

Appendix D: Text of 50 CFR 635.21 (a)(3), (c)(5)(i) and (c)(5)(ii)

50 CFR 635.21(a) All Atlantic HMS fishing gears.

(3) All vessels that have pelagic longline gear on board and that have been issued, or are required to have, a limited access swordfish, shark, or tuna longline category permit for use in the Atlantic Ocean including the Caribbean Sea and the Gulf of Mexico must possess inside the wheelhouse the document provided by NMFS entitled, "Careful Release Protocols for Sea Turtle Release with Minimal Injury," and all vessels with pelagic or bottom longline gear on board must post inside the wheelhouse the sea turtle handling and release guidelines provided by NMFS.

50 CFR 635.21(c)(5) The operator of a vessel required to be permitted under this part and that has pelagic longline gear on board must undertake the following sea turtle bycatch mitigation measures:

(i) Possession and use of required mitigation gear. Required sea turtle bycatch mitigation gear, which NMFS has approved under paragraph (c)(5)(iv) of this section as meeting the minimum design standards specified in paragraphs (c)(5)(i)(A) through (c)(5)(i)(L) of this section, must be carried on board, and must be used to disengage any hooked or entangled sea turtles in accordance with the handling requirements specified in paragraph (c)(5)(ii) of this section.

(A) Long-handled line clipper or cutter. Line cutters are intended to cut high test monofilament line as close as possible to the hook, and assist in removing line from entangled sea turtles to minimize any remaining gear upon release. NMFS has established minimum design standards for the line cutters. The LaForce line cutter and the Arceneaux line clipper are models that meet these minimum design standards, and may be purchased or fabricated from readily available and low-cost materials. One long-handled line clipper or cutter and a set of replacement blades are required to be onboard. The minimum design standards for line cutters are as follows:

(1) A protected and secured cutting blade. The cutting blade(s) must be capable of cutting 2.0-2.1 mm (0.078 in. - 0.083 in.) monofilament line (400-lb test) or polypropylene multistrand material, known as braided or tarred mainline, and must be maintained in working order. The cutting blade must be curved, recessed, contained in a holder, or otherwise designed to facilitate its safe use so that direct contact between the cutting surface and the sea turtle or the user is prevented. The cutting instrument must be securely attached to an extended reach handle and be easily replaceable. One extra set of replacement blades meeting these standards must also be carried on board to replace all cutting surfaces on the line cutter or clipper.

(2) An extended reach handle. The line cutter blade must be securely fastened to an extended reach handle or pole with a

minimum length equal to, or greater than, 150 percent of the freeboard, or a minimum of 6 feet (1.83 m), whichever is greater. It is recommended, but not required, that the handle break down into sections. There is no restriction on the type of material used to construct this handle as long as it is sturdy and facilitates the secure attachment of the cutting blade.

(B) Long-handled dehooker for ingested hooks. A long-handled dehooking device is intended to remove ingested hooks from sea turtles that cannot be boated. It should also be used to engage a loose hook when a turtle is entangled but not hooked, and line is being removed. The design must shield the barb of the hook and prevent it from re-engaging during the removal process. One long-handled device to remove ingested hooks is required onboard. The minimum design standards are as follows:

(1) Hook removal device. The hook removal device must be constructed of 5/16-inch (7.94 mm) 316 L stainless steel and have a dehooking end no larger than 1 7/8-inches (4.76 cm) outside diameter. The device must securely engage and control the leader while shielding the barb to prevent the hook from re-engaging during removal. It may not have any unprotected terminal points (including blunt ones), as these could cause injury to the esophagus during hook removal. The device must be of a size appropriate to secure the range of hook sizes and styles used in the pelagic longline fishery targeting swordfish and tuna.

(2) Extended reach handle. The dehooking end must be securely fastened to an extended reach handle or pole with a minimum length equal to or greater than 150 percent of the freeboard, or a minimum of 6 ft (1.83 m), whichever is greater. It is recommended, but not required, that the handle break down into sections. The handle must be sturdy and strong enough to facilitate the secure attachment of the hook removal device.

(C) Long-handled dehooker for external hooks. A long-handled dehooker is required for use on externally-hooked sea turtles that cannot be boated. The long-handled dehooker for ingested hooks described in paragraph (c)(5)(i)(B) of this section would meet this requirement. The minimum design standards are as follows:

(1) Construction. A long-handled dehooker must be constructed of 5/16-inch (7.94 mm) 316 L stainless steel rod. A 5-inch (12.7-cm) tube T-handle of 1-inch (2.54 cm) outside diameter is recommended, but not required. The design should be such that a fish hook can be rotated out, without pulling it out at an angle. The dehooking end must be blunt with all edges rounded. The device must be of a size appropriate to secure the range of hook sizes and styles used in the pelagic longline fishery targeting swordfish and tuna.

(2) Extended reach handle. The handle must be a minimum length equal to the freeboard of the vessel or 6 ft (1.83 m), whichever is greater.

(D) Long-handled device to pull an "inverted V". This tool is used to pull a "V" in the fishing line when implementing the "inverted V" dehooking technique, as described in the document entitled "Careful Release Protocols for Sea Turtle Release With Minimal Injury," required under paragraph (a)(3) of this section, for disentangling and dehooking entangled sea turtles. One long-handled device to pull an "inverted V" is required onboard. If a 6-ft (1.83 m) J-style dehooker is used to comply with paragraph (c)(5)(i)(C) of this section, it will also satisfy this requirement.

Minimum design standards are as follows:

(1) Hook end. This device, such as a standard boat hook or gaff, must be constructed of stainless steel or aluminum. A sharp point, such as on a gaff hook, is to be used only for holding the monofilament fishing line and should never contact the sea turtle.

(2) Extended reach handle. The handle must have a minimum length equal to the freeboard of the vessel, or 6 ft (1.83 m), whichever is greater. The handle must be sturdy and strong enough to facilitate the secure attachment of the gaff hook.

(E) Dipnet. One dipnet is required onboard. Dipnets are to be used to facilitate safe handling of sea turtles by allowing them to be brought onboard for fishing gear removal, without causing further injury to the animal. Turtles must not be brought onboard without the use of a dipnet.

The minimum design standards for dipnets are as follows:

(1) Size of dipnet. The dipnet must have a sturdy net hoop of at least 31 inches (78.74 cm) inside diameter and a bag depth of at least 38 inches (96.52 cm) to accommodate turtles below 3 ft (0.914 m) carapace length. The bag mesh openings may not exceed 3 inches (7.62 cm) 3 inches (7.62 cm). There must be no sharp edges or burrs on the hoop, or where it is attached to the handle.

(2) Extended reach handle. The dipnet hoop must be securely fastened to an extended reach handle or pole with a minimum length equal to, or greater than, 150 percent of the freeboard, or at least 6 ft (1.83 m), whichever is greater. The handle must be made of a rigid material strong enough to facilitate the sturdy attachment of the net hoop and able to support a minimum of 100 lbs (34.1 kg) without breaking or significant bending or distortion. It is recommended, but not required, that the extended reach handle break down into sections.

(F) Tire. A minimum of one tire is required for supporting a turtle in an upright orientation while it is onboard, although an assortment of sizes is recommended to accommodate a range of turtle sizes. The required tire must be a standard passenger vehicle tire, and must be free of exposed steel belts.

(G) Short-handled dehooker for ingested hooks. One short-handled device for removing ingested hooks is required onboard. This dehooker is designed to remove ingested hooks from boated sea turtles. It can also be used on external hooks or hooks in the front of the mouth. Minimum design standards are as follows:

(1) Hook removal device. The hook removal device must be constructed of 1/4-inch (6.35 mm) 316 L stainless steel, and must allow the hook to be secured and the barb shielded without re-engaging during the removal process. It must be no larger than 1 5/16 inch (3.33 cm) outside diameter. It may not have any unprotected terminal points (including blunt ones), as this could cause injury to the esophagus during hook removal. A sliding PVC bite block must be used to protect the beak and facilitate hook removal if the turtle bites down on the dehooking device. The bite block should be constructed of a 3/4 -inch (1.91 cm) inside diameter high impact plastic cylinder (e.g., Schedule 80 PVC) that is 10 inches (25.4 cm) long to allow for 5 inches (12.7 cm) of slide along the shaft. The device must be of a size appropriate to secure the range of hook sizes and styles used in the pelagic longline fishery targeting swordfish and tuna.

(2) Handle length. The handle should be approximately 16 - 24 inches (40.64 cm - 60.69 cm) in length, with approximately a 5-inch (12.7 cm) long tube T-handle of approximately 1 inch (2.54 cm) in diameter.

(H) Short-handled dehooker for external hooks. One short-handled dehooker for external hooks is required onboard. The short-handled dehooker for ingested hooks required to comply with paragraph (c)(5)(i)(G) of this section will also satisfy this requirement. Minimum design standards are as follows:

(1) Hook removal device. The dehooker must be constructed of 5/16-inch (7.94 cm) 316 L stainless steel, and the design must be such that a hook can be rotated out without pulling it out at an angle. The dehooking end must be blunt, and all edges rounded. The device must be of a size appropriate to secure the range of hook sizes and styles used in the pelagic longline fishery targeting swordfish and tuna.

(2) Handle length. The handle should be approximately 16 - 24 inches (40.64 cm - 60.69 cm) long with approximately a 5-inch (12.7 cm) long tube T-handle of approximately 1 inch (2.54 cm) in diameter.

(I) Long-nose or needle-nose pliers. One pair of long-nose or needle-nose pliers is required on board. Required long-nose or needle-nose pliers can be used to remove deeply embedded hooks from the turtle's flesh that must be twisted during removal. They can also hold PVC splice couplings, when used as mouth openers, in place. Minimum design standards are as follows:

(1) General. They must be approximately 12 inches (30.48 cm) in length, and should be constructed of stainless steel material.

(2) [Reserved]

(J) Bolt cutters. One pair of bolt cutters is required on board. Required bolt cutters may be used to cut hooks to facilitate their removal. They should be used to cut off the eye or barb of a hook, so that it can safely be pushed through a sea turtle without causing further injury. They should also be used to cut off as much of the hook as possible, when the remainder of the hook cannot be removed. Minimum design standards are as follows:

(1) General. They must be approximately 17 inches (43.18 cm) in total length, with 4-inch (10.16 cm) long blades that are 2 1/4 inches (5.72 cm) wide, when closed, and with 13-inch (33.02 cm) long handles. Required bolt cutters must be able to cut hard metals, such as stainless or carbon steel hooks, up to 1/4-inch (6.35 mm) diameter.

(2) [Reserved]

(K) Monofilament line cutters. One pair of monofilament line cutters is required on board. Required monofilament line cutters must be used to remove fishing line as close to the eye of the hook as possible, if the hook is swallowed or cannot be removed. Minimum design standards are as follows:

(1) General. Monofilament line cutters must be approximately 7 1/2 inches (19.05 cm) in length. The blades must be 1 in (4.45 cm) in length and 5/8 in (1.59 cm) wide, when closed, and are recommended to be coated with Teflon (a trademark owned by E.I. DuPont de Nemours and Company Corp.).

(2) [Reserved]

(L) Mouth openers/mouth gags. Required mouth openers and mouth gags are used to open sea turtle mouths, and to keep them open when removing ingested hooks from boated turtles. They must allow access to the hook or line without causing further injury to the turtle. Design standards are included in the item descriptions. At least two of the seven different types of mouth openers/gags described below are required:

(1) A block of hard wood. Placed in the corner of the jaw, a block of hard wood may be used to gag open a turtle's mouth. A smooth block of hard wood of a type that does not splinter (e.g. maple) with rounded edges should be sanded smooth, if necessary, and soaked in water to soften the wood. The dimensions should be approximately 11 inches (27.94 cm) 1 inch (2.54 cm) 1 inch (2.54 cm). A long-handled, wire shoe brush with a wooden handle, and with the wires removed, is an inexpensive, effective and practical mouth-opening device that meets these requirements.

(2) A set of three canine mouth gags. Canine mouth gags are highly recommended to hold a turtle's mouth open, because the gag locks into an open position to allow for hands-free operation after it is in place. A set of canine mouth gags must include one of each

of the following sizes: small (5 inches)(12.7 cm), medium (6 inches) (15.24 cm), and large (7 inches)(17.78 cm). They must be constructed of stainless steel. A 1 -inch (4.45 cm) piece of vinyl tubing (3/4-inch (1.91 cm) outside diameter and 5/8-inch (1.59 cm) inside diameter) must be placed over the ends to protect the turtle's beak.

(3) A set of two sturdy dog chew bones. Placed in the corner of a turtle's jaw, canine chew bones are used to gag open a sea turtle's mouth. Required canine chews must be constructed of durable nylon, zylene resin, or thermoplastic polymer, and strong enough to withstand biting without splintering. To accommodate a variety of turtle beak sizes, a set must include one large (5 1/2 - 8 inches(13.97 cm - 20.32 cm) in length), and one small (3 1/2 - 4 1/2 inches (8.89 cm - 11.43 cm) in length) canine chew bones.

(4) A set of two rope loops covered with hose. A set of two rope loops covered with a piece of hose can be used as a mouth opener, and to keep a turtle's mouth open during hook and/or line removal. A required set consists of two 3-foot (0.91 m) lengths of poly braid rope (3/8-inch (9.52 mm) diameter suggested), each covered with an 8-inch (20.32 cm) section of 1/2 inch (1.27 cm) or 3/4 inch (1.91 cm) light-duty garden hose, and each tied into a loop. The upper loop of rope covered with hose is secured on the upper beak to give control with one hand, and the second piece of rope covered with hose is secured on the lower beak to give control with the user's foot.

(5) A hank of rope. Placed in the corner of a turtle's jaw, a hank of rope can be used to gag open a sea turtle's mouth. A 6-foot (1.83 m) lanyard of approximately 3/16-inch (4.76 mm) braided nylon rope may be folded to create a hank, or looped bundle, of rope. Any size soft-braided nylon rope is allowed, however it must create a hank of approximately 2 - 4 inches (5.08 cm - 10.16 cm) in thickness.

(6) A set of four PVC splice couplings. PVC splice couplings can be positioned inside a turtle's mouth to allow access to the back of the mouth for hook and line removal. They are to be held in place with the needle-nose pliers. To ensure proper fit and access, a required set must consist of the following Schedule 40 PVC splice coupling sizes: 1 inch (2.54 cm), 1 1/4 inch (3.18 cm), 1 1/2 inch (3.81 cm), and 2 inches (5.08 cm).

(7) A large avian oral speculum. A large avian oral speculum provides the ability to hold a turtle's mouth open and to control the head with one hand, while removing a hook with the other hand. The avian oral speculum must be 9-inches (22.86 cm) long, and constructed of 3/16-inch (4.76 mm) wire diameter surgical stainless steel (Type 304). It must be covered with 8 inches (20.32

cm) of clear vinyl tubing (5/16-inch (7.9 mm) outside diameter, 3/16-inch (4.76 mm) inside diameter).

(ii) Handling and release requirements.

(A) Sea turtle bycatch mitigation gear, as required by paragraphs (c)(5)(i)(A)-(D) of this section, must be used to disengage any hooked or entangled sea turtles that cannot be brought on board. Sea turtle bycatch mitigation gear, as required by paragraphs (c)(5)(i)(E)-(L) of this section, must be used to facilitate access, safe handling, disentanglement, and hook removal or hook cutting of sea turtles that can be brought on board, where feasible. Sea turtles must be handled, and bycatch mitigation gear must be used, in accordance with the careful release protocols and handling/release guidelines specified in paragraph (a)(3) of this section, and in accordance with the onboard handling and resuscitation requirements specified in Sec. 223.206(d)(1) of this title.

(B) Boated turtles. When practicable, active and comatose sea turtles must be brought on board, with a minimum of injury, using a dipnet as required by paragraph (c)(5)(i)(E) of this section. All turtles less than 3 ft (.91 m) carapace length should be boated, if sea conditions permit.

(1) A boated turtle should be placed on a standard automobile tire, or cushioned surface, in an upright orientation to immobilize it and facilitate gear removal. Then, it should be determined if the hook can be removed without causing further injury. All externally embedded hooks should be removed, unless hook removal would result in further injury to the turtle. No attempt to remove a hook should be made if it has been swallowed and the insertion point is not visible, or if it is determined that removal would result in further injury. If a hook cannot be removed, as much line as possible should be removed from the turtle using monofilament cutters as required by paragraph (c)(5)(i) of this section, and the hook should be cut as close as possible to the insertion point before releasing the turtle, using bolt cutters as required by paragraph (c)(5)(i) of this section. If a hook can be removed, an effective technique may be to cut off either the barb, or the eye, of the hook using bolt cutters, and then to slide the hook out. When the hook is visible in the front of the mouth, a mouth-opener, as required by paragraph (c)(5)(i) of this section, may facilitate opening the turtle's mouth and a gag may facilitate keeping the mouth open. Short-handled dehookers for ingested hooks, long-nose pliers, or needle-nose pliers, as required by paragraph (c)(5)(i) of this section, should be used to remove visible hooks from the mouth that have not been swallowed on boated turtles, as appropriate. As much gear as possible must be removed from the turtle without causing further injury prior to its release. Refer to the careful release protocols and handling/release guidelines required in paragraph (a)(3) of this section, and the handling and resuscitation

requirements specified in Sec. 223.206(d)(1) of this title, for additional information.

(2) [Reserved]

(C) Non-boated turtles. If a sea turtle is too large, or hooked in a manner that precludes safe boating without causing further damage or injury to the turtle, sea turtle bycatch mitigation gear required by paragraphs (c)(5)(i)(A)-(D) of this section must be used to disentangle sea turtles from fishing gear and disengage any hooks, or to clip the line and remove as much line as possible from a hook that cannot be removed, prior to releasing the turtle, in accordance with the protocols specified in paragraph (a)(3) of this section.

(1) Non-boated turtles should be brought close to the boat and provided with time to calm down. Then, it must be determined whether or not the hook can be removed without causing further injury. All externally embedded hooks must be removed, unless hook removal would result in further injury to the turtle. No attempt should be made to remove a hook if it has been swallowed, or if it is determined that removal would result in further injury. If the hook cannot be removed and/or if the animal is entangled, as much line as possible must be removed prior to release, using a line cutter as required by paragraph (c)(5)(i) of this section. If the hook can be removed, it must be removed using a long-handled dehooker as required by paragraph (c)(5)(i) of this section. Without causing further injury, as much gear as possible must be removed from the turtle prior to its release. Refer to the careful release protocols and handling/release guidelines required in paragraph (a)(3) of this section, and the handling and resuscitation requirements specified in Sec. 223.206(d)(1) for additional information.

(2) [Reserved]