

Geoduck Harvest Safety Committee: Diver Safety Program Recommendation

November 2013



WASHINGTON STATE DEPARTMENT OF
Natural Resources

Acknowledgements

The Washington Department of Natural Resources (WDNR) would like to express its gratitude to the Geoduck Harvest Safety Committee for their commitment to the advancement of harvest diver safety. Special thanks to all other individuals who participated in the committee meeting and/or provided feedback to draft recommendations.

This report fulfills the Geoduck Harvest Safety Committee's statutory obligation to provide WDNR with a recommendation for a Geoduck Diver Safety Program by December 1, 2013 as outlined by WASH. REV. CODE § 43.30.555 [2013] (Section 4, 2SHB 1764).

Released November 27, 2013.

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Geoduck Harvest Safety Committee

Official Membership established pursuant to WASH. REV. CODE § 43.30.555 [2013].

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Summary of Committee Recommendation

The Geoduck Harvest Safety Committee reached consensus agreement on the following requirements for a geoduck diver safety program:

- *Valid CPR/First Aid Certification* (5 hr. course/1 or 2-yr. certification);
- *Valid Emergency O₂ Certification* (4 hr. course/2-yr. certification);
- *Valid Washington State Boater Education Card* (4-6 hr. online course); and
- *Annual Completion of Industry Sponsored Diver Safety Refresher Course*

The Geoduck Harvest Safety Committee debated, but could not reach consensus agreement on the following diver safety requirement:

- *Annual physician verification that a geoduck diver license applicant's medical condition and fitness level are sufficient to safely perform essential job responsibilities*

Legislative Background

Commercial geoduck divers are subject to inherent occupational risks. Despite acknowledged occupational hazards, there are currently no minimum training requirements for obtaining a geoduck diver license and participating in commercial harvest of wildstock geoduck in Washington State. As a result, increased diver safety was identified as both an industry and state priority.

House Bill (HB) 1764 was introduced in the 2013 Regular Legislative Session. The bill's primary purpose was to protect existing diver interests by establishing limited licensing and modifying eligibility requirements for a geoduck diver license; and, to develop rules related to industry-specific safety requirements as a prerequisite for a geoduck diver license issued by the Department of Fish & Wildlife (WDFW). The licensing requirements only apply to the wildstock geoduck fishery – they do not apply to aquaculture operations. Second Substitute (SSHB 1764) passed the legislature and was signed into session law on July 28, 2013.

SSHB 1764 contains a series of safety provisions that have been codified in the Revised Code of Washington. RCW 43.30.555 requires WDNR to establish a *Geoduck Harvest Safety Committee* [Chapter 204, §4 (2013)]. Committee membership is statutorily defined as one representative from each of the following organizations: WDNR, WDNR's geoduck diver advisory committee, geoduck harvesters, and geoduck divers. The committee is required to meet quarterly and submit a geoduck diver safety program recommendation to WDNR by December 1, 2013. The committee is responsible for ongoing program review and may recommend additional changes to ensure industry safety.

RCW 43.30.506 provides WDNR rulemaking authority to establish a geoduck diver safety program [Chapter 204, §5 (2013)]. The statute requires the program to be based on the recommendations of the *Geoduck Harvest Safety Committee*, but directs WDNR to “adopt, amend, or repeal” rules as necessary to ensure industry safety and program success provided

the agency “considers” the committee recommendations. Adopted rules may not conflict with federal Occupational Safety and Health Administration (OSHA) commercial diving safety standards and the initial rulemaking must be completed by December 1, 2014.

RCW 77.65.410 requires all applicants to complete the geoduck diver safety program prior to WDFW issuing or renewing a commercial geoduck diver license [Chapter 204, §1 (2013)]. Effective January 1, 2015, all licensed divers must also annually complete the geoduck diver safety program to be maintained on a WDNR geoduck plan of operations [RCW 79.135.210; Chapter 204, §6 (2013)]. Failure to complete the safety program for the 2015 license year will result in forfeiture of the first right of refusal provided to existing licensed geoduck divers on a 2011-2014 WDNR plan of operations.

Representative Dive Industry Safety Programs

One other legislatively-mandated commercial dive harvest safety program was identified in the United States. In 1993, Maine required all scallop and sea urchin diver license applicants to complete a one-time commercial underwater hand harvesting competency course as a prerequisite to obtain a scallop or urchin harvesting license (12 M.R.S.A. §6531). The 2-day course was offered through a local university and covered: (1) CPR/First Aid; (2) operations management and emergency procedures; and (3) advanced dive tables and physiology. The course is no longer offered, as the state is not currently issuing new licenses.

In 2009, the Maine Department of Marine Resources (DMR) created a sea urchin and scallop diver tender license (12 M.R.S.A §6535). In 2010, DMR established a valid CPR/First Aid certification requirement for both divers and dive tenders. DMR also established a one-time mandatory *Diving Safety Course for Tenders* that can be downloaded online and submitted with proof of CPR/First Aid certification (13-188 CMR Ch. 105).

In July 2013, Lummi Nation Natural Resources Department updated its commercial harvest diving standards that apply to all tribal commercial geoduck divers. Trainee divers must satisfy the following requirements:

- *Physician clearance (annual requirement);*
- *Open water certification in scuba training;*
- *Valid CPR, First Aid, and emergency oxygen administration certification;*
- *Four non-commercial dives in open water; and*
- *Four hours training in operation and maintenance of equipment used in dive operations and dive team procedures.*

Lummi Commercial Diving Standards were adapted from the Association of Diving Contractors International (ADCI) Consensus Standards for Commercial Diving and Underwater Operations; the National Oceanographic and Atmospheric Administrative Diving Manual; University of Washington Scientific Diving Safety Manual; Technical Diving International; and Divers Alert Network.

ADCI Consensus Standards for Commercial Diving and Underwater Operations (2011) for surface-supplied air divers include:

- *ADCI diver certification card (625 hrs. instruction, 100 field days, 30 working dives);*
- *Medical certification that diver is “fit to dive” prior to exposure to hyperbaric conditions; and*
- *Valid CPR/First Aid certification*

OSHA Commercial Diving Operations standards (29 CFR 1910 Subpart T) require the following dive team qualifications:

- *CPR/First Aid training (American Red Cross equivalent);*
- *Training in (1) use of tools, equipment and systems relevant to assigned tasks; (2) techniques of assigned diving mode; (3) diving operations and emergency procedures; (4) diving related physics and physiology training for all divers exposed or controlling exposure to hyperbaric conditions; and*
- *No diver shall be permitted to be exposed to hyperbaric conditions for the duration of any temporary physical impairment or conditions known to the employer that is likely to adversely affect diver health or safety.*

Geoduck Harvest Safety Committee Meeting Summary

WDNR convened the inaugural Geoduck Harvest Safety Committee meeting at the Natural Resources Building in Olympia on September 23, 2013. The committee discussed the responsibilities outlined by SSHB 1764, with a primary focus on a timeline and initial ideas for developing a recommendation for a geoduck harvest safety program by the December 1, 2013 deadline. The group coalesced around the development of a prerequisite checklist that could be administratively verified by both WDNR (plan of operations) and WDFW (geoduck diver license). The need for a straightforward verification that could be completed by existing administrative staff was emphasized by both WDNR and WDFW.

Committee members discussed a range of safety requirements that could be incorporated into the geoduck diver safety program. An industry sponsored annual training was brought up as a potential way to simplify satisfying training requirements. It was suggested that the course could be incorporated into existing annual Washington Harvester Association (WHA) or Harvest Divers Association (HDA) meetings. WDNR suggested that the committee focus on the specific training requirements necessary to enhance and ensure workplace safety rather than on training logistics. Initial ideas discussed include cardiopulmonary resuscitation (CPR) and first aid certification; dive physics and physiology training; dive safety manual review; and a dive physical/physician’s clearance.

The committee recognized that group consensus around specific safety requirements may not be feasible and that majority/minority or agency/association disparate recommendations were a distinct possibility. GHA and HDA representatives expressed strong opposition to any safety requirement that could prevent existing divers from obtaining a license in 2015. The bulk of the discussion revolved around the potential to require physician’s clearance to participate in commercial geoduck harvest diving. Two committee members noted this was in direct opposition to the intent of the original legislation and would effectively preclude existing divers from 2015 license pool.

Scheduling conflicts as a result of out-of-state dive harvest seasons made subsequent committee meetings within the December 1st deadline impractical. The group agreed to work

out the details of a formal recommendation for a geoduck diver safety program through email correspondence. WDNR committed to developing a draft safety program recommendation to present to the committee for comment.

Draft Recommendation Circulated for Comment

A draft recommendation was developed by WDNR's Diving Program Manager and adapted from a combination of committee discussions, OSHA commercial diving standards, and a review of relevant commercial diver safety programs. The committee facilitator distributed a memo containing the draft safety program recommendations on October 23, 2013 and requested committee feedback by November 10, 2013. The memo requested all committee members to specify which proposed safety requirements they support or oppose, as well as clearly outline any suggested alternative requirements.

The draft safety program recommendation aimed to verify that geoduck divers licenses applicants are: (1) physically capable of performing job requirements; (2) properly trained to respond to dive accidents and other emergencies; and (3) familiar with the tools and skills of the trade. The draft Geoduck Diver Safety Program requirements distributed to the committee included:

- *Physician's verification that applicant passed a dive physical;*
- *Valid CPR/First Aid Certification;*
- *Valid Emergency O₂ for Scuba Diving Injuries Certification; and*
- *Completion of Approved Diver safety Course*
 - Dive operations and emergency procedures
 - Dive physiology and physics
 - Use of tools, equipment, and systems relevant to assigned tasks
 - Emergency procedures for fire, equipment failure, adverse environmental conditions and medical illness/injury

Two comments were submitted in response to the draft recommendations. HDA stated it would not support the draft recommendations until (1) the physical examination requirement is removed; and (2) diver-crew communication issues tied to speaker broadcast volume restrictions are resolved. Although the diver-crew communication issue is a valid safety concern, it is not something that can be addressed and verified through diver licensing. It is more appropriately addressed as a vessel safety requirement outlined in a WDNR plan of operations.

The Washington Harvesters Association (WHA) submitted an amended recommendation that included:

- *Valid CPR/First Aid Certification;*
- *Washington Boater's Certification; and*
- *Certificate of completion of industry sponsored online refresher course to include:*
 - Diving Physiology and physics
 - Diving operations and emergency procedures
 - Tools and techniques of geoduck harvesting

- USCG vessel safety requirements

WHA stressed that they were the original sponsors of SSHB 1764, which was intended to create a safer working environment – not to jeopardize geoduck harvester jobs. WHA is opposed to multiple non-consensus recommendations and utilizing the “rule making process as an arbiter of our [committee’s] inability to come to consensus.” They emphasized the importance of a true consensus recommendation and suggest any requirement that does not have consensus support should be tabled for further study and consideration by the committee at a later date. WHA expressed their commitment to ongoing safety program monitoring and modification, as necessary, pursuant to RCW 43.30.555(3).

Formal Geoduck Diver Safety Program Recommendation

The Geoduck Harvest Safety Committee was convened in Olympia on November 26, 2013 to provide feedback on a circulated draft of this final report. The committee confirmed consensus agreement on the following recommended components of a geoduck diver safety program:

- *Valid American Red Cross or American Heart Association CPR/First Aid Certification (5 hr. course/1 or 2-yr. certification);*
- *Valid Emergency O₂ Certification (4 hr. course/2-yr. certification);*
- *Valid Washington State Boater Education Card (4-6 hr. online course); and*
- *Annual Completion of Industry Sponsored Diver Safety Refresher Course*
 - Diving physiology and physics
 - Diving operations and emergency procedures
 - Tool and techniques of geoduck harvesting
 - US Coast Guard vessel safety requirements

The proposed program requirement would (1) enhance best diving practices within the industry; (2) improve accident response and emergency management; and (3) prevent additional fatalities within the wildstock geoduck fishery.

The Geoduck Harvest Safety Committee debated, but could not reach consensus agreement on the following diver safety requirement:

- *Annual physician’s verification that a geoduck diver license applicant’s medical condition and fitness level are sufficient to safely perform required and essential job responsibilities*

The WHA and HDA unilaterally oppose establishing an annual dive physical as a prerequisite for a geoduck diver license. The associations are concerned with the current level of uncertainty associated with implementation of the requirement. A wide range of examination requirements exist between different agency and industry standards for dive physicals. The final scope of the dive physical will influence how many existing divers may be excluded from the 2015 license pool. Failure to consider the percentage of divers potentially unable to pass a dive physical could adversely impact the industry’s ability to harvest 2015 geoduck quotas.

WHA suggested the dive physical be considered as part of a later rulemaking after various alternatives can be comprehensively evaluated by Geoduck Harvest Safety Committee. They also suggested the dive physical be separated from the geoduck diver license and included as a requirement within DNR's geoduck harvest contracts. Another consideration, reemphasized by WDFW, was how to verify a physician's report through the WDFW licensing process; it is essential that the verification is objective and can be completed by administrative staff.

The WDNR Diving Program Manager and Nisqually Tribe Diving Supervisor continue to recommend an annual dive physical as part of the geoduck diver safety program. The physical examination verifies licensed divers are physically able to perform job essential tasks. Physical examinations are a requirement to participate in numerous commercial, educational, and scientific dive operations. Identification of physical impairments detrimental to a diver's health and safety in the water or under hyperbaric conditions is a precautionary safety measure. It not only ensures individual safety, but also minimizes risk exposure for other divers and/or vessels that could be called on to provide emergency response for accidents involving physically unfit divers.

WDNR's Diving Program Manager suggested the proposed physical examination requirements mirror those outlined in Washington Administrative Code 296-37-525. The final rule must be adopted by Dec 1, 2014. The timeline provides the opportunity to finalize specific physical examination requirements and develop associated verification procedures as part of the rulemaking process. The Administrative Procedure Act (RCW 34.05) ensures WHA and HDA will have the opportunity to be involved in the forthcoming rulemaking process. WDNR has dedicated staff to complete the rulemaking in 2014; delaying consideration of a physical examination requirement until a later date would require dedication of additional staff resources.

Rulemaking Process

Chapter 204, §5 (2013) requires WDNR to adopt rules creating a geoduck diver safety program for all geoduck divers licensed under RCW 77.65.410 by December 1, 2014 (RCW 43.30.506). WDNR anticipates initiating rulemaking in January 2014. A draft outline of the process is provided below.

1. *Rulemaking Prospectus* – anticipated completion January 2014
 - a. Aquatic Resources Division to engage WDNR Rules Coordinator
 - b. Determination if rulemaking is a “significant legislative rule” or “procedural rule”
 - c. Identify State Environmental Policy Act requirements
2. *Pre-Notice Inquiry* (CR-101) – anticipated filing January 2014
 - a. Explanation that agency is considering adopting a rule, including rationale behind action and rulemaking authority
 - b. Must be filed at least 30 days prior to filing notice of proposed rulemaking
3. *Notice of Proposed Rule* (CR-102) – anticipated filing April 2014
 - a. Identify date, time, and location of public hearing(s), as well as provide copy of proposed rule
 - b. Must be filed at least 20 days prior to public hearing
 - c. If significant changes are made to proposed rule following public comment, another Notice of Proposed Rulemaking & public hearing may be required
 - d. Small business economic impact statement, if required

- e. Preliminary cost-benefit analysis, if considered a significant rulemaking
- 4. *Rulemaking Order* (CR-103) – anticipated completion October 2014
 - a. Must be filed within 180 days of CR-102
 - b. Must be filed a minimum of 31 days before effective date