

## SEASONAL PREPARATION

### 1.0 Objective

The objective of this surveillance is to verify that the laboratory is implementing appropriate measures to protect equipment and systems from damage due to the effects of cold weather. The Facility Representative or Environmental, Safety, and Health Support Specialist evaluates systems necessary for the protection of the public and workers to determine if they have been adequately prepared for cold weather. The Facility Representative or Environmental, Safety, and Health Support Specialist also examines other preparations for cold weather to ensure that materials are properly stored, permanent and auxiliary heating systems are functional, and other appropriate preparations have been completed. During the surveillance, the Facility Representative or Environmental, Safety, and Health Support Specialist ensures that applicable DOE requirements have been implemented.

### 2.0 References

2.1 DOE 4330.4B, *Maintenance Management Program*

### 3.0 Surveillance Activities

In completing this surveillance, the Facility Representative or Environmental, Safety, and Health Support Specialist performs the following activities:

1. Walkdown a safety-related or important-to-safety system to review effectiveness of cold weather protection actions.
2. Walk through one or more areas of the laboratory that are likely to experience temperatures below freezing.
3. Review plans established for coping with periods of extended, extreme, or unusual cold.
4. Evaluate the readiness of components and systems to protect the laboratory from the effects of extreme or extended cold.

**Surveillance Guideline**  
**SEASONAL PREPARATION**

Surveillance No.: \_\_\_\_\_

Facility: \_\_\_\_\_

Date Completed: \_\_\_\_\_

**Activity 1 - System Walkdown**

The Facility Representative or Environmental, Safety, and Health Support Specialist selects a system that is important regarding laboratory or worker safety and could be damaged or have its functions impaired by cold weather. Systems that contain water or other fluids that are subject to freezing should be considered. However, other systems such as air handling, emergency diesel generators, or systems that include temperature sensitive instruments should also be considered.

	<u>YES</u>	<u>NO</u>	<u>N/A</u>
1. Are portions of fluid systems that are outside the heated portion of a facility insulated and heat traced?	_____	_____	_____
2. Are instruments that are located outside the heated portions of a facility insulated and heat traced?	_____	_____	_____
3. Have anti-freeze levels in the system been checked to verify that appropriate protection is provided?	_____	_____	_____
4. Have stagnant portions of the system that are not required for routine operations been drained?	_____	_____	_____
5. Have auxiliary heaters or other measures been provided for those areas in the facility where the system may be subject to freezing?	_____	_____	_____

**Activity 2 - Walkthrough Portion of Facility That May Experience Freezing**

6. Have provisions been made to ensure that wet-pipe sprinklers will not freeze?	_____	_____	_____
7. Have all chemicals, wastes, or fluids in the area that could freeze been removed?	_____	_____	_____

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YES      NO      N/A

8. Have provisions been made for protecting any temperature-sensitive equipment?

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9. Have all air intakes, windows, doors, and other access ways that could provide abnormal inflows of cold air been secured?

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10. Have portable auxiliary heaters been installed, inspected and tested?

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**Activity 3 - Review Contingency Plans**

11. Have provisions been made for alerting personnel and providing increased surveillance in periods of extreme, unusual, or extended cold?

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12. Are operators and maintenance personnel on-call to respond to periods of extreme, unusual, or extended cold?

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13. Have sources been identified to obtain additional auxiliary heaters?

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14. Is cold-weather gear available for emergency responders and operations personnel?

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15. Have main water supply cutoffs been identified?

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16. Have contingency plans been prepared for temporarily curtailing operations in those nuclear facilities likely to sustain freeze damage when unusually severe weather is expected?

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**Activity 4 - Evaluate Readiness of Equipment**

17. Have heating systems been cleaned, serviced, and tested?

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18. Have heat tracing systems been tested to verify their operability?

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19. Are routine tests conducted to ensure continuing operability of heat tracing systems?

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NOTES/COMMENTS:

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PERSONNEL CONTACTED: \_\_\_\_\_

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**IF MORE SPACE IS NEEDED FOR FINDINGS, OBSERVATIONS, AND FOLLOWUP  
ITEMS - USE ADDITIONAL SHEETS**

FINDINGS:

Finding No.: \_\_\_\_\_

Description: \_\_\_\_\_

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Finding No.: \_\_\_\_\_

Description: \_\_\_\_\_

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Finding No.: \_\_\_\_\_

Description: \_\_\_\_\_

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**OBSERVATIONS:**

Observation No.: \_\_\_\_\_

Description: \_\_\_\_\_

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Observation No.: \_\_\_\_\_

Description: \_\_\_\_\_

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Observation No.: \_\_\_\_\_

Description: \_\_\_\_\_

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**FOLLOWUP ITEMS:**

Followup Item No.: \_\_\_\_\_

Description: \_\_\_\_\_

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Followup Item No.: \_\_\_\_\_

Description: \_\_\_\_\_

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Followup Item No.: \_\_\_\_\_

Description: \_\_\_\_\_

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\_\_\_\_\_  
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LABORATORY MANAGEMENT DEBRIEFED AND RESULTS: \_\_\_\_\_

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\_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Representative or  
Environmental, Safety, and Health Support Specialist