

Rocky Flats Environmental
Technology Site
94-MP/IE-0017



REVISION 2

**MANAGEMENT PLAN FOR MATERIAL
CONTAINED IN IDLE EQUIPMENT**

APPROVED BY: /S/ R. J. Walker / R. J. Walker / August 19, 1997
Kaiser Hill, Nuclear Operations Print Name Date

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1. PURPOSE

This Management Plan addresses the management of waste contained in equipment, on the Rocky Flats Environmental Technology Site (site), that is currently idle due to the change in the site's mission. The program provides a methodology for identifying idle equipment containing material or waste and for prioritizing the draining or removal of material or waste based on the reduction of risk to worker health, safety, and the environment.

2. SCOPE

The program described in this plan involves three phases. Phase 1 is the identification of materials, characterization of the materials, assessment and categorization of hazards in the materials, and management of the materials. Phase I has been completed. Phase 2 specifies the actions required to drain or remove and dispose of or store the materials from idle equipment presenting the greatest hazards, while Phase 3 identifies the actions for the disposition of the equipment itself. This program applies to all site employees and subcontractors who are involved with the process of identifying and managing the material contained in idle equipment, reservoirs, catch pans, product tanks, or product lines.

3. PERFORMANCE STANDARDS

[1] The standard for "RCRA empty," applicable to product tanks, sumps, and idle equipment reservoirs and catch pans, shall be the removal of all visible liquids and liquid residues. Physical methods, for example, using a vacuum, high pressure, rinsing, or tapping low spots, shall be used to detect mobile constituents, if verification cannot be made by gravity draining or nondestructive testing. To achieve this standard, all waste shall be removed using the practices commonly employed to remove materials from the container, for example, pouring, pumping, and aspirating. A visual inspection shall be performed and all visible liquids, liquid residues, and sludge shall have been removed and the affected surfaces wiped visually clean (e.g., no oily surface or sheen), if the surface is visible and readily assessable. Low points in piping systems, including associated pumps, shall be verified empty by either nondestructive testing or gravity draining.

[2] If a piece of idle equipment is discovered to contain acutely hazardous waste, it will be triple rinsed in accordance with 6 CCR 1007-3, Section 261.7(c)(3).

[3] Sampling methods will comply with those listed in Appendix I of 6 CCR 1007-3, Part 261. Analytical test methods will comply with those instructions contained in "L-Procedures".

[4] Characterization shall be performed in accordance with 6 CCR 1007-3, Part 262.11.

4. ASSUMPTIONS

[1] Buildings, equipment, and personnel will be available.

[2] Material in idle equipment that initially is characterized as non hazardous waste, using best available information (e.g. process knowledge, WSRIC book), must be sampled and analyzed during removal operations. If subsequent analytical data proves it to be hazardous waste, the inventory shall be updated and the waste managed appropriately when removed from the equipment.

[3] No equipment may be added to the Idle Equipment inventory Appendix 1, unless the Colorado Department of Public Health and Environments (CDPHE) determines, in writing, based on information provided by either DOE and/or K-H, that circumstances exist such that the regulatory schedules for management of the hazardous waste contained in the idle equipment cannot or should not be met. The CDPHE shall make a determination on any request by DOE and/or K-H to add equipment to Appendix 1 within 10 business days of receipt of the request. The CDPHE's determination on any such request is not subject to dispute resolution under the Compliance Order on Consent, pursuant to which this plan is implemented.

[4] Tanks that are in a RCRA-permitted or interim-status are not within the scope of this program.

[5] Equipment that is still in use shall be managed in accordance with the procedures in the 1-900000, Property Management Manual are not within the scope of this program.

[6] 53 items of equipment in Buildings 371 and 771 that are designated as part of the Liquid Stabilization Program (LSP) scope shall be drained in accordance with schedules developed by that program. This equipment is interconnected and is in close proximity to tanks and/or ancillary equipment that are in the Mixed Residue Tank Systems Management Plan (MRTSMP).

[6] The point of generation, for the purposes of this plan, is the point at which the material is physically removed from the equipment reservoir or product tank.

[7] Deferral of equipment until Decommissioning will not change. Due Diligence forms are on file with the project manager.

[8] The Idle Equipment inventory does not apply to material contained in equipment that is part of:

- o Any type of automotive vehicle.
- o Lead shielding that is used to reduce worker exposure
- o Printed circuit boards.
- o Oil in contained reservoirs intended to maintain the equipment value.
- o Underground storage tanks.
- o Batteries, including lead acid, nickel cadmium, and lithium
- o Equipment covered by other programs (e.g. Liquid Stabilization Program (LSP), Highly Enriched Uranyl Nitrate (HEUN), Mixed Residue Tank System Management Plan (MRTSMP))
- o Non hazardous waste in equipment

[9] If the material contained within the idle equipment is only required for the preservation of that equipment and that equipment has an intended use, no further action is required other than the transfer of the equipment to the appropriate program for eventual reuse.

[10] After waste is removed from a piece of idle equipment, that equipment shall await final disposal through the appropriate program.

5. REGULATORY STRATEGY

The following regulatory strategy shall apply to equipment that has been inventoried.

5.1 Program Scope

The management strategy consists of the following elements:

- Managing Idle Equipment and the Waste Contained Within It
- Deferring The Removal Of Hazardous Waste Until Decommissioning Programs.
- Colorado Department Of Public Health And Environment (CDPHE) Interface

5.2 Managing Idle Equipment and the Waste Contained Within It

Central to the Idle Equipment Management Program is the definition of when equipment is actually considered as no longer being in use. This is the first step identified in Phase 1 of the program management flow chart in Figure 2 and 3, Idle Equipment Process Logic Diagram. The 6 CCR -1007-3, Part 261.4(c) states: "A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under Parts 262 through 266, Part 268, and Part 100 or to the notification requirements of Part 99 of these requirements until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of a product or raw materials."

The candidate population of idle equipment is identified in a Sitewide inventory, and a schedule for removing the contents has been established for equipment that contains hazardous waste. A characterization of the equipment contents has been performed for each affected tank or piece of equipment to ascertain whether or not the contents are potentially hazardous, that is, contain a substance that would be RCRA-regulated (retains a characteristic or is listed) after the unit ceased to be operated.

Should the hazardous waste be eligible for recycling, it will be handled according to the specific regulations outlined in 6 CCR 1007-3; however, should it be ineligible due to radioactivity content or other factors, it will be managed as a RCRA hazardous waste. For example, carbon tetrachloride was widely used in the buildings as a solvent; if it is not recyclable, it would be declared a hazardous waste.

A hazard assessment has been performed to determine whether additional measures are required until the waste is removed. These measures could include: applying lockout/tagout, establishing —postings, and performing inspections.

After removal, the hazardous waste will be containerized and managed in RCRA 90-day storage areas, then stored in RCRA-interim status or permitted-storage units and ultimately shipped off site.

5.3 Deferring the Removal of Hazardous Waste Until Decommissioning

Decommissioning includes surveillance, maintenance, decontamination and/or dismantlement for the purpose of retiring the building from service with adequate regard to health and safety of workers and the public and protection of the environment. The ultimate goal of decommissioning is unrestricted use or, if unrestricted use is not feasible, restricted use of the building.

A subset of the inventory includes idle equipment that contains hazardous waste that is extremely difficult to remove. In many instances, leaving that material in place until decommissioning would present a minimal health risk to the workers, the public, and the environment because of currently effective containment systems and compensatory measures. Deferral until decommissioning will avoid duplication of work resulting from partial or incomplete equipment cleanup efforts. The justification for deferral of waste removal from specific pieces of equipment and the implementation of compensatory measures will be available for review and documented on a Due Diligence Form, Appendix 2. An example of a rationale is as follows:

Glovebox No. B60, Room 110, contains a Heald "T" base lathe with coolant oils and/or oil residues contaminated with solvents (carbon tetrachloride) and gross alpha radioactive contamination. These oils are inaccessible for removal. The removal of materials from the glovebox will require the use of supplied breathing air, construction of a plastic radioactive contamination control house(s), and the removal of accessible points, including glovebox ports and windows, etc., to access the materials. An area of concern for workers is to achieve As Low as Reasonably Achievable (ALARA) exposure to the materials to be removed from the gloveboxes. The materials to be removed from the machine processes could be considered to be plutonium residue and transuranic liquids and may require additional plans to reduce personnel exposure, such as engineered structures, remote handling, additional personnel, extensive training, and limited exposure time. The containment of the material is maintained in the glovebox by negative pressure. The safety and safeguard of the material is verified by an inert atmosphere, glovebox fire detection, fire suppression system, and the detection of radioactive release by Selective Alpha Air Monitors. Therefore, it is more prudent to leave the material in place rather than potentially expose workers, the public, and the environment to the possibility of released material during cleanup. In addition, deferring the cleanup of this equipment until decommissioning avoids duplication of work that would be required for later equipment removal efforts.

5.4 CDPHE Interface

An annual report beginning in Fiscal Year 1998 shall be transmitted to CDPHE by October 1 of each year. The report will identify the significant accomplishments or problems during the preceding year, schedules for the upcoming fiscal year, and any approved revisions to Appendix 1.

Kaiser-Hill shall conduct a quarterly informational meeting with the DOE and CDPHE.

6. RESPONSIBILITIES

6.1 Kaiser Hill Integrator

Ensures implementation of this plan and acts as a liaison for program information between the subcontractor and the Department of Energy/Rocky Flats Field Office (DOE/RFFO) and CDPHE.

6.2 Facility/Area Manager (Subcontractor)

Assigns a Program Team Representative(s) to oversee all activities associated with this plan and to ensure the implementation in the respective facilities.

Reviews requirements and initiates the identification, inventory, and management of regulated materials:

Maintains copies of building inventories and inspection checklists

6.3 Equipment Supervisor or Manager (Subcontractor)

Identifies and inventories all idle equipment.

Performs characterizations of materials.

Initiates and ensures the cleanup of materials.

Provides evaluations for the reuse or recycle potential of material in idle equipment.

Updates the Project Manager as actions are completed.

Documents, in writing, to the Project Manager any equipment that is returned to service.

Ensures and coordinates the performance of necessary inspections, postings, and lockout/tagout.

Performs monthly or bimonthly inspections of Categories 1 and 2 idle equipment.

Verifies the proper management of the identified equipment, waste, and product.

Performs hazard assessments of idle equipment that contains hazardous materials.

Determines whether equipment and materials have reuse and/or recycle potential.

6.4 Idle Equipment Project Manager (Subcontractor)

Maintains the master inventory of idle equipment and any status updates.

Coordinates all phases of the Idle Equipment Program in accordance with this management plan and any other relevant documents.

Ensures that inventories are accurate and verified against existing inventories and management programs on an annual basis.

Evaluates and updates the Kaiser Hill Integrator on a periodic basis with information, accomplishments, problems, and a new inventory.

Updates the Idle Equipment inventory section in the Building WSRIC Books annually.

7. IDLE EQUIPMENT PROGRAM

The identification and management of idle equipment containing targeted materials at Rocky Flats shall be conducted using the following phased implementation process.

- o Phase 1 shall include the inventory of equipment and material associated with the idle systems that are idle, hazard assessments, and the management of the idle equipment as described in Section 8, Phase 1.

- o Phase 2 shall include the removal and draining of materials in equipment as described in Section 9, Phase 2—Material or Equipment Management.

- o Phase 3 shall include the dispositioning of equipment as described in Section 10, Phase 3—Equipment Disposition. Once idle equipment containing material is identified through the inventory process, it shall be dispositioned in accordance with the process described in the flowchart in Figure 4.

8. PHASE 1—IDLE EQUIPMENT INVENTORY

An inventory of idle equipment containing hazardous waste has been performed. The equipment includes product or raw material storage tanks, product or raw material pipelines, and manufacturing process units (lathes, mills, etc.).

The following is a list of those *targeted* waste and equipment that was inventoried.

- o Contents of product tanks, pumps, reservoirs including ancillary piping and equipment with liquids and sludges.
- o Oils and sludges from machining equipment that may contain or be contaminated with organic solvents such as freon or trichloroethane and metals such as cadmium, lead, or selenium
- o Salts and sludges in electroplating baths
- o Electrochemical machining (ECM) sludges

All inventory information shall be recorded on an Idle Equipment Inventory Form, as Appendix 1, and maintained by the Idle Equipment Project Manager.

Material Identified in Other Programs

If the material contained in the idle equipment is to be dispositioned by another program, that program must be identified on an Idle Equipment Inventory form, see Appendix 1. The Idle Equipment Project Manager shall track that item until the material is removed. No other assessments, postings, etc. required by this plan will govern that item. Some examples of programs other than this one are the:

- o Highly Enriched Uranium Nitrate Project (HEUN)
- o Mixed Residue Tank Systems Management Plan (MRTSMP)
- o Liquid Stabilization Program (LSP)

Material Required for Preservation of Equipment

If the material contained within the idle equipment is required for the preservation of that equipment and that equipment has an intended use, no further action is required other than the transfer of the equipment to the appropriate program for eventual reuse.

Commercial Use or Value

If a material has commercial use or value (reuse or recycle), the material, when removed, shall be processed as follows:

- o Fluids removed from equipment
 - Release from radiological controls for unrestricted use - send for recycle/reuse.
 - Not released from radiological controls for unrestricted use - send to regulated storage or off site disposal.
- o Radioactive contaminated metals (three options).
 - Decontaminate to free release and recycle as scrap.
 - Recycle as radioactive low-level scrap.
 - Declare a waste.

Waste Characterization

Characterization shall be performed in accordance with 6 CCR 1007-3, Part 262.11.

Hazard Assessment

The purpose of the hazard assessment is to identify those pieces of idle equipment containing waste that pose the greatest risk to worker safety, health, and the environment and then to prioritize draining the waste from this equipment based on the following risk reduction methodology.

Evaluation of the hazards presented by the material contained in the idle equipment needs to address the likelihood and the consequences of a release. The method developed takes the most conservative approach by assuming that a release does occur (that is, probability equals Category 1) and then evaluating hazards (consequences) resulting from the release. Identification of the hazards was made by considering past site experience, risk assessments being performed elsewhere on the site, and categories of risks normally reviewed in environmental assessments.

Because there is not a significant amount of quantitative data available, these assessments are recognized as having to be qualitative in nature. Types of possible hazards are identified, and the six most severe are addressed. These six types cover the normal hazards presented by materials, reflect past experience on site, and include regulatory considerations. Because these assessments will be subjective, a requirement for the assessment to have an independent observer review and sign the assessment is included.

If a decision cannot be made on any of the consequences, an automatic default shall be given to the highest possible weight factor.

Equipment that contains materials shall be assessed using the hazard scores listed in the form found in Appendix 3, Hazard Assessment for Idle Equipment.

As a result of the hazard assessment, the following steps shall be taken by the equipment Supervisor or Manager:

- oCategory 1 -- Scores ranging from 251 to 450 (high risk):
 - Lockout/tagout the entry and exit points.
 - Perform monthly inspections.
 - Post the area.
 - Drain or remove the material following documented procedures.

o Category 2 -- Scores ranging from 175 to 250:

- Lockout/tagout the entry and exit points.
- Perform bimonthly inspections.
- Post the area.
- Drain or remove the material following documented procedures.

o Category 3 -- Scores ranging from 125 to 174:

- Post the area.
- Drain or remove the material following documented procedures before or during equipment decommissioning.

o Category 4 -- Scores ranging from 0 to 124: (low risk)

- Drain or remove the material before or during equipment decommissioning.

The hazard assessment shall be recalculated when equipment is emptied or a condition changes that could affect the category.

Lockout/Tagout

All entry and exit points shall be locked out and tagged out to ensure protection of the personnel, the environment, and the equipment because of unexpected energization, start-up, release of stored energy, or release of materials from the equipment. Lockout/Tagout shall be performed in accordance with 1-15320-HSP 2.08, Lockout/Tagout for all idle equipment in Categories 1 and 2.

Inspections

Monthly inspections shall be performed by the Equipment Supervisor or Manager for the idle equipment in Category 1 and any unknown materials using the example form found in Appendix 5, Material Contained in Idle Equipment Monthly Inspection Logsheet.

Bimonthly inspections shall be performed by the Equipment Supervisor or Manager for the idle equipment in Category 2 using the example form found in Appendix 6, Material Contained in Idle Equipment Bimonthly Inspection Logsheet.

Postings

All idle equipment in the hazard Categories 1, 2, and 3 and any unknown materials shall be posted with a tag, such as the example in Figure 1, Material Contained in Idle Equipment Posting. The process for controlling postings is identified in 1-31000-COOP-010, Control of Operator Postings.

This idle equipment contains material that, if released, could affect worker safety or the environment. Report any spillage to supervision immediately

Figure 1 Material Contained in Idle Equipment Posting

Other postings shall meet the appropriate requirements identified in the following documents:

- o HSP 13.03, Carcinogen Control
- o HSP 16.01, Laser Safety
- o HSP 18.03, Radiological Protection Signs, Labels, and Tags
- o 1-15310-HSP 9.07, Hazard Communication Program
- o 1-62200-HSP 9.09, Safe Handling of Asbestos
- o 1-10000-HWRM, Hazardous Waste Requirements Manual

WSRIC/Posting Update

After the material is removed, the building WSRIC book shall be updated and the postings shall be removed. During the annual WSRIC reviews, idle equipment parameters shall be updated.

Returning Equipment to Service

If a piece of already inventoried Idle Equipment is later deemed necessary for the current mission of the Site, the equipment owner shall submit a formal documented letter to the Project Manager explaining the reason for returning it to service and its intended future use. Once that equipment is no longer required, hazardous waste shall be removed within 90 days in compliance with the Code of Colorado Regulations (CCR) 6 CCR-1007-3, Colorado hazardous waste requirements, Section 261.4(c). In the case of non hazardous waste, the equipment can be cleaned at anytime prior to demolition of the facility.

9. PHASE 2—REMOVAL AND DRAINING OF MATERIALS IN EQUIPMENT

Documentation in the form of an Operations Order, Integrated Work Control Program (IWCP), procedure, Operations Order, or other acceptable documentation methods shall be generated to remove hazardous material contained in idle equipment.

All hazardous waste shall be drained or removed in accordance with the appropriate documentation to the point of being empty as defined in Section 3.

Once all of the hazardous waste has been drained or removed and the product tank or equipment reservoir is verified empty, no other actions are required.

10. PHASE 3 — EQUIPMENT DISPOSITION

After waste is removed from a piece of idle equipment, that equipment shall await final disposal through the appropriate program.

Equipment Management

The Supervisor or Manager of the equipment shall maintain the equipment. This maintenance can be accomplished by periodic, cursory inspections or detailed preventive maintenance operations (PMO), and by following the requirements outlined in the 1-90000, Property Management Manual.

5. IDLE EQUIPMENT PROGRAM (continued)

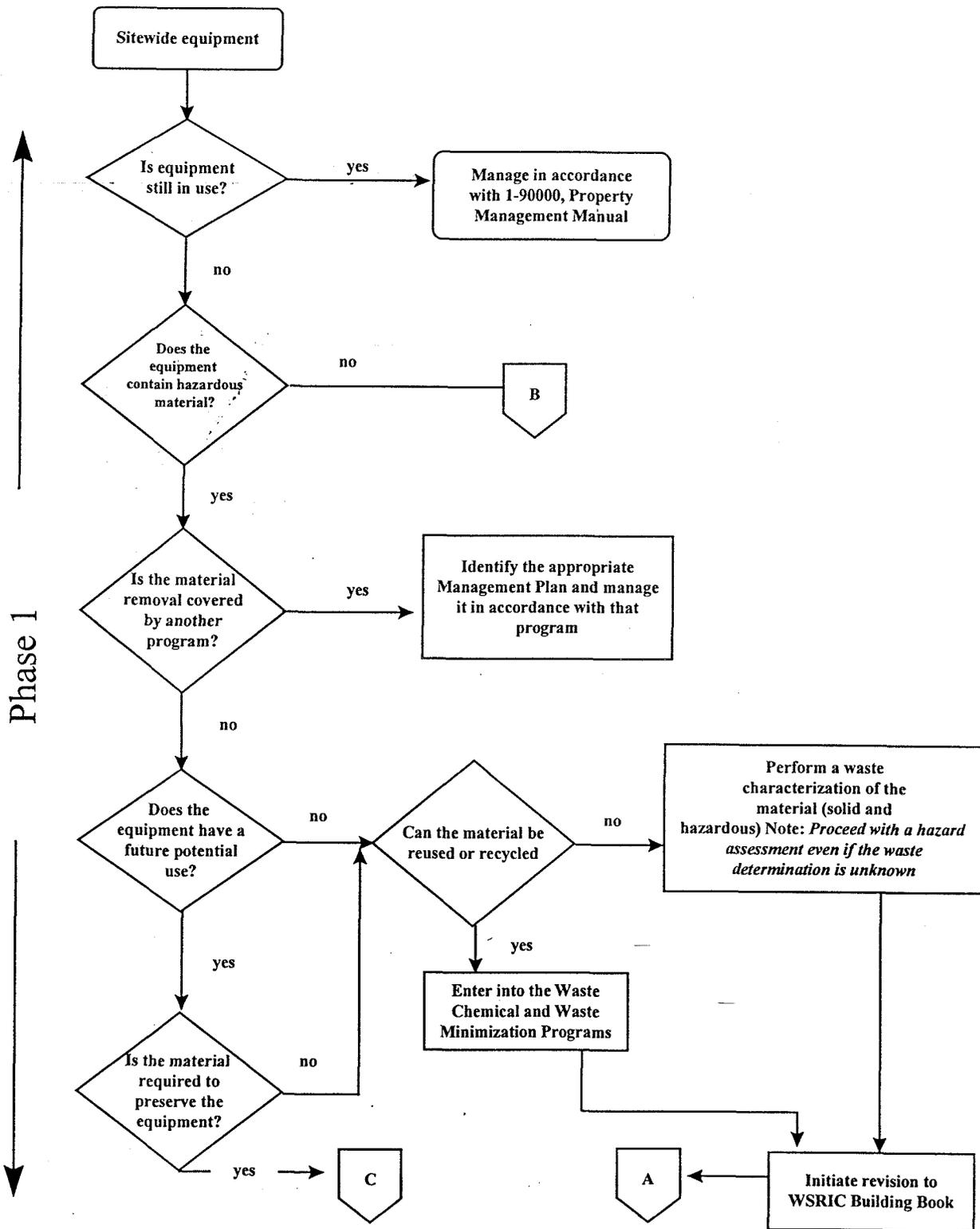


Figure 2, Idle Equipment Process Logic Diagram

5. IDLE EQUIPMENT PROGRAM (continued)

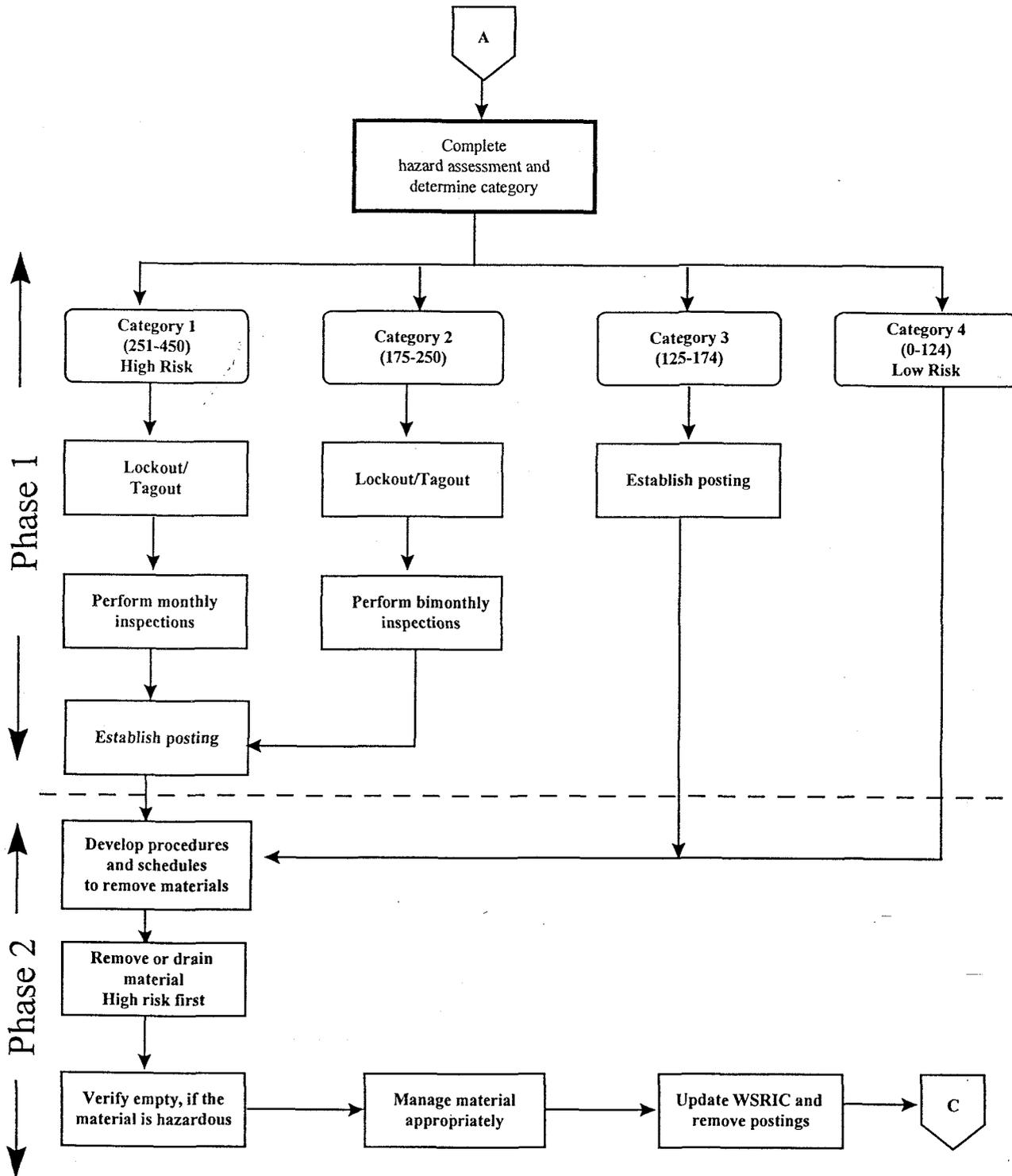


Figure 3 (continued), Idle Equipment Process Logic Diagram

5. IDLE EQUIPMENT PROGRAM (continued)

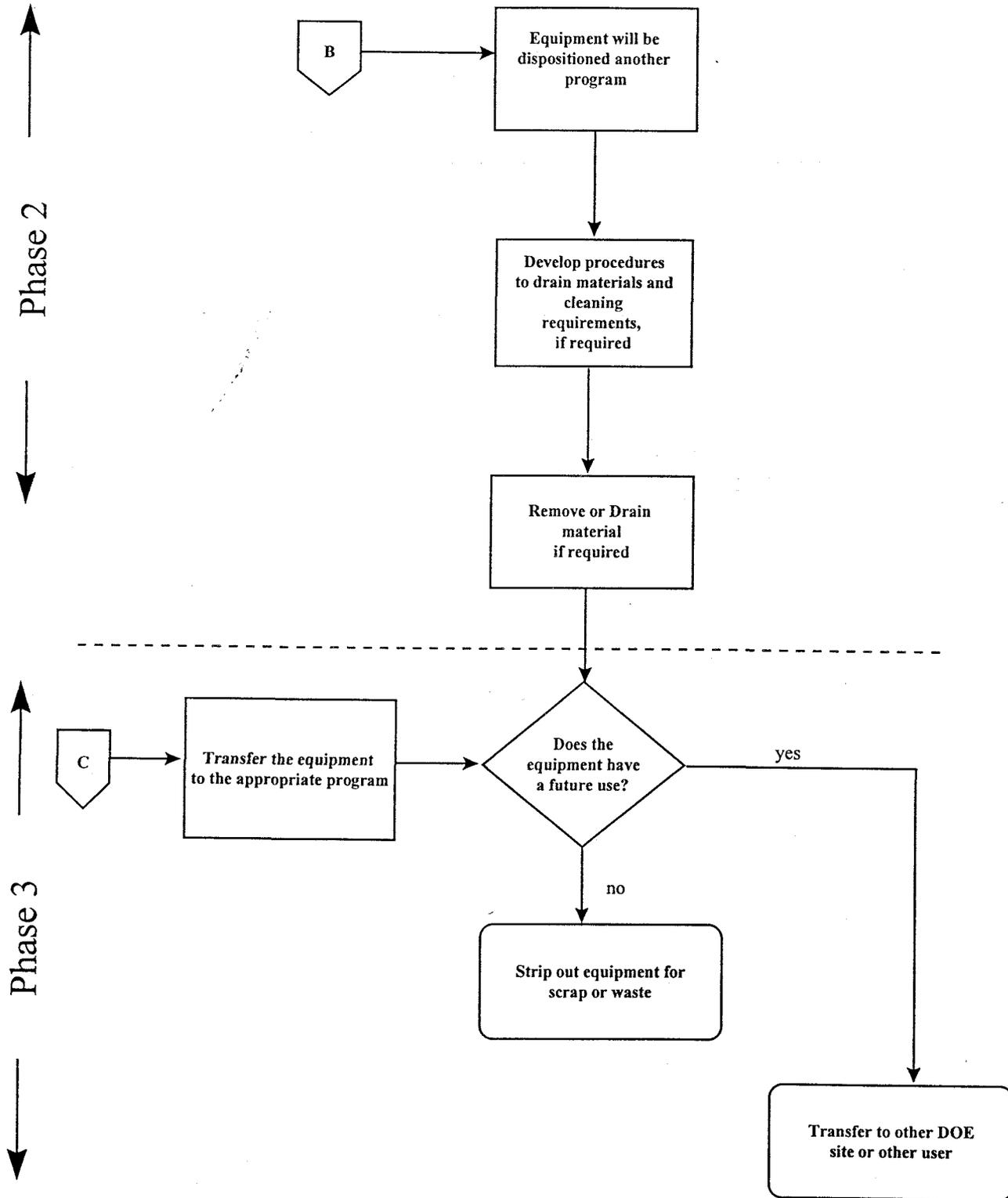


Figure 4 (continued), Idle Equipment Process Logic Diagram

11. PROJECT SCHEDULE

Schedules for removal of waste for equipment remaining in the idle equipment inventory shall be developed each fiscal year by the Project Manager. The scheduled completion dates shall be reflected on the inventory.

12. RECORDS

Records required by this plan will be maintained for a minimum of three years by the project manager and then transmitted to records management in accordance with 1-V41-RM-001, Records Management Guidance for Records Sources.

13. REFERENCES

Health and Safety Practices Manual

1-90000-PMM, Property Management Manual

Mixed Residue Tank Systems Management Plan

State RCRA Part B Operating Permit

6-CCR-1007-3, Colorado Hazardous Waste Regulations

Deactivation Process Plan

Decommissioning Guidance Document

Liquid Stabilization Program Plan

APPENDIX 1

Page 1 of 1

IDLE EQUIPMENT INVENTORY

SAMPLE

The inventory shall have the following fields:

IDENTIFICATION NUMBER

ROOM/AREA

DESCRIPTION OF EQUIPMENT

DATE IDENTIFIED

RADIOACTIVE MATERIAL?

DESCRIPTION OF THE MATERIAL

HAZARDOUS MATERIAL?

QUANTITY

MANAGER

COMMENTS

HAZARD CATEGORY

OTHER PROGRAM

WSRIC UPDATED?

LOCKOUT/TAGOUT APPLIED?

POSTING?

INSPECTED?

SCHEDULED REMOVAL DATE

HAS MATERIAL BEEN REMOVED

APPENDIX 2

Page 1 of 1

DUE DILIGENCE FORM

(SAMPLE)

ID # _____ Building _____ Supervisor or Manager _____

Schedule Completion Date _____

Hazard Category _____

CHECK ONE :

Easy to Clean Moderate to Clean Difficult to Clean

Rationale for Deferral until Decommissioning
(Note: Lack of funding is not a valid rationale.)

Supervisor's or Manager's Signature

Print Name

Date

APPENDIX 3

Page 1 of 3

**HAZARD ASSESSMENT FOR IDLE EQUIPMENT
(SAMPLE)**

Inventory Number: _____

Completed by: _____
print name sign and date

Independent Observer: _____
print name sign and date

| | | | Equipment/Material Description: |
|--------------|--|--------------------|------------------------------------|
| Consequences | | | |
| | | Possible Scores | Actual Scores |
| A. | Worker Health and Safety | | |
| A.1 | Death | 100 | |
| A.2 | Major Injury | 60 | |
| A.3 | Minor Injury | 30 | |
| B. | Characteristics | | |
| B.1 | 9-12 | 90 | |
| B.2 | 5-8 | 40 | |
| B.3 | 0-4 | 10 | |
| C. | Spill History/Probability | | |
| C.1 | Major Spill | 80 | |
| C.2 | Several Spill | 60 | |
| C.3 | Single Minor Spill | 20 | |
| D. | Quantity of Material | | |
| D.1 | Above reportable quantity | 70 | |
| D.2 | Below reportable quantity | 30 | |
| D.3 | Less than one pint or pound | 10 | |
| E. | Radioactivity | | |
| E.1 | Airborne | 60 | |
| E.2 | Smearable | 30 | |
| E.3 | Fixed | 10 | |
| F. | Spill Release | | |
| F.1 | No Containment (to environment) | 50 | |
| F.2 | Secondary Containment (building) | 20 | |
| F.3 | Secondary Containment (within equipment) | 0 | |
| Total | | | |

APPENDIX 3

Page 2 of 3
(SAMPLE)

Instructions to complete the Hazard Assessment for Idle Equipment form.

| | |
|----------------------|---|
| Inventory Number | Record the inventory number from the Idle Equipment Inventory. |
| Completed by: | Record the name of the building person completing the assessment. The person will print their name, and then sign and date as indicated. |
| Independent Observer | Record the name of the Building Deactivation person overseeing the assessment. The person will print their name, and then sign and date as indicated. |

| | Consequences | If there is a release....? |
|-----------|---------------------------------|--|
| A. | Worker Health and Safety | Is there a potential for... |
| A.1 | Death | <ul style="list-style-type: none"> • Long-term <ul style="list-style-type: none"> - Death caused by cancer - Death caused by berylliosis • Immediate, such as death caused by explosion |
| A.2 | Major Injury | Will there be a loss of limb? Will there be a loss of workdays |
| A.3 | Minor Injury | Requires immediate medical attention? No loss of workdays |
| B. | Characteristics | Based on the National Fire Protection Association (NFPA) hazard classification* |
| B.1 | 9-12 | The sum of the health, fire, and reactivity hazards is between 9 and 12. |
| B.2 | 5-8 | The sum of the health, fire, and reactivity hazards is between 5 and 8. |
| B.3 | 0-4 | The sum of the health, fire, and reactivity hazards is between 0 and 4. |

* If the material contains more than one hazardous constituent, sum the numbers for health, fire, and reactivity hazards for each constituent to arrive at a score for the material.

APPENDIX 3

Page 3 of 3
(SAMPLE)

Instructions (continued)

| | Consequences (cont.) | If there is a release....? |
|-----------|---|--|
| C. | Spill History/Probability | Spill likelihood is based on the history of spills or occurrences. Choose the highest probability of spill based on the most severe level of cost or occurrence class. |
| C.1 | Major Spill | Cost > 100,000 or occurrence class most severe. Equipment is presently leaking any amount |
| C.2 | Several Spill | Cost > 10,000 < 100,000 or off-normal occurrence class. |
| C.3 | Single Minor Spill | Cost < 10,000 or occurrence class is internally reportable. |
| | | |
| D. | Quantity of Material | The maximum amount of material that could be released in the event of a spill or occurrence. |
| D.1 | Above CERCLA reportable quantity | Is the volume above the CERCLA reportable volume? |
| D.2 | Below CERCLA reportable quantity | Is the volume below the CERCLA reportable volume but more than one pint or pound? |
| D.3 | Less than one pint or pound | Is the volume less than one pint or pound? |
| | | |
| E. | Radioactivity | What are the radiological consequences of a release? |
| E.1 | Airborne | Will it exceed 0.1 DAC? |
| E.2 | Smearable | Will the smearable contamination exceed 200 DPM? |
| E.3 | Fixed | Will the fixed contamination remain after cleanup? |
| | | |
| F. | Spill Release | What containment is available to control a release to the environment. |
| F.1 | No Containment (direct access to the environment) | The release would have a direct pathway to the environment, for example, an outside gas release or a gas release that escapes through the building filter systems or a liquid release onto the ground. |
| F.2 | Secondary Containment (building) | The release would be contained within a building, either by the building itself, berms, or floors. |
| F.3 | Secondary Containment (within equipment) | The release would be contained by the equipment itself (e.g. in a glovebox) |

APPENDIX 4
Page 1 of 1

**MATERIAL CONTAINED IN IDLE EQUIPMENT
MONTHLY INSPECTION LOGSHEET
SAMPLE**

ID No.: _____ Building: _____ Room: _____

| | |
|------------------------------------|--|
| Date | |
| Name of Inspector | |
| Signature of Inspector | |
| Employee Number | |
| Name of Supervisor or Manager | |
| Signature of Supervisor or Manager | |
| Employee Number | |

| | | |
|--|--|-------|
| <p>The logsheet must be filled out completely and accurately at the time of the inspection. The only acceptable answers are yes or no.</p> | | |
| 1. | Is the area posted? This idle equipment contains material that if released could affect worker safety. | _____ |
| 2. | Was the last inspection performed no longer than one month ago? | _____ |
| 3. | Is the equipment locked out and tagged out? | _____ |
| 4. | Is the external area free of spillage, leakage, or other accumulated liquid? | _____ |
| 5. | Is spill release response equipment accessible, adequate, and in good working condition? | _____ |
| 6. | Is the equipment in good condition, and free of corrosion? | _____ |
| <p>Comments/Corrective Actions:</p> | | |
| | | |
| | | |
| | | |

APPENDIX 5

Page 1 of 1

**MATERIAL CONTAINED IN IDLE EQUIPMENT
BIMONTHLY INSPECTION LOGSHEET
SAMPLE**

ID No.: _____ Building: _____ Room: _____

| | |
|------------------------------------|----------------------|
| Date | <input type="text"/> |
| Name of Inspector | <input type="text"/> |
| Signature of Inspector | <input type="text"/> |
| Employee Number | <input type="text"/> |
| Name of Supervisor or Manager | <input type="text"/> |
| Signature of Supervisor or Manager | <input type="text"/> |
| Employee Number | <input type="text"/> |

| | | |
|--|---|----------------------|
| <p>The logsheet must be filled out completely and accurately at the time of the inspection. The only acceptable answers are yes or no.</p> | | |
| 1. | Is the area posted? This equipment contains material that if released could affect worker safety. | <input type="text"/> |
| 2. | Was the last inspection performed no longer than two months ago? | <input type="text"/> |
| 3. | Is the equipment locked out and tagged out? | <input type="text"/> |
| 4. | Is the area free of spillage, leakage, or other accumulated liquid? | <input type="text"/> |
| 5. | Is the spill release response equipment accessible, adequate, and in good working condition? | <input type="text"/> |
| 6. | Is the equipment in good condition, and free of corrosion? | <input type="text"/> |
| <p>Comments/Corrective Actions:</p> | | |
| <input type="text"/> | | |
| <input type="text"/> | | |
| <input type="text"/> | | |