# Clean and Sanitize Sub-Zero Ice Machines

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>PURPOSE AND SCOPE</td>
</tr>
<tr>
<td>1.1</td>
<td>Purpose</td>
</tr>
<tr>
<td>1.2</td>
<td>Scope</td>
</tr>
<tr>
<td>2.0</td>
<td>INFORMATION</td>
</tr>
<tr>
<td>2.1</td>
<td>General Information</td>
</tr>
<tr>
<td>3.0</td>
<td>PRECAUTIONS AND LIMITATIONS</td>
</tr>
<tr>
<td>3.1</td>
<td>Personnel Safety</td>
</tr>
<tr>
<td>3.2</td>
<td>Equipment Safety</td>
</tr>
<tr>
<td>3.3</td>
<td>Radiation and Contamination Control</td>
</tr>
<tr>
<td>4.0</td>
<td>PREREQUISITES</td>
</tr>
<tr>
<td>4.1</td>
<td>Special Tools, Equipment and Supplies</td>
</tr>
<tr>
<td>5.0</td>
<td>PROCEDURE</td>
</tr>
<tr>
<td>5.1</td>
<td>Sub-Zero Ice Machine Cleaning and Sanitizing</td>
</tr>
<tr>
<td>5.2</td>
<td>Restoration</td>
</tr>
<tr>
<td>5.3</td>
<td>Acceptance Criteria</td>
</tr>
<tr>
<td>5.4</td>
<td>Review</td>
</tr>
<tr>
<td>5.5</td>
<td>Records</td>
</tr>
</tbody>
</table>

Figure 1 – Sub-Zero Water Shutters Location | 7
1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure provides direction to Clean and Sanitize the SUB-ZERO Ice Machines Models UC-15I(P) and UC-15I(P)O.

1.2 Scope

This procedure applies to Cleaning and Sanitizing the SUB-ZERO Ice Machine Models UC-15I(P) and UC-15I(P)O.

2.0 INFORMATION

2.1 General Information

2.1.1 Ice machine Cleaner is used to remove lime scale and mineral deposits.

2.1.2 Ice machine Sanitizer disinfects and removes algae and slime.

3.0 PRECAUTIONS AND LIMITATIONS

3.1 Personnel Safety

WARNING - Sanitizer and Cleaner are corrosives and cause severe irritation and burns to skin and eyes.

WARNING - Condenser fins are sharp and can cause cuts during cleaning activities.

3.1.1 Personnel shall review and be familiar with GHS-SDS and/or MSDS for the Cleaner and Sanitizer being used and understand the hazards associated with them.

3.2 Equipment Safety

CAUTION - Use only the Sub-Zero approved ice machine cleaner and sanitizer and follow all label directions and warnings. Incorrect chemical usage will cause damage to the ice machine evaporator. This Caution is applicable to the entire procedure.

CAUTION - Equipment damage may result if ice is forced from evaporator.
3.3 **Radiation and Contamination Control**

Work in radiological areas will be screened using the Radiological Risk Screening Form (A-6003-910) per Radiological Risk Screening procedure TFC-ESHQ-RP_RWP-C-01.

4.0 **PREREQUISITES**

4.1 **Special Tools, Equipment and Supplies**

The following supplies may be needed to perform this procedure:

- Sub-Zero approved Ice Machine Cleaner 7013400
- GHS-SDS and/or MSDS for Sub-Zero Ice Machine Cleaner
- Sub-Zero approved Ice Machine Sanitizer 7013401
- GHS-SDS and/or MSDS for Sub-Zero Ice Machine Sanitizer
- Clean Rags
- Sub-Zero Use and Care Manual
- Wet/Dry Vacuum cleaner with brush attachment
- Graduated container to measure 4 ounces (115 ml) of Cleaner
- Tablespoon to measure 1 tablespoon of Sanitizer
- Container that fits under the water shutters
- PPE requirements:
  - Chemical resistant gloves: Gauntlet-type (Rubber, Nitrile, Neoprene)
  - Splash proof, chemical resistant safety goggles and face shield
  - Leather Gloves
- Portable eyewash with drench hose OR Safety eyewash location identified
- Other tools, equipment and supplies as identified by Shift Manager/OE/FWS/User.
5.0 PROCEDURE

5.1 Sub-Zero Ice Machine Cleaning and Sanitizing

Cleaning and Sanitizing

WARNING
Sanitizer and Cleaner are corrosives and cause severe irritation and burns to skin and eyes.

5.1.1 DON rubber gloves and safety goggles/face shield to prevent severe eye and/or skin injury.

5.1.2 ADD 4 ounces (115 ml) of undiluted ice machine cleaner to a container that will fit under the lifted water shutters (Figure 1-A).

CAUTION
Equipment damage may result if ice is forced from evaporator

5.1.3 PRESS the CLEAN key pad to initiate a two minute harvest to remove any remaining ice from the evaporator.

5.1.4 REMOVE all ice from the bin.

5.1.5 WAIT Three minutes until the CLEAN light flashes, THEN

ADD the prepared cleaner by lifting the water shutters and pouring directly into the spray area.

NOTE - The ice machine will automatically time out a ten minute cleaning cycle, followed by eight rinse cycles, and stop. The CLEAN light will turn off to indicate the cleaning cycle is complete. This entire cycle lasts approximately 30 minutes.

5.1.6 ADD 1 tablespoon (15 ml) of undiluted ice machine sanitizer to a container that will fit under the lifted water shutters.

5.1.7 PRESS the CLEAN key pad AND

WAIT three minutes until the CLEAN light flashes,
5.1 Sub-Zero Ice Machine Cleaning and Sanitizing (Cont.)

5.1.8 ADD the prepared sanitizer by lifting the water shutters and pouring directly into the spray area.

NOTE - The ice machine will automatically time out a ten minute sanitizing cycle, followed by eight rinse cycles, and stop. The CLEAN light will turn off to indicate the sanitizing cycle is complete. This entire cycle lasts approximately 30 minutes.

- The ice machine will automatically continue from the previous point before the cleaning cycle was initiated. If the ice machine was in the ice making cycle, the control board will start ice making again. If it was in the off cycle, the control board will turn off.

Condenser Cleaning

5.1.9 REMOVE the four screws attaching the kickplate AND TILT the kickplate forward.

**WARNING**

Condenser fins are sharp and can cause cuts during cleaning activities.

5.1.10 DON leather gloves to prevent cuts from condenser fins during cleaning activities.

NOTE - Be careful not to bend the condenser fins while cleaning.

5.1.11 USE vacuum cleaner with brush attachment to clean outside of condenser.

5.1.11.1 CLEAN from top to bottom; not side to side

5.1.11.2 USE caution not to bend the condenser fins.

5.1.12 Using a flashlight, CHECK for dirt between the fins.

5.1.12.1 IF dirt remains repeat step 5.1.11.

5.1.13 IF dirt remains between the fins or if the condenser fins are bent or flattened, CONTACT Sub-Zero factory certified service.

5.1.14 ENSURE the kickplate and kickplate openings are clean before replacing the kickplate.
5.2 Restoration

5.2.1 IF any problems were encountered with cleaning process, **INFORM** FWS.

5.2.2 **CHECK** equipment system restoration by observing indications are consistent with normal operations.

5.2.3 **DISPOSE** of any remaining solutions generated for cleaning and/or sanitizing Sub-Zero ice making units in accordance with Work Package:

5.2.4 **DISPOSE** of rags as directed per Work Package.

5.3 Acceptance Criteria

Acceptance Criteria has been met when Steps in this procedure have been satisfactorily completed.

5.4 Review

5.4.1 **INFORM** FWS cleaning and sanitizing process is complete.

5.4.2 FWS **REVIEW AND CONFIRM** the following:
- Ice Maker is generating ice satisfactorily
- Work requests needed as a result of this procedure are identified and generated
- Work request number(s) of any work documents generated as a result of this procedure, are recorded in the Work Record/Remarks section of Work Package.

5.5 Records

This procedure is performed within a work package, as such, the procedure in its entirety will be maintained as a record per the Work Control process.

The record custodian identified in the Company Level, Records Inventory and Disposition Schedule (RIDS) is responsible for record retention in accordance with TFC-BSM-IRM_DC-C-02.
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Figure 1 – Sub-Zero Water Shutters Location

Location of water shutters.

Vacuum condenser.