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Item	Facility	Type	Sub	Document Number / Title	Sheet	Revision	Doc Date	Copy #	Media	Copies
* 0001	MP	PROC	HP	RPM 2.3.4 INSPECTION MAINTENANCE PROCESS FOR RESPIRATORY PROTECTION EQUIPMENT		002 01			P	01
* 0002	MP	PROC	HP	RPM 2.3.5 INSPECTION AND INVENTORY OF RESPIRATORY PROTECTIONEQUIPMENT		003 03			P	01

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4001

02/27/03  
Approval Date

03/07/03  
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## Procedure Action Request

Document No.: <b>RPMP 2.3.4</b>	Writer: <b>Jean B. Olsen</b> Initiator: <b>William Robinson</b>	Rev. No. <b>002</b>	Minor Rev. <b>01</b>
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Title: **Inspection and Maintenance Process for Respiratory Protection Equipment**

For New Documents: Document is QA ☐ DH Title:

☐ Revision ☐ Minor Revision ☐ Cleanup Revision ☐ Biennial Review  
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Comments:

☒ Administrative Correction FLS: **AKA 9/13/04**

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WC 9 Att 3 Req. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>			
Licensing Basis / RCD (50.59 Screen Req. <input type="checkbox"/> Yes <input type="checkbox"/> No)	<input type="checkbox"/>			
Tech Independent	<input type="checkbox"/>			

Validation	<input type="checkbox"/> None <input type="checkbox"/> Field - Use MP-05-DC-SAP01-004 <input type="checkbox"/> Simulated Performance - Use MP-05-DC-SAP01-004 <input checked="" type="checkbox"/> Table Top and Walk-through <input type="checkbox"/> Comparison			
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Coordinator				NPO
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Training: ☐ None ☐ Nuclear Training ☐ Briefing ☐ Familiarization

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Approval Date: **09/13/04**

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**MILLSTONE NUCLEAR POWER STATION  
HEALTH PHYSICS SUPPORT PROCEDURE**

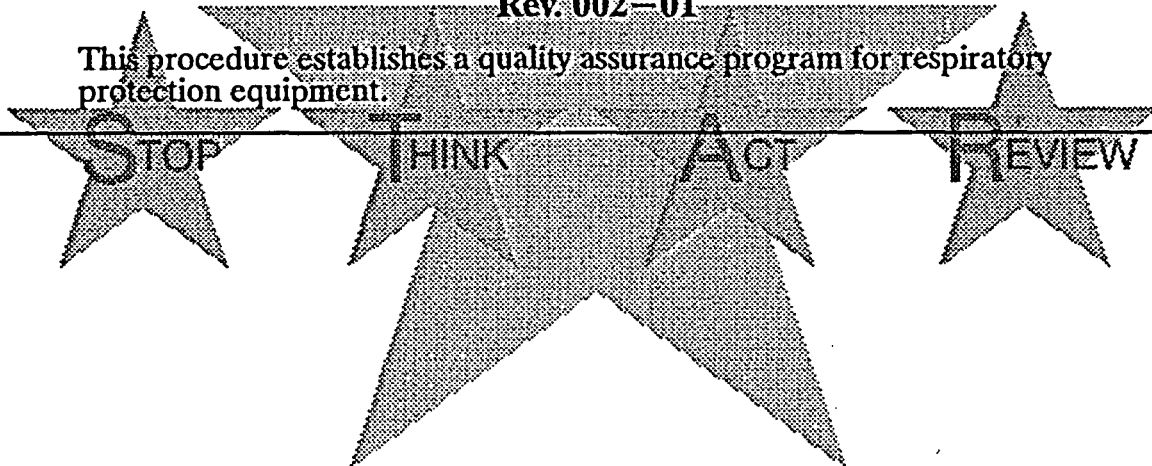


**Inspection and Maintenance Process for  
Respiratory Protection Equipment**

**RPM 2.3.4**

**Rev. 002-01**

This procedure establishes a quality assurance program for respiratory protection equipment.



Approval Date: 09/13/04

Effective Date: 09/21/04

**Level of Use  
Information**

**Millstone All Units  
Health Physics Support Procedure**

**Inspection and Maintenance Process for Respiratory Protection Equipment**

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## 1. INSTRUCTIONS

By performing inspections and maintenance on respiratory protection equipment, Millstone Station will ensure operability of its respiratory protection equipment. This ensures personnel protection against airborne contaminants when using respiratory protection equipment correctly.

### 1.1 Inspection and Maintenance Frequency Flowchart and Table Update

#### 1.1.1 WHEN any of the following conditions occur, Go To step 1.1.2:

- Manufacturer instructions are revised
- Government regulations are revised
- Historical data dictates a review
- New types of equipment are obtained

#### 1.1.2 Refer To Attachment 1 and PERFORM the following:

- a. REVIEW Attachment 1 for affected flowchart or table.
- b. ENSURE inspection and maintenance intervals are correct as specified in the following guidelines:
  - Manufacturer instructions
  - Government regulations
  - Historical data
- c. ENSURE routine inspections and maintenance are performed at regular, scheduled intervals.
- d. UPDATE affected portions of Attachment 1 as required.



## 1.2 Inspection and Maintenance Performance

1.2.1 DETERMINE from the following list the type of equipment to be inspected:

- Full Facepiece or Half Mask Respirator
- Powered Air–Purifying Respirator Units
- Hip–Air Breathing Apparatus
- Scott Self–Contained Breathing Apparatus
- Abrasive Blasting Respirator Assembly
- Bubblehoods or TYVEK Hoods – Air Supplied or Powered Air Purifying
- Filter Cartridges and Canisters
- Breathing Tubes, Air Lines, Air Supply Hoses, Duo–Flow Adapters

1.2.2 IF equipment being inspected is not listed in step 1.2.1, CONTACT Health Physics Supervision.

1.2.3 IF equipment is one of the following, DETERMINE if equipment status is in–service or stored:

- Full Facepiece or Half Mask Respirator
- Powered Air–Purifying Units



1.2.4 Refer To Attachment 1 and the following list and SELECT flowchart or table that applies to equipment type and status:

- Flowchart 1, "MSA Full Facepiece or Half Mask Respirator"
- Flowchart 2, "MSA Powered Air-Purifying Respirator Units"
- Flowchart 3, "MSA Hip-Aire Breathing Apparatus"
- Flowchart 4, "Scott Self-Contained Breathing Apparatus"
- Flowchart 5, "Bullard Abrasive Blasting Respirator Assembly"
- Table - 1, "Bubblehoods or TYVEK Hoods - Air Supplied or Powered Air Purifying"
- Table - 2, "Filter Cartridges and Canisters"

1.2.5 OBTAIN and REVIEW equipment history file record.

1.2.6 Based on the following, SELECT from applicable flowchart or table the activity to be performed:

- Previous activities documented on RPM 2.3.5-001, "Equipment History Record." | ①
- Past equipment use
- Future equipment use

1.2.7 ASSIGN personnel to perform required activity.

1.2.8 MONITOR activity performance and ENSURE all required activities are performed.

1.2.9 DOCUMENT activities performed on RPM 2.3.5-001, "Equipment History Record." | ①

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## 2. REFERENCES

- 2.1 10CFR20, "Standards for Protection Against Radiation"
- 2.2 29CFR1910, "Occupational Safety and Health Standards"
- 2.3 NUREG 0041, "Manual of Respiratory Protection Against Airborne Radioactive Materials"
- 2.4 Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection"
- 2.5 ANSI Z88.2-1992, "American National Standard for Respiratory Protection"
- 2.6 RPM 2.3.5, "Inspection and Inventory of Respiratory Protection Equipment" | ①
- 2.7 RPM 2.3.5-001, "Equipment History Record" | ①

## 3. COMMITMENTS

N/A

## 4. SUMMARY OF CHANGES

### Summary of Changes, Rev. 002-01

- 4.1 Added RPM 2.3.5 to References. This is corrective action to CR-04-04368.
- 4.2 Deleted RPM 2.3.5-002, which was cancelled.
- 4.3 Updated nomenclature of forms.

### Summary of Changes, Rev. 002

- 4.4 Changes in Attachment 1:
  - 4.4.1 Changed Flowchart Number 1 In-Service Inventory from quarterly to monthly and reformatted steps to comply with 29CFR1910.
  - 4.4.2 Deleted time frame for Hydrostatic Test from Flowchart Number 3. This test is dependent on cylinder type and is discussed in RPM 2.3.5.

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- 4.4.3 Deleted "(Posichck)" from "Functional Check (Posichck)" in Flowcharts Number 1, 3 and 4.
- 4.4.4 Changed titles of cylinders in Flowchart Number 4 to distinguish composite cylinders and fiberglass wrapped cylinders as these two types of cylinders have different inspection criteria.
- 4.4.5 Deleted Table -3, "Breathing Tubes, Air Lines, and Air Supply Hoses," because these items are all inspected prior to use and it is unnecessary to perform the inspection twice.
- 4.5 Deleted the words "Quality Assurance Program" from procedure title as this gives the wrong impression of the procedure's objective. It was replaced with the more accurate title "Inspection and Maintenance Process..."
- 4.6 Added Basis information that changes or revisions to this procedure must be processed through the Emergency Planning Services Department to complete a reduced effectiveness review in accordance with 10CFR50.54(q).

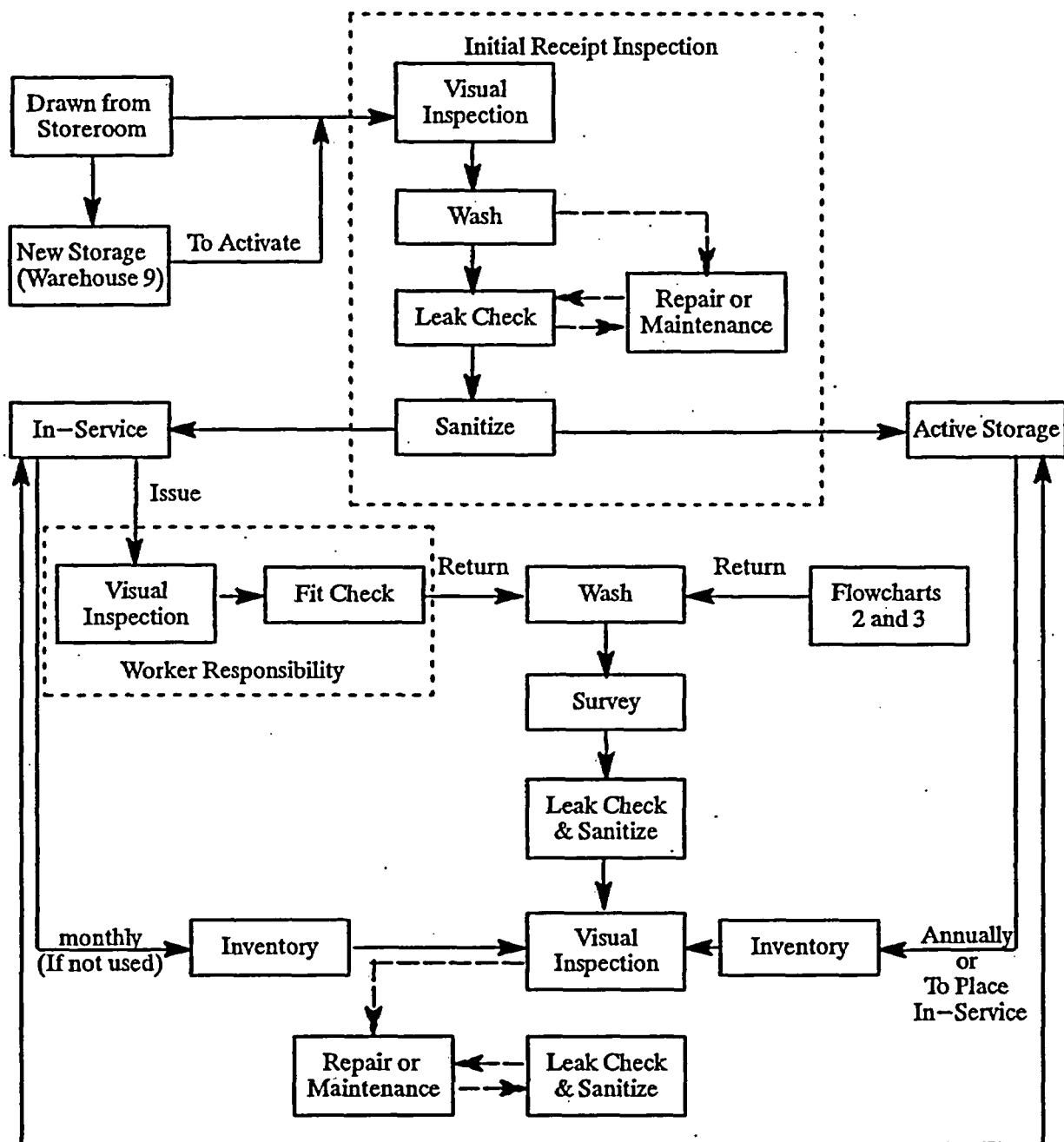


# Attachment 1

## Inspection and Maintenance Frequency Flowcharts and Tables

(Sheet 1 of 6)

**Flowchart Number 1 – MSA Full Facepiece or Half Mask Respirator**



On a periodic basis, respirators should be cycled between active storage and in-service.

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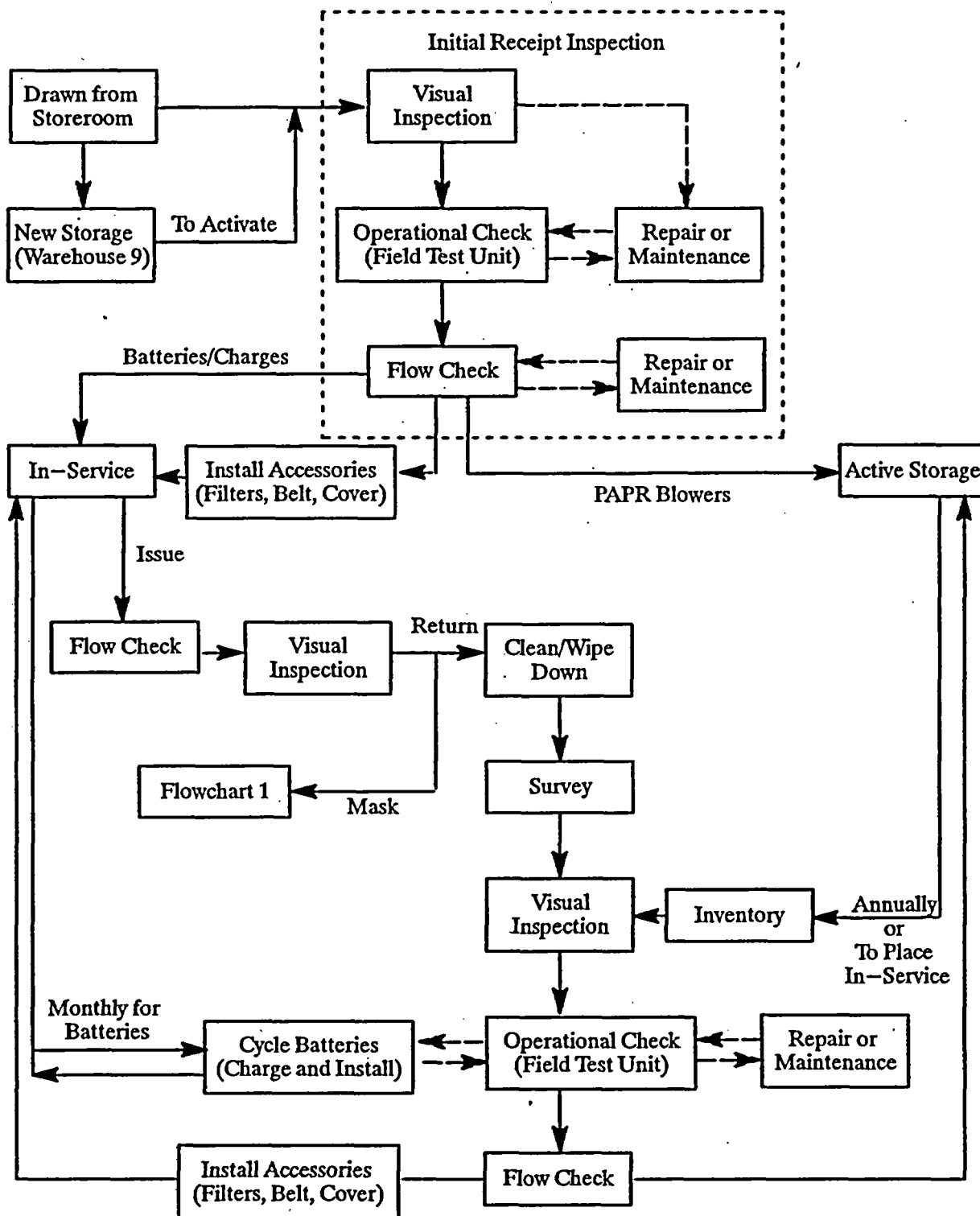
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# Attachment 1

## Inspection and Maintenance Frequency Flowcharts and Tables

(Sheet 2 of 6)

**Flowchart Number 2 – MSA Powered Air–Purifying Respirators Units**



On a periodic basis, PAPR blowers should be cycled between active storage and in-service.

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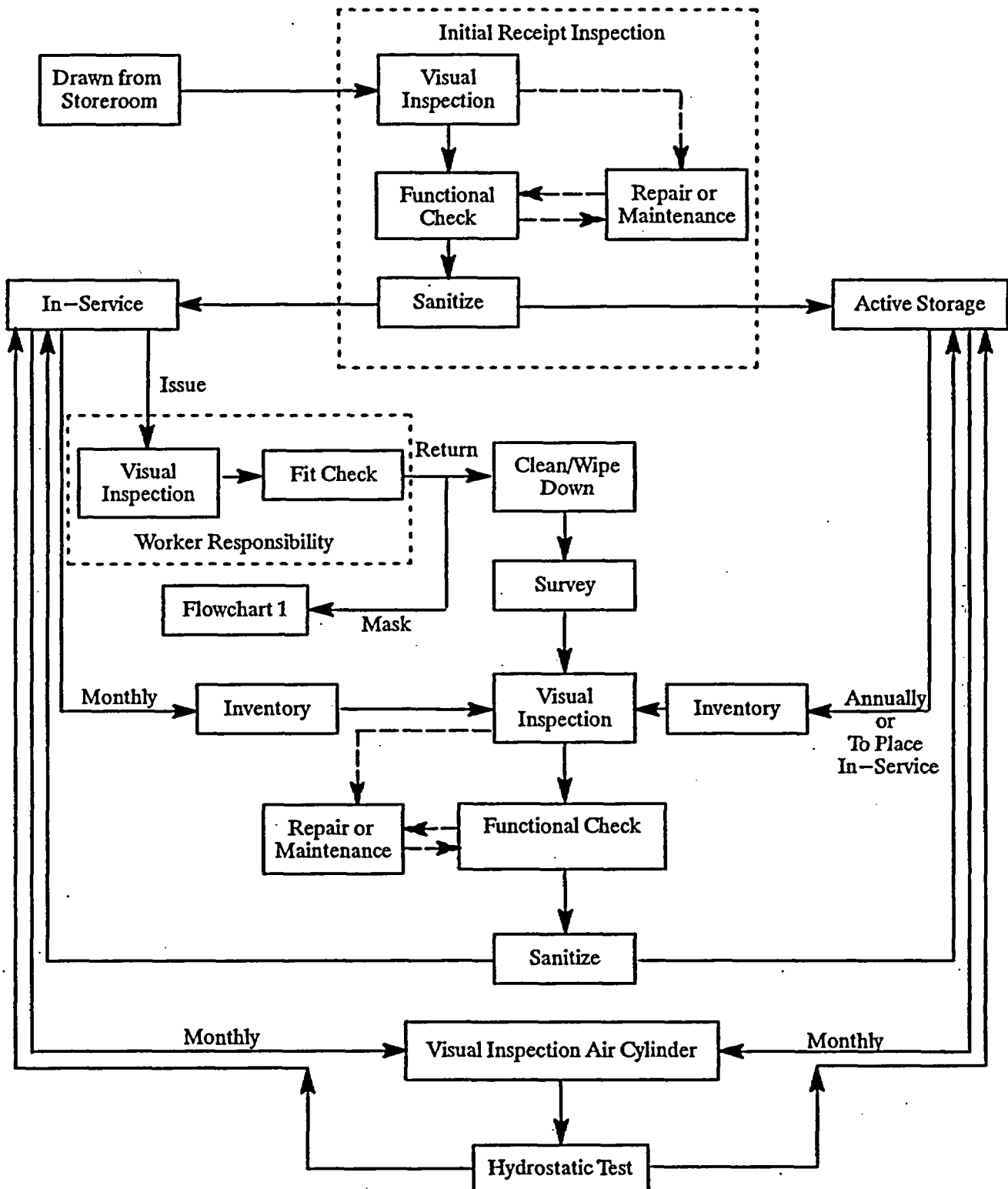
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# Attachment 1

## Inspection and Maintenance Frequency Flowcharts and Tables

(Sheet 3 of 6)

Flowchart Number 3 – MSA Hip–Aire Breathing Apparatus



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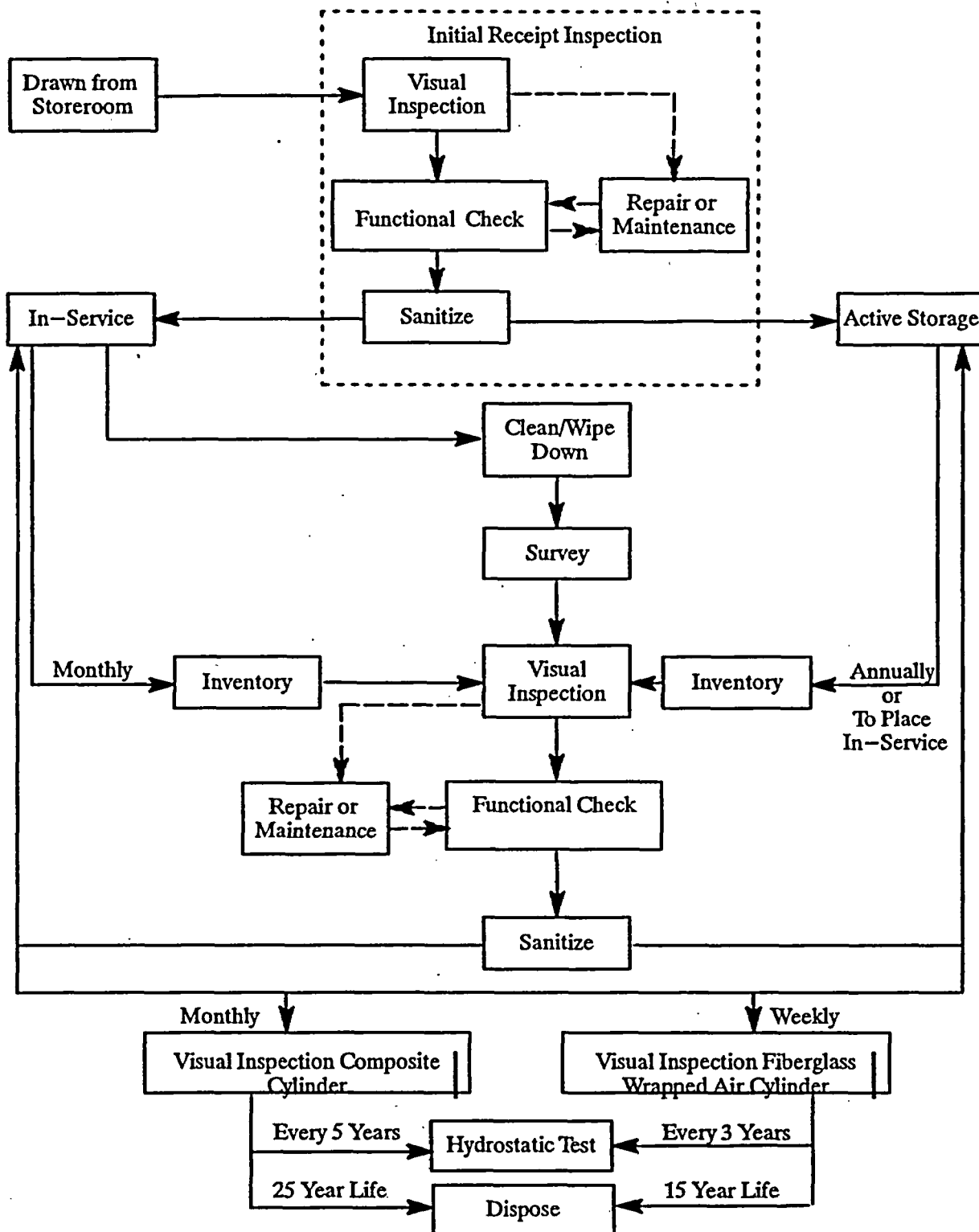
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# Attachment 1

## Inspection and Maintenance Frequency Flowcharts and Tables

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Flowchart Number 4 – Scott Self-Contained Breathing Apparatus



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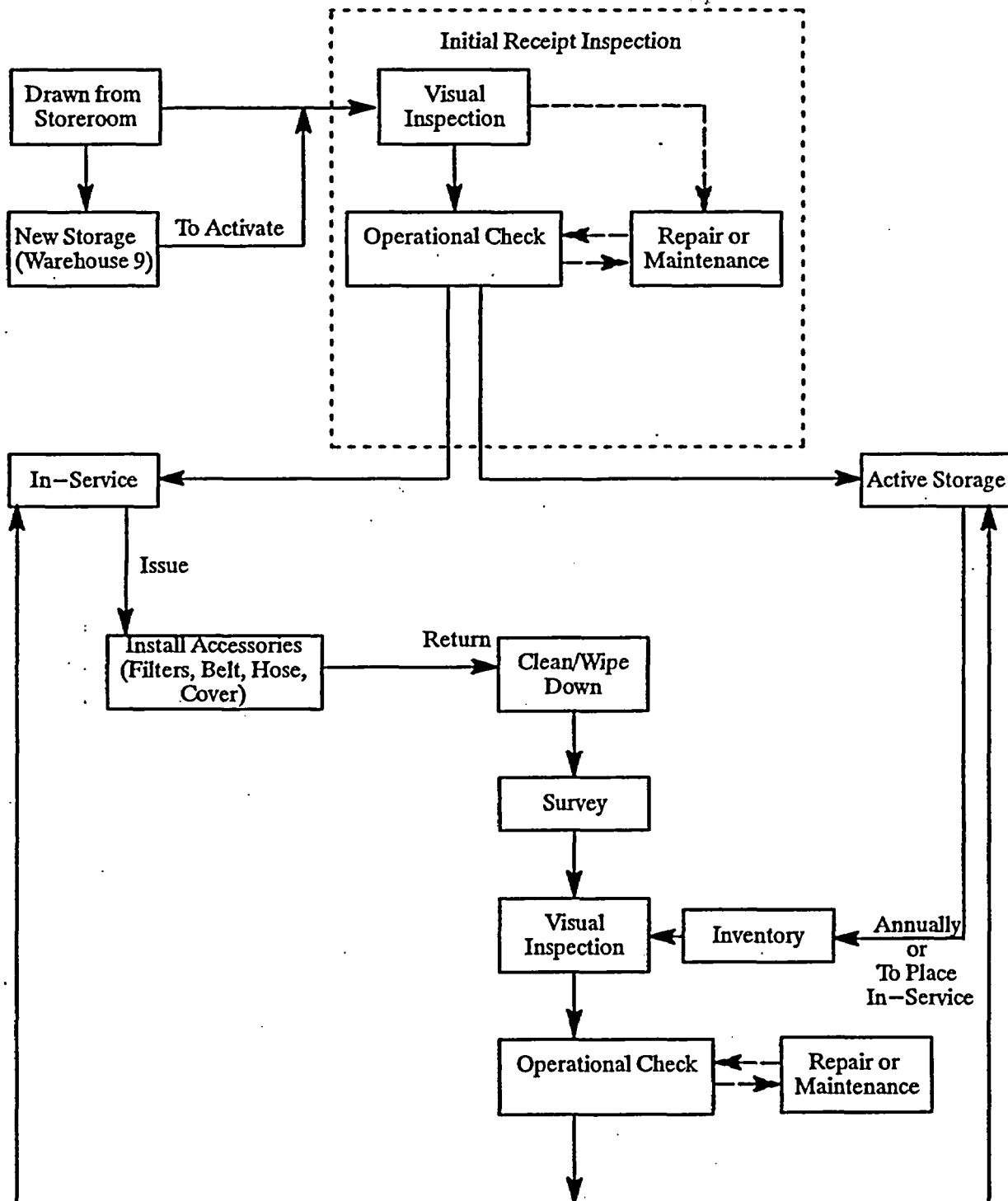
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# Attachment 1

## Inspection and Maintenance Frequency Flowcharts and Tables

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Flowchart Number 5 – Bullard Abrasive Blasting Respirator Assemblies



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**Attachment 1**  
**Inspection and Maintenance Frequency Flowcharts and Tables**  
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**Table – 1**  
**Bubblehoods or TYVEK Hoods – Air Supplied or Powered Air Purifying**

Activity	Frequency	
	Prior To Use	After Use
Visual Inspection	X	
Discard		X

**Table – 2**  
**Filter Cartridges and Canisters**

Activity	Frequency	
	Prior To Use	After Use
Visual Inspection	X	
Discard		X

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## Procedure Action Request

Document No.: <b>APM 2.3.5</b>	Writer: <b>Jean B. Olsen</b> Initiator: <b>William Robinson</b>	Rev. No. <b>003</b>	Minor Rev. <b>03</b>
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Title: **Inspection and Inventory of Respiratory Protection Equipment**

For New Documents: Document is QA ☐ DH Title:

☐ Revision ☐ Minor Revision ☐ Cleanup Revision ☐ Biennial Review  
☐ Cancel ☐ Void (Do Not Use) ☐ Expire ☐ Superseded By: \_\_\_\_\_

Comments:

☒ Administrative Correction FLS: **APA 9/13/07**

Associated ARs **03007069,**

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WC 9 Att 3 Req. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>			
Licensing Basis / RCD (50.59 Screen Req. <input type="checkbox"/> Yes <input type="checkbox"/> No)	<input type="checkbox"/>			
Tech Independent	<input type="checkbox"/>			

Validation	<input type="checkbox"/> None <input type="checkbox"/> Field - Use MP-05-DC-SAP01-004 <input type="checkbox"/> Simulated Performance - Use MP-05-DC-SAP01-004 <input checked="" type="checkbox"/> Table Top and Walk-through <input type="checkbox"/> Comparison
(minimum of two)	Print Sign Date Dept
Coordinator	NPO
Member	

Training: ☐ None ☐ Nuclear Training ☐ Briefing ☐ Familiarization

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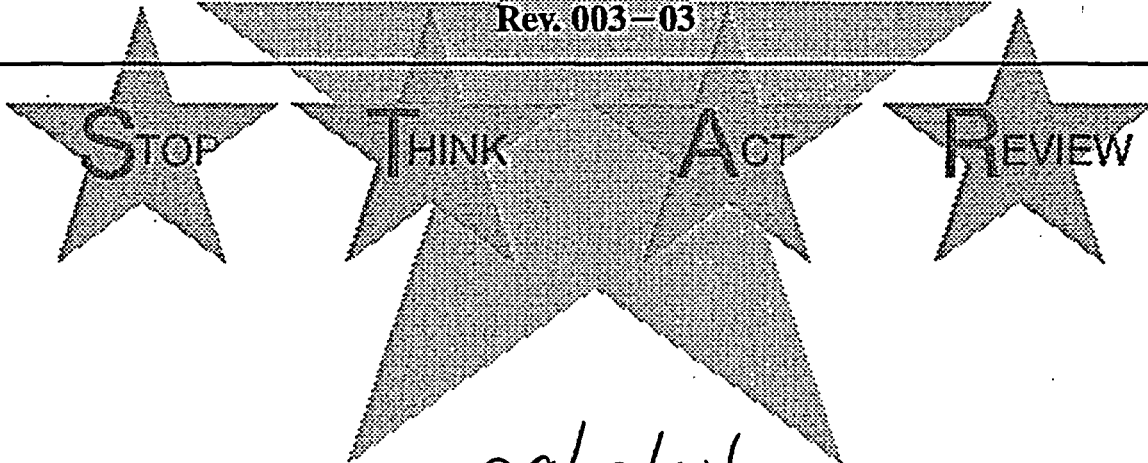


**MILLSTONE NUCLEAR POWER STATION  
HEALTH PHYSICS SUPPORT PROCEDURE**



**Inspection and Inventory of Respiratory  
Protection Equipment**

**RPM 2.3.5  
Rev. 003-03**



Approval Date: 09/13/04

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**Level of Use  
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**-Millstone All Units  
Health Physics Support Procedure**

**Inspection and Inventory of Respiratory Protection Equipment**

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**ATTACHMENTS AND FORMS**

**RPM 2.3.5-001, "Equipment History Record"**

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## 1. PURPOSE

### 1.1 Objective

Provide instructions for inspection of the following types of respiratory protection equipment:

- Full Facepiece
- Half Mask
- MSA Powered Air Purifying
- Bullard Abrasive Blasting Assembly
- Regulators
- Flow Control Valves
- Filter Cartridges and Canisters
- Supplied Air Lines
- Disposable Dust Mask

For that equipment on a routine inspection frequency, the record of inspection on the equipment history file will provide proof of inventory.

### 1.2 Discussion

A well maintained inspection program for respiratory protection equipment at Millstone Station ensures initial and continued operability of this equipment and ensures personnel protection against airborne contaminants when using this equipment.

RPM 2.3.5-001 may be computer generated provided all information required by the procedure is on the form.

### 1.3 Applicability

This procedure cannot be used for other respiratory protection equipment not maintained by Health Physics but approved for use by Site Safety and Health and Health Physics in accordance with MP-19-RSP-PRG01, "Respiratory Protection Program Description."

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Breathing air supplies and associated equipment provided by vendors explicitly for use in diving operations is not considered respiratory protection equipment and therefore not covered by this procedure.

#### **1.4 Frequency**

**1.4.1** An inspection of respiratory protection equipment shall be performed as follows:

- upon initial receipt for reusable items
- either upon initial receipt or prior to intended use for consumable items
- Monthly for in-service and active stored respiratory protection equipment.
- Annually or prior to placing in-service for stored respiratory protection equipment.
- Routinely before and after each use.



## 2. PREREQUISITES

### 2.1 General

N/A

### 2.2 Documents

2.2.1 MP-17-RM-SAP01, "Turnover and Retrieval of Nuclear Plant Records" ③ ①

2.2.2 RPM 2.3.7, "Cleaning and Sanitation of Respiratory Protection Equipment"

2.2.3 RPM 2.3.8, "PAPR Unit Field Testing and Battery Charging"

### 2.3 Tools and Consumables

2.3.1 Foam filters

2.3.2 Brass wire cloth

2.3.3 Plastic outer lenses

2.3.4 Respirator bags

2.3.5 Respirator filters

2.3.6 Disposable dust masks

### 2.4 Definitions

2.4.1 ABRA – Abrasive Blasting Respirator Assembly

2.4.2 Active Stored Respiratory Protection Equipment – Equipment that has been initial receipt inspected and tested and is readily available to be placed in-service. This equipment may have been previously been in-service but has been stored active to reduce amount of in-service equipment.

2.4.3 BREATHE – To draw air into and expel from the lungs.

2.4.4 EXHALE – To breathe out.

2.4.5 INHALE – To breathe in.

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- 2.4.6 Initial Receipt – When respiratory protection equipment is received by Health Physics personnel either directly from the vendor or in case of direct stock items from the warehouse.
- 2.4.7 In-service Respiratory Protection Equipment – Equipment that has been initial receipt inspected and tested and is readily available for immediate use.
- 2.4.8 Monthly – every 31 days,  $\pm 25\%$  (7days)
- 2.4.9 Non-repairable Defect – A defect that renders the entire device unusable.
- 2.4.10 Repairable Defect – A defect in a component that can be easily repaired or replaced thus making device usable.
- 2.4.11 Stored New Respiratory Protection Equipment – New equipment, that has not been initial receipt inspected or tested and is not readily available to be placed in-service.
- 2.4.12 SANITIZE – To make sanitary by cleaning or sterilizing.

### 3. PRECAUTIONS

N/A

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#### 4. INSTRUCTIONS

Respirator  
Technician

##### 4.1 Equipment History

#### NOTE

Consumable items such as dust masks, hoods, filter cartridges or canisters and respirator parts do not require equipment history records. These items are inspected once either upon initial receipt or prior to intended use and are discarded after use or if found defective.

4.1.1 IF preparing a new equipment history record, **PERFORM** the following:

a. IF equipment meets any of the following criteria, **ASSIGN** each device a unique serial number and Go To step 4.1.2.

- Tightfitting respirators
- PAPR blower units
- Supplied-air respirator kits
- Abrasive blasting respirator assemblies

1②

4.1.2 **OBTAIN** RPM 2.3.5-001, "Equipment History Record."

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4.1.3 For each device, DOCUMENT the following on RPM 2.3.5-001.

- Equipment Code, e.g.,
  - B = Bullard, helmet
  - C = MSA, Comfo II, half mask, radiologically clean
  - D = North, half mask, radiologically clean
  - E = Emergency MSA, full face negative pressure, radiologically clean
  - K = MSA, full face negative pressure, radiologically clean
  - M = MSA, full face negative pressure
  - P = Bullard, pump
  - X = MSA, Comfo II, half mask
  - ZP = MSA, PAPR - battery
- Serial number assigned
- Today's date
- Action performed on device, e.g., inspection, decon, storage

4.1.4 WHEN equipment history record has been prepared, EXIT this section of the procedure.





## NOTE

Sections 4.2, 4.4, and 4.5 are for both receipt and routine inspections.

### 4.2 Tight-Fitting Respirator Inspection

- 4.2.1 **VERIFY** respirator has a serial number.
- 4.2.2 **IF** respirator does not have a serial number, Refer To step 4.1.1 and **ASSIGN** a serial number.
- 4.2.3 Refer To Table – 1 and visually **INSPECT** respirator rubber components for the following:
  - a. Mold
  - b. Defects such as cracking and tears
  - c. Structural integrity
  - d. Pliability

**Table – 1 Respirator Rubber Mold Components**

Facepiece	Filter Gaskets
Straps	Hose Gaskets
Inhalation Valve(s)	Nosecup (If supplied)
Exhalation Valve(s) (negative pressure or continuous flow only)	

- 4.2.4 **IF** any defects are found **AND** respirator is repairable, **REPAIR** respirator.
- 4.2.5 **IF** any defects are found **AND** respirator is not repairable, **PERFORM** the following:
  - a. **CONTACT** Health Physics supervision for instructions on equipment disposition.
  - b. **IF** any respirators remain to be inspected, Go To step 4.2.1.
  - c. **IF** all respirators have been inspected, Go To step 4.2.14.



4.2.6 Visually INSPECT the following for defects:

- Speaking diaphragm assembly
- Strap buckles
- Clamps
- IF a negative pressure or continuous flow respirator, exhalation valve cover
- IF a pressure demand respirator, pressure demand exhalation valve
- IF a continuous flow or pressure demand respirator, hose connections
- Full facepiece respirator, facepiece lens
- Full facepiece respirator, lens retainer ring(s)
- Half mask respirator, head harness cradle
- Negative pressure respirator, speaker diaphragm housing or cartridge receptacle(s)

4.2.7 IF any defects are found AND respirator is repairable, REPAIR respirator.

4.2.8 IF any defects are found AND respirator is not repairable, PERFORM the following:

- a. CONTACT Health Physics supervision for instructions on equipment disposition.
- b. IF any respirators remain to be inspected, Go To step 4.2.1.
- c. IF all respirators have been inspected, Go To step 4.2.14.

4.2.9 IF inspection performed was receipt inspection, PERFORM the following:

- a. Refer To RPM 2.3.7, "Cleaning and Sanitation of Respiratory Protection Equipment" and WASH respirators.
- b. Refer To Section 4.3 and PERFORM a leak check.

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- 4.2.10 Visually **INSPECT** respirator gaskets.
- 4.2.11 **IF** any defects are found, **REPLACE** gaskets.
- 4.2.12 **IF** respirator is not part of a kit, **PERFORM** the following:
- a. **PLACE** respirator in a respirator bag.
  - b. **PLACE** respirator in—service **OR** active storage.
- 4.2.13 **IF** respirator is part of a kit, **PLACE** respirator in kit.
- 4.2.14 **DOCUMENT** actions taken on RPM 2.3.5–001.



### 4.3 Tight-Fitting Respirator Leak Check

#### NOTE

Strapping the respirator on is not necessary as long as respirator can be held snugly against the face while performing leak check.

#### 4.3.1 PERFORM manual positive pressure leak checks as follows:

- a. PLACE facepiece snugly against face OR don respirator and EXHALE.
- b. INHALE and CLOSE off exhalation valve with palm of hand.
- c. EXHALE gently so a slight positive pressure is felt inside respirator.
- d. IF respirator remains pressurized AND no outward leakage of air is detected, Go To step 4.3.2.
- e. IF leak check was not satisfactory, Go To step 4.3.4.

#### 4.3.2 PERFORM manual negative pressure leak check as follows:

#### NOTE

Strapping the respirator on is not necessary as long as respirator can be held snugly against the face while performing the leak check

- a. PLACE facepiece snugly against face OR don respirator.
- b. EXHALE and CLOSE off filter housing or hose connection.
- c. INHALE so respirator collapses slightly against face.
- d. HOLD breath for at least 10 seconds.
- e. IF respirator remains collapsed and no inward leakage of air is detected, Go To step 4.3.3.
- f. IF leak check was not satisfactory, Go To step 4.3.4.

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4.3.3 Refer To RPM 2.3.7, "Cleaning and Sanitation of Respiratory Protection Equipment" and SANITIZE respirators.

4.3.4 DOCUMENT actions taken on RPM 2.3.5-001.

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#### 4.4 MSA Powered Air Purifying Respirators Inspection

- 4.4.1 IF tight-fitting respirator is included as part of PAPR assembly AND it has not been inspected, Refer To Section 4.2 and INSPECT respirator.
- 4.4.2 Visually INSPECT the following for damage or defects:
- Respirator blower unit
  - Breathing hose
  - Filter gaskets
  - Respirator belt
  - IF filters are included as part of assembly, INSPECT filters for casing damage.
- 4.4.3 IF any defects are found AND PAPR is repairable, REPAIR PAPR.
- 4.4.4 IF any defects are found AND PAPR is not repairable, PERFORM the following:
- CONTACT Health Physics supervision for instructions on equipment disposition.
  - IF any PAPRs remain to be inspected, Go To step 4.4.1.
  - IF all PAPRs have been inspected, Go To step 4.4.7.
- 4.4.5 Refer To RPM 2.3.8, "PAPR Unit Field Testing and Battery Charging" and TEST the following:
- Battery module
  - Battery charger
  - Blower
- 4.4.6 ASSEMBLE PAPR as follows:
- INSTALL charged battery module to blower assembly.
  - CONNECT breathing tube to blower assembly.

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c. INSTALL PAPR protective cover.

d. INSTALL filters.

e. INSTALL belt.

4.4.7 DOCUMENT actions taken on RPM 2.3.5-001.



#### **4.5 Bullard Abrasive Blasting Respirator Assembly Inspection**

- 4.5.1 DISCONNECT air control system hose from respirator helmet.
- 4.5.2 OPEN window frame and REMOVE plastic outer lens from clamps.
- 4.5.3 IF installed, REMOVE clear mylar lens covers.
- 4.5.4 Visually INSPECT plastic outer lens for damage, defects and visibility.
- 4.5.5 REMOVE the following from helmet:
  - Cape
  - Foam head pad, if installed
  - Headband suspension
  - Chin strap (optional)
  - Plastic inner lens
  - Window frame gasket
- 4.5.6 Visually INSPECT items removed from helmet for damage or defects.
- 4.5.7 IF defects are found in any of the items removed from helmet, REPLACE defective component.
- 4.5.8 Visually INSPECT the helmet for damage and defects.
- 4.5.9 IF defects are found in any helmet component, REPLACE defective item.
- 4.5.10 Visually INSPECT the air control system components for damage and defects.





4.5.11 IF defects are found in any of air control system components, **PERFORM** one of the following:

- **REPLACE** defective component
- **REPAIR** defective component
- **REPLACE** entire air control system

4.5.12 IF respirator assembly is used (not a receipt inspection), **CLEAN** assembly in accordance with manufacturer's instructions.

4.5.13 **REPLACE** the following on helmet:

- Cape
- Foam head pad, if installed
- Headband suspension
- Chin strap (optional)
- Plastic inner lens
- Window frame gasket

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4.5.14 **PLACE** respirator assembly in—service or active storage.

4.5.15 **DOCUMENT** actions taken on RPM 2.3.5—001.



#### 4.6 Regulators and Flow Control Valve Inspection

- 4.6.1 Visually **INSPECT** regulator for external damage and defects.
- 4.6.2 Visually **INSPECT** flow control valve for external damage and defects.
- 4.6.3 **IF** any regulator or flow control valve defects are found, **CONTACT** Health Physics supervision for instructions on equipment disposition.
- 4.6.4 **PERFORM** operability check of regulators.
  - a. **ATTACH** regulator to a respirator and an air supply of proper pressure.
  - b. **TURN** on air supply.
  - c. **PLACE** respirator against face.
  - d. **CHECK** regulator operation by breathing normally.
  - e. **REMOVE** respirator from face.
  - f. **TURN** off air supply.
  - g. **DETACH** regulator from respirator and air supply.
- 4.6.5 **PERFORM** operability check of flow control valves as follows:
  - a. **ATTACH** flow control valve to an air supply of proper pressure.
  - b. **TURN** on air supply.
  - c. **CHECK** flow of air at valve outlet.
  - d. **IF** valve is an adjustable flow control valve, **TURN** valve knob from start to stop and **VERIFY** air flow increase and decrease.
  - e. **TURN** off air supply.
  - f. **DETACH** flow control valve from air supply.
- 4.6.6 **IF** regulator or flow control valve does not perform as expected during operability check, **CONTACT** Health Physics supervision for instructions on equipment disposition.
- 4.6.7 **PLACE** regulators or flow control valves that pass inspection in—service or active storage.

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#### 4.7 Supplied Air Line or Hose Inspection

- 4.7.1 Visually **INSPECT** the following supplied air line or hose components for damage and defects.
- a. Hose
  - b. Hose quick—connect
  - c. Hose threaded fitting
- 4.7.2 **IF** any defects are found **AND** component is repairable, **REPAIR** component.
- 4.7.3 **IF** any defects are found **AND** component is not repairable, **CONTACT** Health Physics supervision for instructions on equipment disposition.
- 4.7.4 **PLACE** supplied air lines or hoses that pass inspection in—service or active storage.

#### 4.8 Filter Cartridges and Canisters Receipt Inspection

- 4.8.1 Visually **INSPECT** for the following:
- a. Filter cartridges and canisters for damage to casings.
  - b. Filter label corresponds to filter ordered.
  - c. **IF** filter normally has a paper seal, seal is present and not damaged.
  - d. **IF** item has an expiration date, expiration date is greater than one year from receipt inspection.
- 4.8.2 **IF** any defects are found, **PERFORM** the following:
- a. **CONTACT** Health Physics supervision for instructions on equipment disposition.
  - b. **IF** any items remain to be inspected, Go To step 4.8.1.
  - c. **IF** all items have been inspected, **EXIT** this procedure.
- 4.8.3 **IF** filters will be placed in storage, **STORE** filters so filters with nearest expiration dates will be used first.

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## 4.9 Hood Inspection

4.9.1 Visually **INSPECT** hood for the following:

- Installation of air fittings
- Tears and holes
- Integrity of heat sealed seams
- Uneven sewing of sewn seams
- Scratches in the lens

4.9.2 **IF** hood is plastic (i.e. bubblehood), visually **INSPECT** for the following:

- Nicks
- Cracks
- Structural imperfections

4.9.3 **IF** any defects are found, **PERFORM** the following:

- a. **CONTACT** Health Physics supervision for instructions on hood disposition.
- b. **IF** any hoods remain to be inspected, Go To step 4.9.1.
- c. **IF** all hoods have been inspected, **EXIT** this procedure.

4.9.4 **IF** PAPR Tyvek hood has an exhalation valve, **CHECK** exhalation valve and cover are present.

4.9.5 **IF** PAPR Tyvek hood does not have an exhalation valve, **INSTALL** exhalation valve.

4.9.6 **IF** hood is a plastic bubblehood, **CHECK** muffler is attached.

4.9.7 **IF** hood is a plastic bubblehood **AND** a muffler is not attached, **RETURN** hood to manufacturer.

4.9.8 **IF** hood is a Tyvek hood, **CHECK** adjustable headband is attached.

4.9.9 **IF** hood is a Tyvek hood **AND** adjustable headband is not attached, **ATTACH** an adjustable headband.

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#### 4.10 Disposable Dust Mask Inspection

4.10.1 Visually INSPECT dust mask for the following defects:

- Holes
- Tears
- Broken or missing straps
- Broken or missing nosepiece metal strip
- Broken or missing exhalation valve assembly

4.10.2 IF any defects or abnormalities are observed in any single dust mask, DISPOSE of dust mask.

4.10.3 IF any defects or abnormalities are observed in several or all dust masks in a lot, RETURN dust masks to warehouse for return to manufacturer and OBTAIN a new lot of dust masks for inspection.

#### 4.11 Documentation

4.11.1 FILE or STORE RPM 2.3.5-001.

4.11.2 On a yearly basis, Refer To MP-17-RM-SAP01, "Turnover and Retrieval of Nuclear Plant Records," and SEND RPM 2.3.5-001 to NDS. ③ ①



## 5. REVIEW AND SIGNOFF

5.1 N/A

## 6. REFERENCES

- 6.1 10CFR20, "Standards for Protection Against Radiation"
- 6.2 29CFR1910.134, "Respiratory Protection"
- 6.3 NUREG 0041, "Manual of Respiratory Protection Against Airborne Radioactive Materials"
- 6.4 Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection"
- 6.5 ANSI Z88.2-1992, "American National Standard for Respiratory Protection"
- 6.6 NOV VIO 50-245, 336, 423/97-81-02 and CR M3-97-4483
- 6.7 Memo EP-98-127, "Implementation of Millstone Emergency Plan Revision #24," from Mark White to Millstone HP Management Personnel
- 6.8 RPM 2.3.4, "Inspection and Maintenance Process for Respiratory Protection Equipment" ③

## 7. SUMMARY OF CHANGES

### Summary of Changes, Rev. 003-03

- 7.1 Added RPM 2.3.4 to References. This is corrective action to CR-04-04368.
- 7.2 Updated procedure title of NDM 1 to MP-17-RM-SAP01.

### Summary of Changes, Rev. 003-02

- 7.3 Electronically added minor revision 003-01.
- 7.4 Corrected spelling of Shift Manager in step 7.2

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7.5 The following items were deleted. This subject matter is owned by Site Fire Protection and has been incorporated into SFP 24, "Inspection and Inventory of Self Contained Breathing Apparatus."

- MP-ENGPROG-99-0073, "Proposed change to RPM 2.3.5 for Fire Fighting SCBA equipment," from Jerry Derryberry to Ira Haas, dated 2/19/99 was also deleted.
- Basis information that changes or revisions to this procedure must be processed through the Emergency Planning Services Department to complete a decrease in effectiveness review in accordance with 10CFR50.54(q). (This was deleted with the concurrence of Mark White, Emergency Planning, December 13, 2001.)
- Missing Respiratory Protection Equipment
- RPM Form 2.3.5-3, "SCBA and Air Cylinder Inspections,"
- "SCBA Routine Inspection."
- MSA Hip-Aire Respirators Kit Inspection
- Attachment 1, "Combined Millstone Fire Protection Required SCBAs,"
- "Air Cylinder Inspection"
- SCBA Kit Receipt Inspection
- CGA C-4-1978, "Method of Marking Portable Compressed Gas Containers to Identify the Material Contained"
- CGA C-6.1-1984, "Standards for Visual Inspection of High Pressure Aluminum Compressed Gas Cylinders"
- CGA C-6.2-1988, "Guidelines for Visual Inspection and Requalification of Fiber High Pressure Cylinders"
- Unit 1 Technical Requirements Manual OPS Form 273-7.4, "Control Room Habitability Technical Requirements"

7.6 RPM 2.3.10, "Operation of PosiChek 2," no longer exists and was deleted.

7.7 Corrected title of Safety Department.

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- 7.8 Changed "breathing tube" to "breathing hose."
- 7.9 Deleted steps for Bullard ABRA Model 77/46 as it has been replaced by Model 88.
- 7.10 Deleted excessive detail on how to store ABRA; the respirator assembly just needs to be ready for issue.
- 7.11 Deleted "broken or missing buckles" from disposable dust mask as this type is not used at Millstone.

**Summary of Changes, Rev. 003**

- 7.12 Added Basis information that changes or revisions to this procedure must be processed through the Emergency Planning Services Department to complete a decrease in effectiveness review in accordance with 10CFR50.54(q).
- 7.13 Added new Attachment 1, "Combined Millstone Fire Protection Required SCBAs" and steps in Sections 4.7 and 4.8 to verify Fire Protection respiratory protection equipment is present and operable. If inventory is missing or inoperable the Shift Manager is notified and the equipment replaced. This addresses A/R 99000357-02.
- 7.14 Deleted authorized acronyms.

