

Lake Encroachment Individual Permit Application – Response to Comments



VERMONT DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
WATERSHED
MANAGEMENT DIVISION
LAKES & PONDS PROGRAM

Permittee(s): Vermont Division for Historic Preservation & the Lake Champlain Transportation Company Waterbody: Lake Champlain Permit Number: 3027-LEP	Project Description: M/V Adirondack Artificial Reef Project Location: Outer Harbor, Burlington Bay, Burlington Coordinates: 44.480278, -73.247778
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The above referenced Lake Encroachment Individual Permit #3027-LEP authorizes the artificial reefing of the M/V Adirondack in Lake Champlain, Burlington.

The Department of Environmental Conservation (Department) placed the draft permit on public notice between January 19, 2021 and February 18, 2021 in accordance with the permit process as identified under 10 V.S.A. Chapter 170. Public comments were received during the notice period. The following is a summary of comments received and the Department’s responses to those comments. Where appropriate, comments have been paraphrased, consolidated, and categorized for clarity. Duplicative comments were combined where appropriate.

Comment 1: Responsibility for the Project - The Commenters have questions about who the applicant and co-applicants are for the project. The principal applicant for the project is the Vermont Division for Historic Preservation. This raises several questions: Does the State of Vermont currently own the ferry? Will the State be solely responsible for complying with any permit issued for the project and any liability that may stem from impacts from the project if a permit is granted?

Response 1: The co-applicants for this project are the Vermont Division for Historic Preservation and the Lake Champlain Transportation Company. The M/V Adirondack has been owned and operated by the Lake Champlain Transportation Company and the Lake Champlain Transportation Company is donating the vessel to the State for the purposes of this project.

Specific condition a.5. states: “Upon sinking, the M/V Adirondack artificial reef shall become a part of the Vermont Underwater Historic Preserve, be managed to promote the public good and public trust uses of the water, and the permit shall transfer solely to the Vermont Division for Historic Preservation.”

Potential future non-compliance shall be reviewed on a case-by-case basis and the permittee shall be responsible for compliance with all permit conditions. While the permittee will solely be the Vermont Division for Historic Preservation upon sinking of the M/V Adirondack, the Lake Champlain Transportation Company may still be held responsible for any potential future non-compliance with this permit or any other applicable state regulations should the non-compliance be associated with issues arising from when the Lake Champlain Transportation Company was still the permittee.

Comment 2: Public Good - As noted above, the applicants have the burden to prove that the proposed project does not adversely affect the public good. Under Vermont’s Management of Lakes and Ponds statute, 29 V.S.A. § 403(a)(3), “No permit shall be granted if the encroachment adversely affects the public good.”⁵ 402(6) defines “public good” as, “that which shall be for the greatest benefit of the people of the State of Vermont.”⁶ The statute goes on to say, “In determining whether the encroachment will adversely affect the public good, the Department shall consider the effect of the proposed encroachment as well as the potential cumulative effect of existing encroachments on water quality, fish and wildlife habitat, aquatic and shoreline vegetation, navigation and other recreational and public uses...”⁷

In re Svendsen Dock Extension, the Vermont Environmental Court confirmed that, “The State has expressly reserved the right to manage Vermont lakes and ponds... for the greatest benefit of the people of Vermont.” The Court went on to recognize that this responsibility is vested in the VTDEC.⁸ In another case involving a dock extension, *In re Champlain Marina, Inc.*, the Court elaborated that the reference to “public good” made it “quite possible that the Legislature intended to incorporate all Vermont citizens into this statute’s ‘zone of interests’ for purposes of standing.”⁹

The case law referencing the public good standard suggests that the language should be taken in plain meaning. The lakes and ponds in Vermont should be managed to achieve the *greatest benefit* for all the people in Vermont. The proposed sinking of the *M/V Adirondack* would benefit a small segment of the public: the diving community. However, the cumulative effects from sinking the ferry could adversely affect the much larger segment of Vermonters who use the Lake for other purposes.

⁵ Vt. Stat. Ann. tit. 29, § 403(a)(3).

⁶ Vt. Stat. Ann. tit. 29, § 402(6).

⁷ Vt. Stat. Ann. tit. 29, § 405(b).

⁸ *In re Svendsen Dock Extension Variance*, No. 1-1-09VTEC, 2009 WL 4396711 (Vt. Env’tl. Ct. Oct. 14, 2009).

⁹ *In re Champlain Marina, Inc.*, No. 28-2-09VTEC, 2009 WL 4396755 (Vt. Env’tl. Ct. July 31, 2009).

Response 2: Consistent with both statute and case law, the Department manages public waters to serve the public good, and interprets “public good” to mean that which shall be for the greatest benefit of the people of the State of Vermont. Pursuant to statute, the Department reviews encroachment permit applications to determine whether the proposed project will adversely affect the public good (29 V.S.A. §403(a)(3)). The project need not directly benefit every Vermonter, but it must provide a public benefit and it must not adversely affect the public good. In this case, the applicant provided sufficient information to demonstrate that the project will not adversely affect the public good (see Permit Findings 1-17) and will provide a public benefit in the form of a new dive site and preservation of the ferry as part of Vermont’s Underwater Historic Preserve. Specific condition a.5. states: “Upon sinking, the *M/V Adirondack* artificial reef shall become a part of the Vermont Underwater Historic Preserve, be managed to promote the public good and public trust uses of the water...” As the *M/V Adirondack* shall become a part of the Vermont Underwater Historic Preserve, the Department views this project as inherently being for and a benefit to the public. Also, see response 4.

Comment 3: Public Awareness & Outreach - A public meeting was held by the permit applicants on March 5, 2020, but it’s not clear how extensive the outreach was to alert members of the public. A 1998 Vermont Supreme Court case outlines that the meeting should not sway the VTDEC’s decision one way or the other: “The encroachment permit is not granted or denied at the public information meeting. Rather, the purpose of the meeting is to determine the impact of the encroachment on the public interest.”¹⁰

The timeline for this project did not provide adequate opportunity for public review. No public meeting was scheduled during the public comment period (January 19, 2021 to February 18, 2021) associated with the draft decision. The authors of these comments could not request a public meeting within the 14 days following the draft decision date, as we did not become aware of the decision until February 3, 2021, after the 14-day window had passed. Additionally, members of the public were and continue to be significantly inhibited from becoming aware of or participating in the VTDEC’s public comments process due to the COVID-19 pandemic.

¹⁰ *Parker v. Town of Milton*, 169 Vt. 74, 80, 726 A.2d 477, 482 (1998).

Response 3: Upon receipt of the application, the Department processed the application in accordance with 10 V.S.A. Chapter 170, which requires notice of the draft decision and a public comment period. During the public comment period, no request for a public meeting was received.

Prior to the public comment period, the application was posted to the Environmental Notice Bulletin beginning on February 20, 2020 where application materials were available for public review:

<https://enb.vermont.gov/?id=7542>

The application preparer identified that prior to submission of the application, ten Adjoining Property Owner letters were mailed to companies, government entities, and organizations in the greater Burlington Harbor area.

In addition, the permittee pursued an active public awareness and outreach campaign. The proposal to sink a ferry to create a recreational dive site in Lake Champlain gained public awareness beginning on September 13, 2018 with several articles ([NECN](#) and [WCAX3](#)). The Vermont Division for Historic Preservation created [a website](#) to promote awareness of the project. On this website, information on the project could be found, which included a general project description, a "[M/V Adirondack Proposal For Reefing FAQ](#)" (posted on January 29, 2020) of the project (the permittee identified that this document was sent out to a diverse group of individuals and organizations on February 14, 2020), a link to their application materials, a [survey](#) asking for public comments and questions (posted on January 29, 2020), as well as a notification for the public meeting the permittees voluntarily held on March 5, 2020 (a recording of this meeting was [posted here](#) on March 16, 2020). The voluntary public meeting held by the permittees took place in the Community Room at the Burlington Police Department. This meeting was publicized by a post in the legal section of the February 19, 2020 edition of the Seven Days Newspaper. A multitude of news outlets posted stories on this project immediately following this meeting.

In addition to the Department having jurisdiction over this project, the United States Army Corps of Engineers also required a permit for this project. Their draft permit for this project was placed on public notice from March 17, 2020 to April 16, 2020 and the final permit was issued on May 27, 2020.

Based on the amount of time the permit application was available for public review, the length of time over which there was public awareness of this project, and the public outreach the permittees conducted, the Department decided to not voluntarily schedule a public meeting on the draft permit during the public comment period. A public meeting was not requested at any point during the public comment period.

Comment 4: Precedent - The Commenters recognize the cultural history of the *M/V Adirondack*, however its preservation via sinking should not come at the expense of our public resource: Lake Champlain. This is a precedent-setting project in the Lake; no vessel has purposefully been sunk to create an artificial reef and therefore the proposed project has the potential to set a deleterious precedent for littering the bottom of Lake Champlain with obsolete vessels.

According to the Lake Champlain Maritime Museum, there are currently 60 shipwrecks and miscellaneous sites resting on the bottom of Lake Champlain.¹¹ Ten of these wrecks are classified as Vermont Underwater Historic Preserves.¹² There is not a shortage of vessels to serve as artificial reefs or dive sites.

Moreover, if the ferry is sunk, the vast majority of people will not be able to view the ferry under Lake Champlain. If historic preservation of the ferry is the goal, preservation of the ferry on land, creation of an in-water static display, or in-depth documentation of the ferry's history would be better ways to achieve this goal than sinking the ferry in public trust waters.

In addition, the Commenters are concerned about the cumulative impact of sinking boats or other structures into the Lake. If VTDEC determines that sinking this ferry does not adversely affect the public good without addressing the issues raised in this comment, what guidance and parameters have they set to limit the number of boats or structures that may be disposed of in Lake Champlain?

¹¹ <https://www.lcmm.org/archaeology/shipwrecks/>.

¹² <https://www.lcmm.org/archaeology/vermont-underwater-historic-preserves/>.

Response 4: To the Department’s knowledge, this will be the second vessel permitted to be purposefully sunk in Lake Champlain. Lake Encroachment permit #1969-002 was issued on September 3, 1970 for the sinking of a barge in Lake Champlain, South Hero, to create a breakwater. Lake Encroachment permit #2922-LEP, issued December 27, 2019, approved the removal of this vessel.

The Department reviewed the permit application submitted by the applicant for compliance with applicable statutes and regulations. Less intrusive feasible alternatives were reviewed by the applicant, but did not achieve the stated project purpose. As identified under finding c.8.: “Various alternatives regarding the fate of the M/V Adirondack were considered. Alternatives considered included creating a static site on land, creating a static site on the water, scrapping the vessel, or selling the vessel for continued use elsewhere. While there are various alternatives, sinking the M/V Adirondack in accordance with the conditions of this permit is considered a less intrusive feasible alternative when considering the project purpose.”

Regarding the potential cumulative impact from the project, the Department will review all future encroachment permit applications and consider their potential cumulative effects in conjunction with other existing encroachments. Finding c.17. states: “Any cumulative impacts from the project are minimal and outweighed by benefits to public good uses. Any request to create an additional artificial reef for a similar purpose within public waters may be an unacceptable cumulative impact until it can be proven that the M/V Adirondack artificial reef can no longer adequately support public good uses, and the public benefit of additional artificial reef structures outweighs any potential adverse impacts.”

Comment 5: Evaluation of Practical Alternatives to Proposed Action- The permit requires that the applicants describe “less intrusive alternatives” to the project that have been considered. Although there are other means to dispose of defunct ferry ships, such as scrapping the material, the applicants offer no alternatives in their permit application. Here, the applicants maintain that the purpose of the project is to create, “an artificial reef/Underwater Preserve.”¹³ The applicants describe the alternatives to the specific site chosen for the sinking; however, no alternative means of disposing of the ferry are addressed. The applicants present the creation of an historic diving site and artificial reef as the only goals of the project, with disposal of the non-functional ferry as an ancillary benefit.

The Vermont Historic Site webpage maintains that the most cost-effective option is to scrap the ferry and sell the parts. The major downside to this option is that the historic legacy of the *M/V Adirondack* would be lost; however, this option, among others listed on the Historic Site’s FAQ page, should be investigated further because although they don’t create an artificial reef or dive site, they will serve as less environmentally hazardous alternatives.¹⁴

¹³ https://anrweb.vt.gov/Pubdocs/DEC/ENB/SHORE/7542-3027_Lake%20EncroachmentApplication_AdminComplete.pdf.

¹⁴ <https://historicsites.vermont.gov/sites/histsites/files/documents/Adirondack%20Ferry%20Project%20FAQ.pdf>.

Response 5: Less intrusive feasible alternatives were reviewed as identified under finding c.8.: “Various alternatives regarding the fate of the M/V Adirondack were considered. Alternatives considered included creating a static site on land, creating a static site on the water, scrapping the vessel, or selling the vessel for continued use elsewhere. While there are various alternatives, sinking the M/V Adirondack in accordance with the conditions of this permit is considered a less intrusive feasible alternative when considering the project purpose.”

As identified in Appendix S. of the application, the alternatives to reefing the Adirondack were analyzed and the chosen fate of the M/V Adirondack was identified as a less intrusive feasible alternative. Alternatives included removing the vessel from the water or leaving the vessel in the water, both of which would create a static use site. The permittee demonstrated that neither of these options were practical or feasible due to complications on how a static use site would be created along with complications related to the continual

upkeep and maintenance requirements of a static use site. Other options of either selling or scrapping the vessel were considered as well. However, selling or scrapping the vessel would not achieve the purpose of this project, which is to keep the M/V Adirondack in the Champlain Valley where it has served since 1954. While there are alternatives to the reefing of the M/V Adirondack, this finding is reviewed through the scope of the project purpose. Finding c.6. identifies that “The purpose of the project is to create an additional site for Vermont’s UHP, which will increase recreational diving opportunities, provide unique underwater habitat that may be utilized for fishing or environmental research, and preserve a piece of Lake Champlain maritime history.” In achieving the project’s purpose, alternative reefing sites were analyzed, and the proposed sinking location was chosen specifically to minimize impacts to navigation and underwater habitat.

Not encroaching is an alternative to every project. However, the Department must review each proposed project to determine whether the project is excessive for the stated purpose. The Department found that the project is not excessive for the stated purpose and as such, the Department proceeded to review alternatives. Even though alternatives included projects that did not encroach, the Department was able to determine that the proposed project is a less intrusive feasible alternative as it could be determined that the project is not excessive for its stated purpose and will not adversely affect the public good.

Comment 6: Historic Significance - We question the historic designation of the *M/V Adirondack* as to whether it was modified during its period of significance on Lake Champlain—when it began its service on the Lake in 1954 until present. When the vessel arrived at Lake Champlain, what did it look like, has it retained all of those character-defining features post-arrival, and will it retain those features if it is sunk? All of the other boats in the Underwater Historic Preserve (UHP) were sunk in their original form.

Response 6: This comment is beyond the scope of review for Lake Encroachment permitting.

Comment 7: Water Quality - Questions remain about the cumulative impacts of lead, polychlorinated biphenyls (PCBs), and other debris that may breakdown and diffuse into Lake Champlain from the *M/V Adirondack*, even after following the *National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs produced by the, U.S. Environmental Protection Agency and U.S. Maritime Administration, May 2006*.¹⁵

The application highlights a difference between the *M/V Adirondack* and all of the other UHP vessels in the Lake—while the other historic vessels are wooden, the *M/V Adirondack* would be the first UHP vessel with a steel hull.¹⁶ The ecological unknowns associated with sinking a steel-hulled ship the size of the *M/V Adirondack* in Lake Champlain may represent research opportunities, but they may also pose threats to the underwater environment. Correspondence between Jonathan Eddy (the application preparer) and J. Ellen Marsden, Professor of Wildlife and Fisheries Biology at the University of Vermont, is included in the appendix to the permit application.¹⁷ The letter from Marsden to Eddy identifies several research opportunities, but also pitfalls of creating artificial wildlife habitat meant to attract divers and anglers. First, the ship may degrade natural habitat. Second, a lack of long-term assessments may not account for long-term environmental impacts of the sunken vessel. Third, the wildlife habitat created by the proposed artificial reef may not create habitat for new populations of fish but induce them to leave natural habitats. Marsden includes, “there is currently no funding in place to conduct a scientific evaluation of the impacts of the ferry.”¹⁸

With toxic contaminants we often learn after the fact that they cause more environmental harm than originally understood. We see no reason to put Lake Champlain at risk through the sinking of a vessel that contained lead and PCBs. If the applicants are able to meet the burden of proof in the future and address the questions raised in this comment, as a condition for the final permit issuance, VTDEC should require bonding for the non-State permit applicant, the Lake Champlain Transportation Company, in case of contaminant pollution, lake navigation issues, or other problems that may arise due to faulty engineering, analysis, or project implementation.

¹⁵ <https://www.epa.gov/sites/production/files/2015-09/documents/artificialreefguidance.pdf>.

¹⁶ *Id.*

¹⁷ https://anrweb.vt.gov/Pubdocs/DEC/ENB/SHORE/7542-3027_Appendices_LEP_FerryAdirondack.pdf.

¹⁸ *Id.*

Response 7: With regard to fish habitat, under finding c.12., it is determined that: “The sinking location for the M/V Adirondack is relatively flat (2% slope), has no dynamic structure (i.e., stones/boulders, woody debris), and primarily consists of soft sediments. In the absence of dynamic structure, the artificial reef would likely attract fish, but would not provide necessary fish habitat due to the presence of ample existing habitat in the lake.” This conclusion was reached by the Department in consultation with the Vermont Department of Fish and Wildlife. The comments expressed within the correspondence between the application preparer and Ellen Marsden (Appendix D. of the application) were interpreted as being general in nature on how artificial reefs may interact with fish and wildlife habitat. These comments were taken into consideration when reviewing potential impacts to fish and wildlife habitat. However, it should be noted that these comments do not acknowledge the site-specific characteristic of the proposed sinking location. As such, the Department was able to review of the current conditions of the sinking location within the context of how artificial reefs may interact with fish and wildlife habitat. Given that the sinking location currently lacks in dynamic structure, it is not known to be a spawning bed, nor is there a lack of natural fish and wildlife habitat in Lake Champlain, the Department concluded that it is not anticipated that the artificial reef will degrade natural habitat nor is it anticipated that fish movement to and from the artificial reef would result in adverse impacts to overall fish populations. Due to these factors, the Department determined that it is not necessary for the project to include long-term assessments related to fish and wildlife habitat.

As to potential impacts on water quality, the Department determined that provided the best management practices identified by the applicant and included in the permit conditions are followed and all clean-up goals are met, the project is not anticipated to have an adverse impact on water quality. This conclusion was identified under finding c.11., which clarifies how potential contaminants like lead and PCBs were reviewed and how they will be addressed prior to sinking: “Prior to sinking, the M/V Adirondack will be prepared in accordance with the U.S. Environmental Protection Agency’s and U.S. Maritime Administration’s *National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs, Appendix E* of the Approved Application. The purpose of following the best management practices is to provide clean-up performance goals and the methods for achieving those goals. Materials of concern identified in the best management practices include oil/fuel, asbestos, polychlorinated biphenyls (PCBs), paint, solids/debris/floatables, and other materials of environmental concern. Prior to sinking, the Department will review how the permittee implemented these best management practices to ensure the vessel is in a condition that is suitable for creating an artificial reef. The M/V Adirondack may only be sunk upon final Department review and approval of the permittee’s compliance with the best management practices. As all contaminant-related issues will be addressed prior to sinking, and the permit will transfer to the State upon sinking, and the State will be responsible for long-term compliance obligations, a financial assurance mechanism was not determined to be necessary for the non-state permittee. Provided the best management practices are followed and all clean-up goals are met, the project is not anticipated to have an adverse impact on water quality.

The following is the list of hazardous materials identified in the best management practices, a description of how those hazardous materials are associated with the M/V Adirondack, the measures that have or will be taken to address those hazardous materials, and the clean-up performance goals that must be achieved in order to minimize potential impacts to water quality:

- A.** Oil and fuel: most items on the vessel that contained oil and fuel will be removed prior to sinking. Items that are to remain will be cleaned to the maximum extent possible so that no film or visible accumulation is remaining on any vessel structure or component.

- B. Asbestos: the vessel was tested for any concentrations of asbestos in 2018 and all test results were negative. The Vermont Department of Health reviewed the findings from this testing and concluded that there should be no concerns related to asbestos. All other equipment that may be a potential source of asbestos (i.e., electrical contactors, motor starters, steering clutches, or brake linings) will be completely removed from the vessel prior to sinking.
- C. PCBs: there are several potential sources of PCB contamination on the vessel, which includes paint, fluorescent light ballasts, and electrical capacitors. All fluorescent lights and electrical equipment that may contain capacitors will be removed from the vessel prior to sinking. Sampling of the paint was conducted in 2018 and PCBs were detected in concentrations below the 50 parts per million threshold identified in the best management practices, therefore no additional action is required.
- D. Paint: the bottom paint on the M/V Adirondack is epoxy and vinyl. No anti-fouling paint has been used on the hull. Various painted surfaces were tested for lead in 2018. In general, lead based paint was found to be present on some original wood surfaces on the passenger deck, bulkhead paint, and some original surfaces in the voids of the vessel. Any loose or exfoliating paint will be removed from the vessel prior to sinking.
- E. Solids/debris/floatables: all loose materials on the vessel will be removed prior to sinking. The rubber roofing and foam underlayment on the hurricane deck and pilothouse roofs will be removed. Wooden planking on the superstructure will be steel reinforced to prevent any from coming loose. On the day of sinking, the sinking location will be surveyed and any debris that may be generated while sinking will be removed from the water.
- F. Miscellaneous other materials of environmental concern: sewage holding tank and associated piping, all electrical wiring, thermometers containing mercury, all plastic and rubber items, and all thermal insulation will be removed from the vessel prior to sinking.”

Given the current understanding of the project and how it would interact with water quality and fish and wildlife habitat, the Department does not anticipate that a steel-hulled vessel would pose a threat to the underwater environment.

Comment 8: Long-term Monitoring - Again, if the applicants are able to meet the burden of proof in the future and address the questions raised in this comment, the Commenters advocate for long-term biological, chemical, and physical monitoring on and around the *M/V Adirondack*. Among the scientific community, little is known about the efficacy of vessels serving as artificial reefs in freshwater ecosystems, especially in Lake Champlain. In a 2015 peer-reviewed article published in the *Journal of Great Lakes Research*, McLean et al. state: “Our investigation underscores the need to develop standard protocols for monitoring the biological and physical attributes of artificial structures. Further, long-term monitoring is needed to assess the benefits of artificial reefs to fish populations and inform future artificial reef projects.”¹⁹

Additionally, the Commenters note that the Vermont Fish & Wildlife Department’s position on the *M/V Adirondack Artificial Reef Project* providing fish habitat is that: “This project would neither benefit or adversely impact fish and wildlife habitat. The structure would likely attract fish, but not truly be a benefit to fish and wildlife habitat as Champlain does not lack in habitat” (Pientka).²⁰ If a project of this nature moves forward in Lake Champlain, it warrants long-term monitoring; the State would have the responsibility to ensure the health of the Lake a year from now or 100 years from now.

¹⁹ McLean, Mathew et al. “Artificial reefs and reef restoration in the Laurentian Great Lakes.” *Journal of Great Lakes*

Management, vol. 41, no. 1, 2015, pp. 1-8. *ScienceDirect*, doi: <https://doi.org/10.1016/j.jglr.2014.11.021> .

²⁰ Pientka, Bernie. “Re: Inquiry, Potential for Artificial Reef to Provide Fish Habitat in Lake Champlain.” Received by Lauren Sopher, 14 April 2020. Email Exchange.

Response 8: The applicant has provided sufficient information to demonstrate that the project will not adversely affect the public good (see Permit Findings 1-17) and will provide a public benefit in the form of a new dive site and preservation of the ferry as part of Vermont's Underwater Historic Preserve. As stated under finding c.6., "The purpose of the project is to create an additional site for Vermont's UHP, which will increase recreational diving opportunities, provide unique underwater habitat that may be utilized for fishing or environmental research, and preserve a piece of Lake Champlain maritime history." The primary purpose of the project is to create an additional site for Vermont's Underwater Historic Preserve to increase recreational diving opportunities, which will preserve a piece of Lake Champlain maritime history. Potential ancillary benefits are related to fishing and environmental research. Given the primary purpose of the project is not for the benefit of fish and wildlife habitat or environmental research and the Department does not anticipate there will be adverse impacts on water quality, fish and wildlife habitat, aquatic vegetation, shoreline vegetation, or navigation, the Department does not find that it is necessary to require the permittee to conduct long-term monitoring. However, given the unique nature of this project, the Department encourages the permittee and other institutions (e.g., the University of Vermont) to conduct research on the project.

Comment 9: Navigation & Recreation - The proposed site is a high boat traffic area and the safety of all Lake Champlain recreationists, from anglers to paddlers, must be protected. The Coast Guard deployed a temporary buoy to mark the proposed location of the vessel from September 6 to September 20, 2019. ²¹ In order to fully comprehend the burden to navigation, a more thorough examination should be done. The aforementioned study lasted only two weeks and may not account for increased boat traffic at other times during the year, for example Fourth of July Weekend or Labor Day Weekend. We emphasize the necessity for proper safety measures to be considered and implemented at the site, if the final permit is approved, with all recreationists in mind.

²¹ *Id.*

Response 9: Finding c.14. states: "The sinking location for the M/V Adirondack was chosen to avoid any potential impacts to navigation while still providing benefits to recreational and public uses. To avoid impacts to navigation, the site must not be in a narrow or congested area and be deep enough to allow for vessels to pass overtop the site without coming into contact with the artificial reef. The sinking location is 68 feet deep when the surface of the lake is at 93.5 feet NGVD 1929, which leaves 25 feet of depth between the surface of the water and the smokestack. To ensure the selected sinking location will not impede navigation, a buoy was deployed from September 6, 2019 through September 15, 2019 in collaboration with the U.S. Coast Guard. A notice was posted to mariners and the Lake Champlain Transportation Company's ferry captains for them to provide feedback on the buoy location and whether it posed a hazard to navigation. No negative feedback on the location of the buoy was received. While the depth is adequate to avoid impacts to navigation, it is beneficial for recreational diving as the site will be accessible to beginner and advanced divers."

Given the specific sinking location (the outer harbor of Burlington Bay and not directly within any known navigation lane) and depth at the sinking location (anticipated depth of unimpeded water column will be 25 feet of depth between the surface of the water and the smokestack), the Department anticipates that the M/V Adirondack artificial reef will not impact navigation and will benefit recreation and public uses. The study conducted in September of 2019 was intended to elicit feedback on the location of the buoy; the ferry reefing project itself is not anticipated to impede navigation in any way.

Comment 10: Conclusion - For the reasons stated herein, the applicants for the proposed project have not met the burden of proof to demonstrate that sinking the ferry will not adversely affect the public good and therefore the Lakes and Ponds permit should be denied.

Response 10: Upon review of all application materials, the public comments, and findings originally made in the draft permit, the Department continues to conclude that the applicant provided sufficient information to demonstrate that the project will not adversely affect the public good (see Permit Findings 1-17) and will

provide a public benefit in the form of a new dive site and preservation of the ferry as part of Vermont's Underwater Historic Preserve. The project passes the Public Good Determination test as outlined in Section 4 of the [Interim Procedures for the Issuance or Denial of Encroachment Permits](#) and the project meets the requirements of the [Public Trust Doctrine](#).