numbers are automatically generated within the database.

Actionee	Step	Action
Surveyor	1.	INFORM the Sample Management and Reporting (SMR) group of pending sampling.
	2.	NOTIFY the project Radiological Control for pending sample clearance. Clearance must be obtained for samples without concern if they are taken in radiologically controlled areas.
	3.	TRANSCRIBE appropriate field data into the database.
	4.	PRINT the COC from the database. <ul style="list-style-type: none"> • DO NOT MODIFY the sample numbers on the COC. • COMPLETE the CACN and COA.
	5.	RETAIN a signed copy when the samples are relinquished to the laboratory.

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Actionee	Step	Action
OS&IH Programs	6.	POPULATE the database with the laboratory results as they are received.
Project IH or IH Manager	7.	<ul style="list-style-type: none"> ATTACH Final Lab Report to the survey in the database. COMPLETE the survey in the database.
OS&IH Programs	8.	RETAIN records as described in Section 5.05-0 .

3.3.4 Heat Stress Monitoring Surveys

Heat stress monitoring is commonly referred to as Wet Bulb Globe Thermometer (WBGT). The process for documenting Heat Stress Monitoring Surveys using the database is described in this section. Survey and reading numbers are automatically generated within the database.

Actionee	Step	Action
Surveyor	1.	VERIFY the instrument's calibration dates are current. <ul style="list-style-type: none"> IF there are discrepancies with dates, THEN CONTACT IHES.
Project IH or IH Manager	2.	TRANSCRIBE whatever subset of the data is deemed representative into the database.
Project IH or IH Manager	3.	COMPLETE the survey.

3.3.5 Noise Surveys

The process for documenting Noise Surveys using the database is described in this section. Survey numbers are automatically generated within the database.

Actionee	Step	Action
Surveyor	1.	VERIFY the instrument's calibration dates are current. <ul style="list-style-type: none"> IF there are discrepancies with dates, THEN CONTACT IHES.
Project IH or IH Manager	2.	TRANSCRIBE whatever subset of the data is deemed representative into the database.
Project IH or IH Manager	3.	REVIEW personal notification and, if applicable, representative letter(s), making modifications as needed.
Project IH or IH Manager	4.	SAVE changes.

NOTE: Steps 3, 4, and 5 only apply to surveys with personal exposure samples. Time limits for OSHA agent letter distribution are presented in Appendix B.

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Actionee	Step	Action
Project IH or IH Manage	5.	ATTACH letter(s) and any additional records to the survey (i.e., sample plans, final reports).

NOTE: Completing the survey will automatically distribute the notification and representative letters to the respective email addresses with a copy to the Site Occupational Medical Contractor (SOMC).

6. COMPLETE the survey in the database.

3.4 Beryllium Facility Assessment

A Beryllium Facility Assessment, in accordance with either DOE-0342-002 or DOE-0342-004, is to be developed and maintained within the Beryllium module within the database.

Actionee	Step	Action
Assessor	1.	INITIATE new or revision Beryllium Facility Assessment in the Beryllium module in the database as applicable.
	2.	ENTER information in accordance with the appropriate implementing procedure (DOE-0342-002 or DOE-0342-004).
Reviewer	3.	COMPLETE the assessment in the database.

3.5 Requests for Exposure Assessment Data

Whenever an employee or designated representative requests access to a record, CHPRC shall assure that the information is provided in a reasonable time, place, and manner. If CHPRC cannot reasonably provide access to the record within 15 working days, CHPRC shall (within the 15 working days) apprise the employee or designated representative requesting the record of the reason for the delay and the earliest date when the record can be made available.

CHPRC may require of the requester only such information as should be readily known to the requester and which may be necessary to locate or identify the records being requested (e.g., dates and locations where the employee worked during the time period in question). Form A-6006-800 is available to document the information expected to fulfil the request.

Actionee	Step	Action
Project IH and IH Managers	1.	COORDINATE with the individual requesting the exposure data to gain clarification as to the timeframes and type of data being requested.
Project IH and OS&IH Programs	2.	<u>IF</u> the information requested is unable to be obtained within 15 working days, <u>THEN</u> NOTIFY the requestor apprising the employee the reason for the delay and the earliest date when the data can be made available.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project IH	3.	CONTACT the requestor <u>AND</u> COORDINATE delivery of information.
	4.	OBTAIN the requestor signature on the request form, acknowledging receipt of the information. <ul style="list-style-type: none"> The deliverer of the information may sign attesting to delivery of the information to the requestor if the requestor is unable to acknowledge receipt.
OS&IH Programs	5.	RETAIN records as defined in Section <u>5.05-0</u> .

3.6 Hanford Confined Space Documents

Hanford Confined Space documents shall have an independent (peer) OS&IH review. Forms are identified in section 4.2 of this procedure. The add-a-line function should be used on the A-6005-717 form to create an additional signature line for peer review. The Confined Space Hazard Identification form (A-6005-724) shall be peer reviewed when it is created and when Section 5 is filled out. The peer reviewer shall indicate the review by printing, signing and dating the document.

All Confined Space forms (i.e., A-6005-717, A-6005-719, and A-6005-724) shall be submitted to Records for inclusion into IDMS when they are completed.

The A-6005-724 form shall be reviewed for accuracy prior to any entry. If the A-6005-724 form includes signatures of individuals no longer with the project or company, the form shall be revised with current employees performing the review and signing the form prior to entry.

3.7 Record Configuration Management

3.7.1 Pen and Ink Changes

Handwritten modifications to record material are made using a single line through the wording to be modified. The modification will be legibly written in. The modifier shall initial and date the change. Pen and ink changes to sampling plans shall be incorporated in the next formal revision to the document.

3.7.2 Revisions

Monitoring/sampling plans and reports are managed using version control. When the document is revised it is identified as R1, R2, etc. Original and revisions are record material. Approvals are dependent on the type of plan or report as defined in Sections 3.13-4 and 3.23-2.

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4.0 FORMS

4.1 Field Use Forms

IH DRI Functional Test Data, A-6003-861

IH Personal Data Form, A-6003-857

IH Sampling Pump Functional Test Data, A-6003-862

Industrial Hygiene Chain of Custody and Laboratory Request, A-6004-114

Industrial Hygiene Noise Dosimetry Survey, A-6004-735

Industrial Hygiene Noise Survey, A-6004-736

Industrial Hygiene Surface Sampling Field Log, A-6004-078

WBGT Monitoring form, A-6004-691

4.2 Other Forms

Hanford Confined Space Entry Log, A-6005-719

Hanford Confined Space Hazard Identification Form, A-6005-724

Hanford Confined Space Entry Permit, A-6005-717

5.0 RECORD IDENTIFICATION

All records are required to be managed in accordance with PRC-PRO-IRM-10588, *Records Management Processes*. Records created during the performance of OCRWM activities shall be managed and additionally submitted to the OCRWM Records Coordinator, in accordance with PRC-PRO-QA -9579, *OCRWM Records Management*.

Records Capture Table

Name of Record	Submittal Responsibility	Retention Responsibility
Laboratory Reports including signed Chain of Custody	IH personnel for company initiating monitoring	CHPRC OS&IH Programs
Employee Notification Letters		
Building/Area Monitoring Postings		

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6.0 SOURCES**6.1 Requirements**

10 CFR 850, *Chronic Beryllium Disease Prevention Program*
10 CFR 851, *Worker Safety and Health Program*
29 CFR 1910.1020, *Access to Employee Exposure and Medical Records*
29 CFR 1910 and 1926, *Substance Specific Standards*
29 CFR 1910 Subpart Z, *Toxic and Hazardous Substances*
CRD M 231.1-2, Supp Rev 7, *Occurrence Reporting and Processing of Operations Information*
SCRD O 471.3, *Identifying and Protecting Official Use Only Information*
National Archives and Records Administration, <http://www.archives.gov/index.html>

6.2 References

PRC-MP-MS-003, *Integrated Safety Management System/Environmental Management System Description (ISMSD)*
PRC-PRO-IRM-112, *Forms Control*
PRC-PRO-IRM-10588, *Records Management Processes*
PRC-PRO-QA-19579, *OCRWM Records Management*

6.3 Basis Documents

PRC-PRO-IRM-184, *Information Protection and Clearance*
PRC-PRO-IRM-8310, *Document Control Processes*
PRC-PRO-SH-17916, *Industrial Hygiene Exposure Assessments*

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Appendix A - Glossary

<i>Term</i>	<i>Definition</i>
IH Personnel	An industrial hygienist or industrial hygiene technician involved in the monitoring or sampling process.
Managed Forms	Forms originated on the Hanford Site in conventional or electronic format that: <ol style="list-style-type: none">1. Cross divisional or departmental lines, within or across contractor organization/agency; and/or2. Are required by state or federal law, DOE order, company policy or procedure, or are defined in a controlled manual; and/or3. Are required for audit traceability or otherwise becomes an official document of record when completed.
Monitoring	The process of evaluating the level of a material or agent using a direct reading instrument and comparing the results obtained to acceptable values.
Sampling	The process of collecting one or more representative samples from the work environment to quantitatively evaluate the level of the agent present. This usually involves sampling an individual (personal) or sampling the immediate work area (area).

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Appendix B - DOE & OSHA-Driven Time Requirements

The information below is provided only to assist in determining employee notification time requirements. Refer to the applicable standards for the actual requirements since the information below may be dated material. The values are for both OSHA General Industry (citation provided) and OSHA Construction Standards unless noted otherwise.

Table B-1: Working (Business) Days for Notification of Results

Agent, Regulation	General Industry	Construction Industry
1,2-dibromo-3-chloropropane; 1910.1044;	5	None
1,3-Butadiene; 1910.1051;	5	None
Acrylonitrile; 1910.1045;	5	None
Asbestos; 1910.1001;	15	5
Benzene; 1910.1028;	15	None
Beryllium, DOE 10 CFR 850.24	10	None
Cadmium; 1910.1027;	15	5
Coke oven emissions; 1910.1029;	5	None
Ethylene oxide; 1910.1047;	15	None
Formaldehyde; 1910.1048;	15	None
Hexavalent Chromium; 1910.1026;	15	5
Inorganic Arsenic; 1910.1018;	5	None
Lead; 1910.1025;	5	None
Methylene chloride; 1910.1052;	15	None
Methylene dianiline; 1910.1050;	15	None
Noise; 1910.95;	employees must be notified if 85 dBA or more but no day requirement;	None
Vinyl Chloride; 1910.1017;	10	None