

# TOWN OF NAHANT



## OFFICE OF THE HARBORMASTER

*Mariana L. Rauworth*

**TOWN OF NAHANT, MASSACHUSETTS**

**OFFICE OF THE HARBORMASTER**

**WINTER MOORING & MOORING WINTERIZATION**

**STANDARD OPERATING PROCEDURE**

**SOP Number:** HM-05

**Effective Date:** September 9, 2026

**Revision Date:** \_\_\_\_\_

**Approved By:** Nahant Harbormaster

**Supersedes:** New

**Applies To:** All permitted moorings and vessels utilizing moorings within Nahant waters

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### 1. PURPOSE

The purpose of this Standard Operating Procedure is to establish uniform requirements for the **inspection, preparation, winterization, maintenance, storm readiness, and enforcement of moorings** within the jurisdiction of the Town of Nahant.

The procedure is intended to:

1. Protect life and property.
2. Reduce the likelihood of mooring failure.
3. Reduce the risk of vessels breaking free during winter storms.
4. Protect Town infrastructure, private property, other vessels, and navigation channels.
5. Establish a consistent inspection and documentation process.
6. Establish clear responsibilities for mooring permit holders.
7. Provide the Harbormaster with an objective framework for winter enforcement and emergency action.

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Nahant's existing Mooring Regulations establish minimum mooring specifications, annual inspection/service requirements, two-year full inspections, and additional precautions during gale winds, stronger conditions, and extreme tides.

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## 2. AUTHORITY

This SOP shall be administered under the authority granted to the Harbormaster by applicable Massachusetts General Laws, including **M.G.L. Chapters 91 and 102**, applicable Town bylaws, and the Town of Nahant Mooring Regulations.

Nahant's existing regulations provide that moorings may not be placed, altered, or shifted except under the direction of the Harbormaster or designee and authorize the Harbormaster to require increased mooring standards where the minimum standard is inadequate for a particular vessel.

Massachusetts law also recognizes the authority of a local Harbormaster to authorize temporary bottom-anchored moorings and related facilities through an annual permit.

**Nothing in this SOP shall supersede applicable federal, state, or Town law. Where requirements conflict, the more restrictive lawful requirement shall apply.**

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## 3. DEFINITIONS

### 3.1 Winterization

The process by which a mooring and vessel are prepared for the winter season, including removal of vessels where required, inspection of ground tackle, installation or maintenance of an approved winter buoy, and completion of required documentation.

### 3.2 Winter Mooring

A mooring configuration approved by the Harbormaster for use during the winter season.

### 3.3 Winter Buoy

A properly identified buoy approved for marking a mooring during the winter period.

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#### 3.4 Mooring Permit Holder

The person or entity to whom the Town has issued the mooring permit.

#### 3.5 Mooring Tackle

The complete mooring system, including anchor, shaft, chain, shackles, swivels, buoy, pennant, chafing gear, and associated components.

#### 3.6 Storm Condition

A forecast or observed weather condition that, in the judgment of the Harbormaster, creates an increased risk of vessel or mooring failure.

#### 3.7 Unattended Vessel

A vessel left without a responsible person immediately available to respond to a Harbormaster directive or emergency.

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### 4. WINTERIZATION SEASON

#### 4.1 Winterization Deadline

**All applicable moorings shall be winterized no later than 0001 hours on November 1 of each year.**

Nahant's existing regulations state that **winter buoys are not allowed between June 1 and November 1**. Accordingly, the November 1 date shall serve as the standard transition date for the Town's winter mooring configuration.

#### 4.2 Early Winterization

The Harbormaster may order or recommend early winterization when:

- A significant storm is forecast;
- A hurricane or tropical system threatens the area;
- A nor'easter is forecast;

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- Extreme tides are expected;
- Significant coastal flooding is forecast;
- A vessel or mooring presents an unsafe condition;
- A mooring is determined to be inadequate.

#### 4.3 Vessel Removal

Unless specifically authorized by the Harbormaster, vessels should be removed from exposed moorings before the onset of significant winter storm conditions.

The Town's existing storm guidance recommends removing boats from the water when possible and provides additional measures when hauling is not possible.

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## 5. OWNER RESPONSIBILITIES

Every mooring permit holder shall:

1. Maintain the mooring in safe and serviceable condition.
2. Maintain compliance with all applicable Nahant Mooring Regulations.
3. Ensure annual inspection/service of the mooring.
4. Complete required two-year full inspections.
5. Replace worn, damaged, defective, or undersized equipment.
6. Maintain proper chain, shackles, swivels, pennants and chafing gear.
7. Maintain a properly identified buoy.
8. Winterize the mooring by the November 1 deadline.
9. Monitor weather conditions during the winter season.
10. Take additional precautions when severe weather is forecast.
11. Respond promptly to Harbormaster directives.

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12. Immediately report a missing buoy, damaged mooring, parted pennant, displaced vessel, or other hazardous condition.

13. Ensure that contact information on file with the Harbormaster remains current.

The existing Nahant regulations place responsibility on the owner for additional precautions during gale-force or stronger winds and extreme tides.

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## 6. MOORING INSPECTION REQUIREMENTS

All mooring systems shall receive **annual inspection and/or service**.

Nahant's current regulations require a full top-to-bottom inspection every two years, documented on a mooring inspection form. The full inspection must include either lifting the mooring or having a diver determine its condition.

### 6.1 Annual Inspection

The annual inspection shall examine, at minimum:

- Mooring anchor
- Anchor eye/shaft
- Bottom chain
- Riser chain
- Shackles
- Shackle pins
- Swivel, if installed
- Mooring buoy
- Pennant
- Chafing gear
- Identification

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- General condition

#### **6.2 Two-Year Full Inspection**

Every two years, the entire system shall be:

**A. Lifted for inspection; OR**

**B. Inspected by an approved diver capable of determining the condition of the submerged tackle.**

The inspection shall be documented and submitted to the Harbormaster.

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#### **7. MINIMUM MOORING CONDITION**

The existing Nahant regulations establish minimum tackle standards and specifically address wear.

The following conditions shall be considered unacceptable unless specifically approved by the Harbormaster:

##### **Anchor / Shaft**

- Bent
- Deformed
- Cracked
- Severely corroded
- Damaged
- More than 33% reduction in original diameter

##### **Chain**

Chain shall be replaced when:

- Links are deformed;

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- Links are excessively corroded;
- Links have lost 33% or more of their original diameter;
- Connections are damaged;
- The chain is otherwise determined unsafe.

Nahant's existing specification requires the riser chain to equal maximum water depth plus 5 feet and the bottom chain to be at least 1.5 times maximum water depth.

#### **Shackles**

Replace shackles showing:

- More than 15% wear;
- Loose fit around the pin;
- Deformation;
- Cracks;
- Severe corrosion;
- Damaged threads or pins.

Shackle pins shall be properly seized, wired, or otherwise secured against accidental removal.

#### **Pennants**

Pennants shall be replaced if:

- Chafed;
- Cut;
- Frayed;
- Beginning to unlay;
- Excessively worn;

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- Improperly sized.

Chafing gear shall be properly secured and maintained.

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## 8. WINTER BUOY REQUIREMENTS

Winter mooring buoys shall:

- Be approved by the Harbormaster;
- Be properly sized for the mooring;
- Be readily visible;
- Display the applicable mooring permit number;
- Be securely attached;
- Remain properly buoyant;
- Be maintained throughout the winter season.

Nahant's existing regulation specifies a **white mooring ball**, recommends a blue band, requires the permit number to be visible, and requires the ball to remain at least 50% above the water surface.

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## 9. STORM RESPONSE THRESHOLDS

The following are recommended **operational triggers for Harbormaster use**.

They should not be interpreted as replacing the Town's existing storm precautions or as establishing a guarantee that a mooring will withstand any particular wind or sea condition.

### LEVEL 1 — MONITOR

**Forecast:** Sustained winds 20–29 knots or significant coastal weather expected.

Harbormaster:

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- Monitor marine forecasts.
- Review exposed vessels.
- Review known deficient moorings.
- Notify owners as appropriate.

Owner:

- Inspect vessel.
- Check pennant and chafing gear.
- Verify bilge and pumps.
- Remove unnecessary equipment.

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### LEVEL 2 — PREPARE

**Forecast:** Sustained winds 30–39 knots, significant gusts, or developing coastal storm.

Harbormaster may:

- Issue advisory to mooring owners.
- Identify vessels requiring special attention.
- Require additional mooring precautions.
- Increase harbor patrols.

Owner should:

- Remove vessel where feasible.
- Remove sails, canvas, antennas and loose equipment.
- Double pennants.
- Increase chafe protection.

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- Verify mooring integrity.
- Secure all hatches and openings.

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#### LEVEL 3 — STORM ACTION

**Forecast:** Sustained winds 40+ knots, major nor'easter, hurricane conditions, significant storm surge, or other conditions deemed hazardous by the Harbormaster.

Harbormaster may:

- Order removal of vessels.
- Require relocation to a protected location.
- Require additional securing measures.
- Restrict access to portions of the harbor.
- Suspend use of particular moorings.
- Require defective or unsafe vessels to be removed.

Nahant's existing storm guidance specifically recommends hauling vessels when possible and, when hauling is not possible, adding pennants, increasing scope, and using storm anchors as appropriate.

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#### LEVEL 4 — EMERGENCY

Conditions exist in which a vessel, mooring, or structure presents an immediate threat to:

- Life safety;
- Navigation;
- Other vessels;
- Town property;

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- Private property;
- Public infrastructure.

The Harbormaster may take reasonable emergency measures authorized by law to mitigate the hazard.

The owner shall be notified as soon as reasonably practicable.

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## 10. VESSEL STORM PREPARATION

Where a vessel cannot be hauled, the owner shall, as applicable:

- Remove sails;
- Remove roller furling;
- Remove biminis;
- Remove dodgers;
- Remove enclosures;
- Remove antennas where practical;
- Remove loose equipment;
- Remove portable fuel tanks;
- Secure batteries;
- Check bilge pumps;
- Secure hatches;
- Secure windows and ports;
- Close appropriate seacocks;
- Shut off fuel systems where appropriate;
- Install additional chafing gear;

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- Double or otherwise reinforce pennants;
- Take additional measures directed by the Harbormaster.

These measures substantially track Nahant's existing published storm precautions.

**No person should remain aboard a vessel during a severe storm solely to monitor or tend the vessel.**

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## 11. WINTERIZATION INSPECTION CHECKLIST

### TOWN OF NAHANT — HARBORMASTER'S OFFICE

Mooring Permit #: \_\_\_\_\_

Owner: \_\_\_\_\_

Vessel: \_\_\_\_\_

LOA: \_\_\_\_\_

Mooring Location: \_\_\_\_\_

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

Inspector: \_\_\_\_\_

#### A. PERMIT / ADMINISTRATION

| Item                              | Pass                     | Fail                     | N/A                      |
|-----------------------------------|--------------------------|--------------------------|--------------------------|
| Current mooring permit            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Permit number visible             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Owner contact information current | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Vessel information current        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Required inspection current       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

#### B. ANCHOR / GROUND TACKLE

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| Item                             | Pass                     | Fail                     | N/A                      |
|----------------------------------|--------------------------|--------------------------|--------------------------|
| Anchor appropriate for vessel    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Anchor eye/shaft sound           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| No significant deformation       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| No excessive corrosion           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bottom chain properly sized      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bottom chain properly connected  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Riser chain properly sized       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Chain free of excessive wear     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shackles serviceable             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shackle pins secured             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Swivel serviceable, if installed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### C. BUOY / PENNANT

| Item                   | Pass                     | Fail                     | N/A                      |
|------------------------|--------------------------|--------------------------|--------------------------|
| Winter buoy installed  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Buoy properly buoyant  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Buoy visible           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Permit number visible  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pennant properly sized | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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**Item** **Pass Fail N/A**

Pennant free of excessive wear ☐ ☐ ☐

Chafing gear installed ☐ ☐ ☐

Chafing gear secured ☐ ☐ ☐

**D. WINTERIZATION**

**Item** **Pass Fail N/A**

Vessel removed, if required ☐ ☐ ☐

Summer configuration removed ☐ ☐ ☐

Winter configuration installed ☐ ☐ ☐

Winter buoy properly installed ☐ ☐ ☐

Mooring clear of navigation hazard ☐ ☐ ☐

**E. FINAL DETERMINATION**

☐ **APPROVED — WINTERIZED**

☐ **APPROVED WITH CONDITIONS**

☐ **CORRECTION REQUIRED**

☐ **UNSAFE — IMMEDIATE ACTION REQUIRED**

**Inspector Comments:**

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**Corrective Action Required By:** \_\_\_\_\_

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Inspector Signature: \_\_\_\_\_

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### 12. DEFICIENCY CLASSIFICATION

#### CLASS I — MINOR

Examples:

- Faded identification
- Minor buoy issue
- Minor documentation deficiency

**Correction:** Within 30 days or by date established by Harbormaster.

#### CLASS II — SIGNIFICANT

Examples:

- Worn pennant
- Damaged chafing gear
- Excessive corrosion
- Defective shackle
- Improper winter configuration

**Correction:** Normally within **7 days**.

Nahant's existing regulations already provide a seven-day correction period for moorings found inadequate under the Town's specifications.

#### CLASS III — CRITICAL

Examples:

- Broken chain
- Failed shackle

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- Severely damaged anchor
- Missing buoy
- Vessel creating immediate hazard
- Mooring substantially incapable of securing the assigned vessel

**Action:** Immediate correction, removal, relocation, or suspension as directed by the Harbormaster.

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### 13. ENFORCEMENT

Failure to comply with this SOP, where the underlying requirement is established by applicable Town regulation, permit condition, or law, may result in:

1. Written notice of violation.
2. Requirement for corrective action.
3. Suspension of mooring privileges.
4. Revocation of mooring permit.
5. Removal or relocation of an unsafe vessel.
6. Removal of an unauthorized or unsafe mooring.
7. Recovery of applicable Town costs from the responsible party.
8. Referral for enforcement under applicable Town bylaws or Massachusetts law.

Nahant's existing regulations provide that violations may be enforced by the Harbormaster, Assistant Harbormasters, and authorized police officers. They also provide for permit suspension/revocation where a boat or mooring threatens safety and authorize removal of certain illegal moorings at the owner's expense.

### Important drafting provision

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**This SOP shall not independently create a new penalty where no penalty is authorized by existing law or regulation.**

Any enforcement action shall be based upon the applicable statute, bylaw, regulation, permit condition, or other lawful authority.

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#### 14. EMERGENCY REMOVAL

The Harbormaster may direct the owner of an unsafe vessel to remove, relocate, or secure the vessel when the vessel presents an actual or reasonably anticipated hazard.

If the owner cannot be reached, fails to comply, or circumstances constitute an emergency, the Town may take reasonable action authorized by law to protect life, property, navigation, and public safety.

All emergency actions shall be documented.

The report should include:

- Date/time;
- Weather conditions;
- Vessel;
- Mooring number;
- Owner notification attempts;
- Nature of hazard;
- Action taken;
- Personnel involved;
- Equipment used;
- Photographs, where practicable;
- Costs incurred.

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#### 15. WINTER MOORING INSPECTION PROGRAM

The Harbormaster's Office should maintain an annual winterization database containing:

- Mooring number;
- Permit holder;
- Vessel;
- Vessel length;
- Mooring location;
- Anchor type;
- Anchor weight/specification;
- Chain size;
- Chain length;
- Pennant size;
- Date of annual inspection;
- Date of two-year inspection;
- Inspector;
- Winterization status;
- Deficiencies;
- Corrective action;
- Date corrected;
- Storm incidents;
- Enforcement actions.

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This creates an auditable record of the Town's mooring-management program.

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### **16. HARBORMASTER WINTERIZATION SCHEDULE**

#### **September 1**

Begin winterization notification.

#### **October 1**

First compliance reminder.

#### **October 15**

Identify outstanding or deficient moorings.

#### **October 25**

Final owner notification.

#### **October 31 — 1700 Hours**

Target date for completion.

#### **November 1 — 0001 Hours**

**Winter configuration required.**

#### **November 1–15**

Harbormaster compliance inspection.

#### **November 15**

Issue notices for outstanding deficiencies.

#### **November 30**

Escalate unresolved Class II/III deficiencies.

This schedule gives owners an opportunity to comply before the legal/operational deadline rather than making November 1 the first notification.