

## ATTACHMENT II

Oyster Creek Nuclear Generating Station

Sea Turtle Surveillance, Handling, and  
Reporting Instructions for Operations Personnel

Revision 0  
August 20, 1994

## 1.0 Purpose

To define the surveillance, handling and reporting requirements necessary to minimize the impact of station operation on sea turtles as well as document the occurrence of sea turtles in the vicinity of the station's intake structures.

## 2.0 Applicability

These instructions apply to all operations personnel responsible for conducting surveillance of the intake structures, cleaning trash racks and making notifications. This includes Equipment Operators, Group Operating Supervisors and Group Shift Supervisors.

## 3.0 Surveillance of Circulating Water Pump and Dilution Pump Intakes

### 3.1 Seasonality and Frequency

During the June 1-October 31 period the Circulating Water Pump and the Dilution Pump intake trash racks, and the area immediately upstream of the trash racks, will be inspected at least twice per 8-hour shift for the presence of sea turtles.

### 3.2 Timing

The first inspection should normally be conducted one to two hours into the work-shift; the second inspection should normally be conducted five to six hours into the work-shift.

It is recognized that other responsibilities or emergencies may periodically prohibit adherence to this schedule. The intent of the schedule is to prevent the individual inspections from being clustered together in a relatively short time period.

### 3.3 Conduct of Inspections

The trash racks and the area immediately upstream of the trash racks should be inspected for the presence of sea turtles. Note that sea turtles are distinguishable from Diamondback Terrapins and Snapping Turtles by the presence of swimming flippers on sea turtles, instead of walking feet with claws. In addition, unlike Terrapins and Snapping Turtles, sea turtles are unable to completely withdraw their heads into their shell (see Attachment I). Information on how to identify sea turtles is also posted at the Circulating Water and Dilution Pump intake structures.

Portable spot lights shall be used during night inspections to assist in spotting sea turtles.

The time that each inspection of the Circulating Water Intake and Dilution Intake is completed shall be recorded on the intake area supplemental tour sheets.

#### 4.0 Trash Rack Cleaning

Personnel cleaning the Circulating Water and Dilution intake trash racks during the June 1-October 31 period shall observe the trash rake during the cleaning operation so that the rake may be stopped if a sea turtle is sighted. It may be necessary to utilize the nets described in Section 4.1.1 in order to prevent injury to the turtle while it is removed from the trash racks.

As the debris removed from the trash racks is hand raked into the trash car hopper, the Equipment Operator should observe the material to ensure that sea turtles are not present. Particular care must be taken to ensure that sea turtles are not mistaken for horseshoe crabs.

#### 4.1 Actions Required if a Sea Turtle is Observed

- 4.1.1 Sea Turtles observed on the trash racks shall be recovered immediately, taking care to prevent injury to the animal.

Long handled dip nets suitable for smaller turtles are located at the Circulating Water Intake and at the Dilution Pump Intake structures, hanging on the fence adjacent to the sea turtle posters.

A rescue sling that is suitable for larger turtles is stored in the fish sampling pool at the Circulating Water Intake.

When handling sea turtles, do not assume an inactive turtle is dead. When water temperatures are relatively low, for example during the fall, inactive turtles may only be "cold-stunned", resulting in a temporary, coma-like condition (see Attachment II).

Keep clear of the head and front flippers which have claws. Pick up sea turtles by the front and back of the top shell. Do not pick them up by the flippers, the head or the tail.

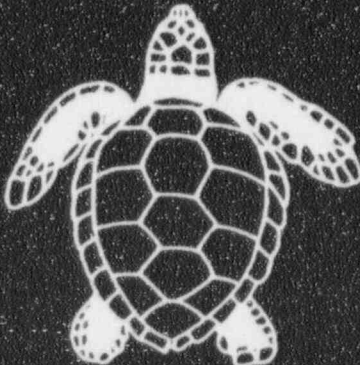
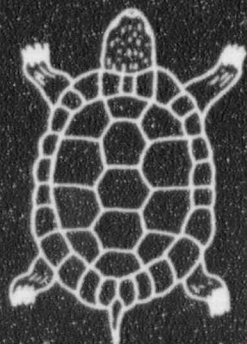
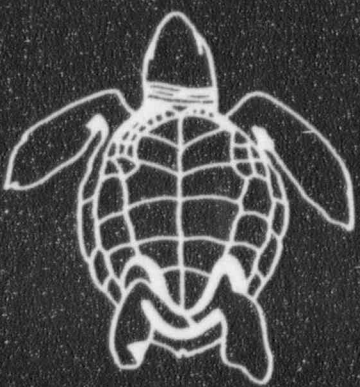
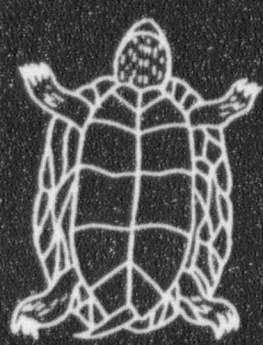
- 4.1.2 The presence of any sea turtle, alive or dead, on the trash racks or in the vicinity of the intake structures must be reported in accordance with sections 4.1.3 and 4.1.4 of these Instructions.
- 4.1.3 The Group Shift Supervisor (Ext. 4667) shall be notified immediately.
- 4.1.4 The Group Shift Supervisor, or his designee, shall notify Environmental Affairs as soon as possible in accordance with Procedure 126 "Notification of Station Events".

- 4.1.5 Sea turtles removed from the intakes, regardless of their condition, should be kept moist and out of direct sunlight until Environmental Affairs personnel arrive to remove them from the site. Fiberglass tubs suitable for holding sea turtles are stored in the fish sampling pool building at the Circulating Water intake structure. A small amount of intake water may be added to the tub, **but do not cover the mouth or nostrils with water.**

Diamondback Terrapins or Snapping Turtles removed from the intake structures may be released into the discharge canal; no additional actions or notification are required for these species.

- 4.1.6 Attempts should be made to revive inactive sea turtles immediately after they are retrieved. Normally, this activity would be performed by Environmental Affairs personnel, however, if they do not arrive within a few minutes after the sea turtle is retrieved, resuscitation efforts should be initiated by Station personnel. Guidance on handling and resuscitation is provided in Attachment II and is posted at the intake structures.
- 4.1.7 After consulting with Environmental Affairs personnel regarding the identity and condition of the sea turtle, the Group Shift Supervisor or his designee shall make the appropriate regulatory agency notification in accordance with Procedure 126 "Notification of Station Events".
- 4.1.8 The Group Shift Supervisor or his designee shall complete the Sea Turtle Incidental Sighting/Capture Report form (Attachment III) and submit it to Environmental Affairs.

## HOW TO DISTINGUISH SEA TURTLES FROM TERRAPINS

	Sea Turtles	Terrapins
	<p>no swimming fins or flippers</p> <p>Flippers are only used to draw head inside of shell.</p> <p>Adult can grow to over three feet in length.</p>	<p>Looks like a turtle, but has walking feet with 4 or 5 toes at the end.</p> <p>Can withdraw head inside of shell.</p> <p>Does not exceed 10 inches in length.</p>
Top View		
Bottom View		
	Sea Turtles	Terrapins
Actions Required	Notify Group Shift Supervisor (x4667) and Environmental Controls (x4022)	None required. May be gently removed from intake and returned to discharge canal.

## ATTACHMENT II

### Sea Turtle Handling and Resuscitation Procedures

#### Handling:

Do not assume an inactive turtle is dead. Pressing the soft tissue around the nose of a sea turtle may result in an eye reflex in a comatose turtle. The onset of rigor mortis is often the only definite indication that a turtle is dead.

Keep clear of the head.

Adult male sea turtles of all species other than leatherbacks have claws on their foreflippers. Keep clear of slashing foreflippers.

Pick up sea turtles by the front and back of the top shell (carapace). Do not pick up sea turtles by flippers, the head or the tail.

#### Resuscitation Procedures:

If a turtle appears to be comatose (unconscious), attempts should be made to revive it immediately. These procedures are designed to void the turtles' lungs of water by active pumping and passive drainage. Sea turtles have been known to revive up to 24 hours after these procedures have been followed:

- 1) Place the turtle on its back and gently pump the breastplate. This may stimulate the animal to breathe and allow water to drain.
- 2) Place the animal on its breastplate and raise the hindquarters. The degree of elevation depends on the size of the turtle; greater elevations are required for larger turtles.
- 4) Keep the turtle shaded and moist and observe for 24 hours.

#### Special Instructions for Cold-Stunned Turtles:

Comatose turtles found in water less than 10°C (50°F) are probably "cold-stunned". This is most common in the fall and early winter. If a turtle appears to be cold-stunned, the following applies:

To increase blood flow, flap the flippers and rub the skin. Gradually, (over a period of six hours) move the turtle to a warmer area.

If possible, place the animal in a few inches of water that is warmer than the water it was removed from. Do not cover the mouth or nostrils with water. It is not imperative that sea turtles be kept in water.

Dead sea turtles should be retained for necropsy.



## OCNGS SEA TURTLE INCIDENTAL SIGHTING/CAPTURE REPORT FORM

Reporter's full name (print): \_\_\_\_\_ Dept. \_\_\_\_\_ Tel. no. \_\_\_\_\_  
(GSS or designee)

Date of sighting/capture: \_\_\_\_\_ Time of day of  
( mm-dd-yy ) sighting/capture: \_\_\_\_\_ hrs.

Who first observed the turtle? (print name): \_\_\_\_\_ Tel. no. \_\_\_\_\_

Location of ☐ Circ. water intake Which bay? \_\_\_\_\_ ☐ # Circ. pumps op.?  
sighting/capture: ☐ Dilution intake Which bay? \_\_\_\_\_ ☐ # Dil. pumps op.?

Turtle behavior ☐ Was turtle impinged against trash rack?  
and orientation: ☐ Was turtle swimming near trash racks?  
☐ Other (Describe below)

First observation: ☐ Was turtle first observed at or near the water surface?  
☐ Brought up from below surface with trash rake?  
☐ Other (Describe below)

Method of ☐ Trash rake When was trash rack in  
capture: ☐ Dipnet bay with turtle last cleaned? \_\_\_\_\_  
☐ Sling (Date & time)

Condition of ☐ Alive  
specimen: ☐ Stunned or comatose Intake water: temperature  
☐ Dead/decomposed when sighted/captured: \_\_\_\_\_ F.  
☐ Not sure

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_