RESPONSES TO COMMENTS ON THE PROPOSED REISSUANCE OF MNG30000

1. **Alliance of the Great Lakes Comments:**

   1. Draft permit provision 1.1.7

   **Comment:** Strongly support the prohibition of ballast water discharges to waters of the State that designated as outstanding national resource waters. These areas have been specifically designated as deserving of a higher level of protection and the prohibition is appropriate.

   **MPCA response:** Noted

2. Draft permit provision 1.1.9

   **Comment:** This provision appears to apply to Lakers built after January 1, 2009. The provision simply reminds the permittee that it may have responsibilities under the terms of the Vessel General Permit (VGP) issued by the United States Environmental Protection Agency (EPA). As written, it creates no obligation for the installation or proper operation and maintenance of a ballast water treatment system. The State would have no authority to require that adequate treatment be provided and properly operated and maintained. Any compliance issues that might arise regarding the adequacy of ballast water treatment including equipment performance, operation or maintenance would be the responsibility of EPA and/or the Coast Guard and would have to compete with other national priorities.

   **MPCA response:** MPCA believes that this comment is meant to reference permit section 1.1.11. (Section 1.1.9 addresses Ballast Water and Sediment Management Plans approved by the MPCA.) The draft permit complements the EPA VGP, so VGP requirements are not repeated in the draft permit. The VGP requires (VGP 2.2.3.5.1.1) proper installation and maintenance and operation of the ballast water management system. If the VGP is no longer in force, MPCA could modify the permit to include these provisions. At this time, MPCA goal is to avoid duplicating VGP requirements in the draft permit. MPCA will rely on EPA to enforce those provisions in the VGP.

   **Comment:** Also, the regulatory cite provided: [Minn. R. 7001.0150, subp. 3(F)], requires proper operation and maintenance of treatment systems. Based on the discussion above, the provision is not consistent with the provision as written.

   **MPCA response:** As described in the previous response regarding section 1.1.11 of the draft permit, the VGP does require a ballast water management system for the vessels in question. It is appropriate to require permittees to properly operate and maintain treatment systems regardless of whether those systems were installed as required by the VGP or the MPCA permit and this is reflected in the citation.
Comment: It is noted that of the 247 vessels listed on the Minnesota Pollution Control Agency (MPCA) website as covered by the existing Ballast Water Permit, at least 11 have been built on or after January 1, 2009 and are therefore subject to the treatment limits in Part 2.2.3.5 of the VGP.

MPCA response: Although the exact numbers cited by the comment may change depending on when the website was last updated, MPCA agrees that there are permitted vessels that were built after January 1, 2009. These vessels are required by the VGP to meet discharge limits on the schedule in Table 6 (requirement 2.2.3.5.2). The MPCA draft permit requires Lakers to meet discharge limits if a USCG type approved system exists that is commercially available and compatible for the vessel.

Comment: Also noted is the difficulty of coordinating this permit with the VGP, which is set to expire on December 19, 2018. As this permit is scheduled to issue in September 2018 and where it refers to the VGP, it is the current VGP, as defined in provision 1.1.45. When the EPA VGP is reissued it will require conforming changes to the MPCA Ballast Water Permit. Recognizing this issue and the on-going advancements in ballast water analytical techniques and treatment technologies, we suggest MPCA use a five year term for this permit.

MPCA response: EPA has not proposed a schedule for reissuance of the VGP. MPCA can modify MNG30 to conform with the VGP if necessary when the VGP is reissued. Alternatively, the MPCA can use the 401 certification to modify the VGP to meet Minnesota requirements. MPCA has determined that a ten-year permit term is appropriate.

Comment: The protection of Lake Superior from AIS is a high priority for the people of Minnesota as well as for the Great Lakes and the nation as a whole. MPCA should establish a parallel requirement for ballast water treatment and performance as well as operation and maintenance in this permit as that in the VGP, in order to establish the authority of the State to protect Lake Superior.

MPCA response: MPCA believes the draft permit as written is protective of the Minnesota waters of Lake Superior. One of MPCA’s goals with this draft permit is to further the development of treatment technologies that will reduce the introductions of Aquatic Invasive Species (AIS) to the waters of Lake Superior. Once the next VGP is released, MNG30 can be modified to include requirements for maintenance and operation of treatment systems as necessary or these additional requirements can be included in the 401 certification.

3. Draft Permit provision 1.1.12

Comment: This provision addresses Lakers built before January 1, 2009. Provision 1.1.12 c should be modified to require that after permittees install an operational ballast water management system (BWMS), they shall meet the numeric discharge requirements of the VGP as well as the sampling and analysis requirements as stated.
The comment above regarding the overlapping schedules of this permit and the VGP apply to this provision as well.

**MPCA response:** To address this comment, MPCA will modify Section 1.12c of the draft permit with the following in italics:

Section 1.1.12.c after permittees install an operational *type-approved* BWMS, Lakers shall follow the sampling and analysis requirements *and meet the numeric discharge requirements* contained in the VGP for treated ballast water discharges and the requirements of part b., above, no longer apply.

4. Draft Permit Provisions 1.1.14 through 1.1.17

**Comment:** These provisions provide the goals as well as the requirements for the Study(s) to be carried out either individually or in cooperation by permittees with Lakers built before January 1, 2009 and have demonstrated that a BWMS is not currently available. We support the concept of the Study.

Provision 1.1.17 should be amended to provide a requirement that MPCA must approve the work plan or provide comments that will require an amended work plan on a schedule as established by MPCA. Also, that when approved, there should be clarity as to the schedule for completion and what the responsibilities are of the permittee, especially if there are multiple permittees participating in a Study. Finally, the Study(s) should be not be limited to on-board treatment of ballast water but also investigate shore-based, barge-based, and other alternative treatment options.

**MPCA response:** As stated in the permit in section 1.1.17, MPCA staff will review the work plans for a treatability study and comment and may require modifications to the plans as necessary. MPCA agrees that the treatment options should not be limited to shipboard technologies and will review and comment on non-shipboard technologies if presented as part of the Treatability Study. It can be noted that the permit definition of a Ballast Water Management System (1.1.46) does not exclude shore-based systems. However, MPCA agrees that it is a good reminder to vessel owners and will incorporate non-shipboard technologies into the permit. See addition to section 1.1.14 in italics below:

Section 1.1.14 The goals of the Study, *to include shipboard or non-shipboard technologies* are to: a. identify and investigate weaknesses and gaps in knowledge that lead to uncertainty in the compatibility and/or effectiveness of the existing type-approved BWMSs; and b. describe performance requirements and operating conditions necessary for BWMSs to be effective in Great Lakes waters and compatible with Laker vessels.
5. Draft Permit Provision 1.1.26

Comment: We strongly agree with the requirement for ballast water exchange being added to this permit. It provides an extra layer of protection given the continued uncertainties regarding the control of AIS.

MPCA response: noted

6. Draft Permit Provision 1.1.34

Comment: As drafted, this is not an NPDES Permit under Section 402 of the Clean Water Act. The regulatory citation provided: [Minn. R. 7001.1090] references the NPDES program.

MPCA response: The MPCA will revise the incorporation by reference.

Chamber of Marine Commerce Comments

1. Section 1.1.9

Comment: This section requires that the MPCA approve each vessel's BWMP. If the plan is already approved by a competent authority (i.e. Transport Canada or USCG) there should not be an additional approval required by MPCA. This introduces duplicative requirements and change the actions required to manage ballast additional administrative burden.

MPCA response: Minnesota Statute section 115.1703 requires MPCA approval of Ballast Water Sediment Management Plans. The current application form includes a provision for vessels to state that the BWSMP is unchanged and does not require resubmission and review.

2. Section 1.1.12

Comment: Our members have been actively searching for a ballast water management system that is suitable for operation on Great Lakes waters and vessels. To date, none have been found. We are continuing to look at systems, with goal of making something work.

MPCA Response: noted and appreciated.

3. Section 1.1.14

Comment: We would be grateful if this requirement would apply only for the vessels entering a scheduled dry docking in the following year and that they will not have to resubmit a study or install until the next scheduled drydocking.

MPCA Response: The draft permit requires that a documentation report be submitted February 28 in the year before a scheduled drydocking. The report is not due annually.
4. Section 1.1.17

**Comment:** With regards to the required Laker Ballast Water Treatability Study schedule, if the new permit is issued Sept. 30, 2018, then the study plan is due March 30, 2019 and the work plan must be implemented by April 30, 2019. This is very aggressive if not impossible timing given the requirement in section 1.1.16 that Study objectives must include “to work with BWMS manufacturers or independently to develop USCG-approved modifications existing BWMSs or develop new BWMS ... and/or to pilot test BWMS .... ”. Given lead times on ordering and installing equipment, and considering that the shipowner will not receive 'approval' of the work plan from MPCA until after submission, this schedule would be very difficult if not impossible to meet.

**MPCA response:** The intent of this permit requirement is to have permittees develop a work plan and schedule with the ultimate goal of meeting the VGP numeric discharge standards. This requires that permittees submit a plan to achieve that goal, then begin to implement that plan. Although pilot systems are expected to be a part of the research and development, the permit does not require pilot equipment to be installed and operational by April 2019. The work plans submitted by the permittees should propose a timely schedule for pilot testing BWMSs. Annual updates are required by 1.1.18 as a way to ensure that permittees are making progress toward meeting the goals the Treatability Study. MPCA proposes the following language change to indicate that the Plan should be initiated, not completed, within 30 days of Plan submittal:

Section 1.1.17 Within 180 days after permit issuance, permittees (individually or in partnership) shall submit a work plan for MPCA review that identifies methods and timelines to complete the Study and achieve the ultimate goal of meeting the VGP numeric discharge standards. Permittees shall implement initiate the work plan for the Study 30 days after submittal, unless MPCA requires they modify the work plan. If MPCA requires modifications to the work plan, permittees shall implement the revised work plan that addresses MPCA requirements, within 30 days after resubmittal of the revised work plan.
5. Section 1.1.21

Comment: We are concerned that the definition is too vague. We would like the definition to be quantified, measurable, process oriented, and time-specific. Such an approach would provide ship owners with more clarity as to what is "high risk ballast water".

MPCA response: As stated in the permit, a "high risk" ballast water presents an imminent and substantial danger to the health and welfare of the people of Minnesota. The MPCA can invoke emergency powers to restrict such discharges. Minnesota Statute section 116.11 states, in part:

116.11 EMERGENCY POWERS.
If there is imminent and substantial danger to the health and welfare of the people of the state, or of any of them, as a result of the pollution of air, land, or water, the agency may by emergency order direct the immediate discontinuance or abatement of the pollution....

Permit section 1.1.21 provides how the MPCA intends to implement this authority. MPCA would make this determination with the help of experts in AIS at the Minnesota Department of Natural Resources (DNR). MPCA proposes to make the following changes in italics to the draft permit:

Section 1.1.21 A "high risk" ballast water is one that in the opinion of the MPCA determines, in consultation with the DNR, poses an imminent and substantial danger to the health and welfare of the people of the state related to the introduction of a nonnative species into Minnesota waters.

6. Section 1.1.22

Comment: These clauses should be clearer on what MPCA intends. MPCA is considering emergency control or possible contingency for high risk ballast water, but we will need more certainty on what may be required and how it would be applied.

MPCA Response: MPCA anticipates that such emergency situations would require that the MPCA, DNR, and the vessel owner/operator coordinate when reviewing and determining appropriate actions to safeguard human health and the environment. MPCA staff does not have a specific situation in mind, but the benefits of such actions would be immediate.

7. Section 1.1.23

Comment: This appears to read as the MPCA imposing new requirements mid-permit without consultation. For instance, what would the "alternative to standard ballasting/de-ballasting" entail?

MPCA response: This requirement would only be imposed during an emergency situation in consultation with DNR and vessel owners (and perhaps USCG) to determine the most appropriate method to alleviate the situation.
8. **Section 1.1.27**

**Comment:** By itself, this clause applies to any vessel entering Minnesota waters, although it appears to be linked to 1.1.26 that applies to vessels from outside the exclusive economic zone. As worded, this would include a vessel originating from Wisconsin. We would appreciate clarification that this clause does not apply to a vessel whose voyage originates within the EEZ.

**MPCA response:** MPCA will add the italicized language in section 1.1.27 below to the final permit to clarify this requirement only applies to vessels arriving to Minnesota waters from outside the EEZ:

Section 1.1.27. All vessels entering Minnesota waters from outside the EEZ shall maintain the ability to measure salinity levels in each tank onboard the vessel to ensure that the levels reach salinities of at least 30 parts per thousand prior to discharge in Minnesota Waters. This requirement applies regardless of whether the vessel has an operational BWMS. This requirement is in addition to treatment required under the VGP.

9. **Section 1.1.39**

**Comment:** This clause appears to create a unique standard for Minnesota. As our vessels serve all jurisdictions within the Great Lakes region, we would prefer use of one common standard set out by the US Coast Guard.

**MPCA response:** MPCA has the authority and the responsibility to restrict discharges to concentrations that do not exceed water quality standards. See Minn. Stat. § 115.03 subd. 1(e); Minn. Rule 7050.0210 subp. 13. Other authorized states have this same authority and may develop differing standards depending on the use and characteristic of the discharge water. This requirement is in the 2013 ballast water discharge permit.

10. **Section 1.1.39**

**Comment:** As well, this clause may unintentionally create a conflict between state water quality standards and VGP discharge.

**MPCA response:** This is not a new requirement for the ballast water discharge permit or for other permits issued by the MPCA. MPCA may be more restrictive in their discharge limits; this does not constitute a conflict with the VGP. Any discharge to Minnesota waters must not cause an exceedance of state water quality standards, regardless of any less restrictive requirements in the VGP.
Lake Carriers Association comments:

1. Section 1.1.12
   Comment: Clarify if the ongoing requirement to install a ballast water management system (BWMS) on pre-2009 lakers unless there are none shown to be compatible with a vessel only needs to be completed one year in advance of its scheduled drydocking and is sufficient documentation on compatibility until that vessel’s next scheduled drydocking. Currently MPCA requires every vessel, every year to provide this incompatibility review (Section 1.1.12);
   MPCA response: Please see MPCA response # 3 to the Chamber of Marine Commerce.

2. Section 1.1.21
   Comment: MPCA should quantify what “high risk” ballast water is beyond an "opinion" which could lead to significant deleterious impacts to Great Lakes commercial navigation and the industries it supports (Section 1.1.21); and
   MPCA response: Please see MPCA response # 5 to the Chamber of Marine Commerce.

3. Section 1.1.27
   Comment: Remove the requirement for ALL vessels to have the capability of measuring salinity and specify that it is only applicable to those vessels arriving in Minnesota water from outside the Canadian and U.S. Exclusive Economic Zones (EEZ) (Section 1.1.27).
   MPCA response: Please see MPCA response # 8 to the Chamber of Marine Commerce.

4. Additionally, LCA strongly supports the MPCA Commissioner’s determination that this proposed reissuance of the general permit be for a term of 10 years.
   MPCA response: noted

5. Section 1.1.12
   Comment: With the current ballast water general permit, set to expire on September 30, 2018, MPCA interpreted the compatibility review for the installation of a BWMS on lakers built before January 1, 2009, at Section 1.7, to require operators of those vessels to submit individual reviews to MPCA for each vessel by February 28 of the calendar year before their permit expiration and annually thereafter, whether or not a vessel was headed in for a scheduled drydock.

   It is our understanding that the intent of this reissuance of the general permit is to clarify that lakers only need to submit their compatibility review for the installation of a BWMS by February 28 of the calendar year before their permit expiration for their next scheduled drydocking.
In Section 1.1.12(a) of the permit it states that the compatibility review is submitted "... in the year prior to the scheduled drydocking." In Section 1.1.12(b), the permit states "... permittees shall submit documentation demonstrating that no BWMS is compatible for the permitted vessel by February 28 of the calendar year prior to the vessel’s next drydocking."

Unscheduled drydocking may occur for a number of reasons with the intent to place the vessel back into service as soon as possible. LCA assumes that 1.1.12(a) and 1.1.12(b) are meant to align with "scheduled drydocking" and asks that the word "scheduled" be placed before the word "drydocking" at the end of the first sentence in Section 1.1.12(b).

**MPCA response:** MPCA did mean ‘scheduled dry docking” and will clarify that in the final permit in section 1.1.12b as shown with the addition in italics:

> 1.1.12b. For each scheduled drydocking that a permittee does not plan to install a BWMS, permittees shall submit documentation demonstrating that no BWMS is compatible for the permitted vessel by February 28 of the calendar year prior to the vessel's next scheduled drydocking. The individual who signed the Ballast Water General Permit application form or an individual who meets the criteria in Minn. R. 7001.0060 shall certify this documentation and include the certification required by Minn. R. 7001.0070. In the interim, permittees shall comply with all other portions of this permit as applicable.

**6. Section 1.1.21**

**Comment:** The proposed language in the reissuance of the Minnesota VGP states:

“The MPCA, in coordination with the Minnesota Department of Natural Resources (DNR), may prohibit discharges, require discharges occur in a particular area or require emergency treatment of any 'high risk' ballast water permittees propose to discharge in Minnesota waters.

“A 'high risk' ballast water is one that, in the opinion of the MPCA in consultation with DNR, poses an imminent and substantial danger to the health and welfare of the people of the state related to the introduction of a nonnative species into Minnesota waters.”
While LCA understands and wholeheartedly supports prevention as the best tool to mitigate the threat and potential deleterious impacts of a non-native species in waters of the Great Lakes, it is concerned the term of “high risk” is too loosely defined and open to wide individual interpretation. The impact of the broad definition could result in:

- Stranding vessels between cargo discharge ports and load ports in Minnesota without leaving viable options for the shippers;
- Mandate vessels exchange ballast in another states’ or Canadian waters which could have legal jeopardy for vessel operators; and
- Require vessels to perform an operation not available or viable such as discharging ballast water to an onshore facility where none exist and the vessels themselves are not designed to or capable of pumping ballast water off-vessel through a shoreside connection.

LCA requests the term “high risk”, to the extent possible, be quantified and anticipatory. The Great Lakes is a system where ports and docks are intimately intertwined and customer(s) are reliant on that non-interchangeable system for the delivery of cargoes. For instance, a specific grade of taconite required by a steel mill in Cleveland, Ohio may only be loaded at Two Harbors, Minnesota due to the requirements of the end use of the steel produced. There are not options to load at other facilities in Wisconsin or Michigan. The Great Lakes navigation season is only open nine-and-a-half months a year because of the annual closure of the navigation locks at Sault Ste. Marie, Michigan. The entire system of Great Lakes commercial shipping is reliant on full availability of cargoes and ports throughout the remainder of the year.

Quantification of “high risk” should provide a distinct target for assigning this elevated restriction that specifies the issue, stressors that define the risk, its trigger for the declaration, and the definable levels that would need to be achieved to suspend the “high risk” designation.

Beyond being quantified, “high risk” should also have a defined timeline with periodic reevaluation waypoints that include consultation with the industries impacted either at the load port or the discharge port. With the commercial traffic reliant on Minnesota ports, in addition to operators of commercial vessels, in their notification process, MPCA should also include mine operators, dock operators, port authorities(s), customers, end users of the cargoes, and other transportation modes required in the logistics chain to move cargoes.

LCA believes that this MPCA/DNR consultation process should be inclusive of the commercial entities since the impacts would reach far beyond Minnesota waters and could be economically devastating. Halting or turning around a vessel, most likely vessels, is not a sustainable option in the Great Lakes.
MPCA response: Please see MPCA response to comment #5 to Chamber of Marine Commerce. Further, responding to the idea of a "defined timeline", MPCA staff agree that an emergency response to a high risk ballast water situation would require a response to remediate the situation on a definable time line. However, the timeline depends on the particular emergency and response needed; it cannot be determined in advance for inclusion in the permit.

7. Section 1.1.27

Comment: The U.S.-flag Great Lakes fleet, operating “lakers”, is by definition confined to freshwater navigation in the Great Lakes system. Section 1.1.27 of the proposed reissuance states that "all vessels entering Minnesota waters shall maintain the ability to measure salinity in each tank onboard the vessel . . ." Though it appears that reference may be intended to be focused on those oceangoing vessels entering the Great Lakes-Saint Lawrence Seaway system from beyond Canada’s and United States' EEZs, without the specific language either clarifying that or expressly excluding lakers, it could catch lakers in an enforcement conundrum for unnecessary reasons.

LCA asks that wording in 1.1.27 be modified to connote that lakers are not included in the requirement to maintain the ability and equipment specific to measuring salinity onboard lakers as defined in the 2013 United States Environmental Protection Agency’s (U.S. EPA’s) Vessel General Permit (VGP):

“Specifically, per the 2013 VGP, Lakers are vessels that operate exclusively in the Laurentian Great Lakes – that is, upstream of the waters of the St. Lawrence River west of a rhumb line drawn from Cap de Rosiers to West Point, Anticosti Island, and west of a line along 63 W. longitude from Anticosti Island to the north shore of the St. Lawrence River.”

This definition aligns with United States Coast Guard (USCG) regulations at 33 Code of Federal Regulations 42.05-40 and concurs with Canadian regulations.

Since U.S.-flag lakers do not navigate beyond the EEZ nor even beyond the line demarcating the Great Lakes, we ask MPCA drop the requirement for “all” vessels having the ability to measure salinity and specifically exclude lakers as defined by U.S. EPA and USCG.

MPCA response: Please see MPCA response # 8 to the Chamber of Marine Commerce.
Comments from the following Minnesota non-governmental organizations referred to as the NGO Group in this letter signed by: A.C.E.S., Alliance for the Great Lakes, Clean Up the River Environment (CURE), Clean Water Action, Environment Minnesota, League of Women Voters-Duluth, League of Women Voters-Minnesota Minnesota Center for Environmental Advocacy, Minnesota Environmental Partnership, Minnesota Trout Unlimited, Pollinator Friendly Alliance, Save Our Sky Blue Waters, WaterLegacy

MPCA staff is responding to the section of the letter entitled, “Actions MPCA should take”.

1. **Establish a Deadline**

   The permit will do little to force the development of technology to allow existing Lakers to meet the ballast water discharge standards. The permit exempts Lakers built before January 1, 2009 from meeting the ballast water treatment requirement until a commercially available and compatible system is available for that vessel. Without an end date or another regulatory mechanism that provides increasing pressure to develop technology to meet the discharge standards, MPCA’s permit cannot be considered to be technology forcing.

   To address this issue, the MPCA should, at the minimum, sunset the option for an exemption for no type approved system available after no later than 10-years from reissuance of the permit. A deadline will establish a clear goal for technology development and meet the technology-forcing requirements of the Clean Water Act.

   **MPCA response:** The draft permit requires that discharge limits be met at the vessel’s next drydock unless the there is no USCG-approved system that can be used on the vessel. MPCA believes this is a deadline. If a BWMS is not able to be used on the vessel, two other requirements are necessary: a demonstration report supporting the contention that a BWMS cannot be installed and a Treatability study to develop systems that can be used on a Laker.

2. **Strengthen Emergency Control of Ballast Water Discharges**

   The MPCA introduced an option for emergency control of ballast water discharges in the 401 certification of the VGP. The organizations are happy to see that this option is also included in the draft permit reissuance. The extremely large volume of high-risk ballast water permittees could potentially discharge necessitates a rapid response procedure. Unfortunately, the current system has not been shown to be effective. It has not been used despite the fact that the current permit requires vessels to provide a 24-hour alert to the state regarding the source of vessel ballast water.

   The draft permit alters the emergency control for ballast water program by removing the 24-hour reporting requirement. The explanation in the factsheet is incomplete and does not give the organizations confidence that the MPCA will receive the information needed, when it is needed, to take protective emergency control actions. The MPCA should alter the draft permit to maintain the reporting requirement and extend it to 48-hours.

   Finally, organizations find it unsatisfactory that the emergency control program has not been used.
Studies show that Lakers are moving non-native aquatic species from port to port, yet none of the nearly 100 Lakers with active permits in Minnesota have ever been required to treat their ballast water before discharging it into Minnesota waters. The emergency control program is only effective if it is used. The MPCA should ensure that the staff and systems are in place to improve the robustness of the emergency control program and use it to protect Minnesota waters.

**MPCA response:** MPCA has the power in statute (Minn. Stat. § 116.11) to declare an emergency situation and take action or compel parties to act. This authority is incorporated into the draft permit. Although the MPCA has not had cause to declare an emergency response to a ballast water discharge, MPCA believes it is important to have the provision in the ballast water discharge permit. As the ability to communicate and to monitor for emergency situations improves, the MPCA and DNR will work with states and the USCG and USGS to implement an emergency declaration when necessary.

MPCA is encouraged that the USGS has initiated a program to track the introduction of invasive species across the Great Lakes and hopes this is the first step to a more comprehensive response to AIS as analytical and monitoring techniques are developed. MPCA determined that the 24-hour notice is unnecessary. In the event of an emergency situation, MPCA is confident that it can quickly contact all permitted vessels to provide direction regarding the emergency situation.

3. **Improve Ballast Water Treatability Study**

The Ballast Water Treatability Study (BWTS) proposed in the permit reissuance appears to be an attempt to compel the regulated industry to accelerate development of technology to treat ballast water discharged to Minnesota waters. However, the organizations expect the study to fall short of this goal if it proceeds as proposed.

Setting a goal to study the deficiencies of current systems runs the risk that a significant amount of time will be spent developing more defensible arguments for continuing exemptions instead of using the opportunity to find solutions that will protect Minnesota’s waters. The study should focus entirely on developing solutions that meet the requirements of the permit.

The Ballast Water Treatability Study (BWTS) should be designed to have more accountability and transparency. The organizations suggest that the following elements be included to result in a more fruitful study. To start, the MPCA should require the formation of a review and oversight board for the BWTS. The review board should:

- ensure the study has clearly understood and agreed-upon objectives;
- ensure fair, unbiased project selection;
- ensure accountability and transparency;
- develop review mechanisms for research projects and study results and ensure that those reviews occur; and
- pursue potential private and public funding.
The BWTS should include a biennial public meeting to update the public on the latest developments and to allow for feedback on the BWTS objectives and projects.

Finally, the BWTS should prioritize pilot studies performed in real operating conditions to fully test the effectiveness of the systems as well as to identify challenges to technologies that would not be identified by bench or laboratory tests.

**MPCA response:** Anything submitted to the MPCA, unless not public under the Minnesota Government Data Practices Act (Minn. Stat. ch. 14), can be requested for review by the public. As Treatability reports are submitted, the MPCA may hold an informational meeting to communicate the findings. At that time, MPCA will review this idea and talk to our partners to determine if a public informational meeting or advisory board would be useful.

Section 1.16 gives vessel owners two options to develop technologies. Both options would need pilot testing before implementation and the requirement was not intended to promote pilot testing for only one of the options. To clarify this, MPCA will modify permit condition 1.1.16 with the following, in italics:

Section 1.1.16 In addition, the Study shall include one or both of the following requirements: a. Permittees shall work with BWMS manufacturers or independently to develop USCG-approved modifications to existing BWMSs or develop and pilot test new BWMSs that are compatible with Great Lakes waters and Laker vessels and are capable of meeting VGP numeric discharge standards; and/or b. Permittees shall work with BWMS manufacturers or independently to pilot test BWMSs to demonstrate the extent of system treatment effectiveness/compatibility with the vessel through actual testing on one or more ballast tanks.

### 4. Do Not Extend Permit Term

The MPCA proposes to extend the permit duration to 10-years. In a more settled situation, a longer permit period may be warranted. However, this is not such a situation and the MPCA should maintain the flexibility to adjust course, if needed, in 5-years.

**MPCA response:** MPCA has the authority to extend SDS permit terms to ten years and believes that makes sense for the ballast water general permit. It should be noted that MPCA can modify the permit if technology and an unforeseen situation arises that makes the permit conditions obsolete or not adequately protective.
5. **Consider Stronger Treatment Standards**

The organizations believe that the discharge standards in the SDS permit are not sufficiently protective. The permit standards are the current International Maritime Organization (IMO) standards set in 2004. However, if vessels meet this standard there is still a risk of introducing AIS to Lake Superior. Less than ten organisms per cubic meter may not sound significant until one considers the sheer volume of ballast water discharged into some ports.

The most important challenge right now is that every permitted vessel use a Ballast Water Management System. The MPCA should not lose sight, though, of the need to consider, at some later date, more protective standards (e.g. the California Ballast Water Discharge Performance Standards California.)

**MPCA response:** As shown in the reports prepared by the 2011 Science Advisory Board (SAB) report, entitled "Availability and Efficacy of Ballast Water Treatment Technology: Background Issue Paper" and as detailed in the MPCA factsheet in 2013, technologies exist to meet the International Maritime Organization (IMO) D-2 discharge standards which are required in this draft permit, but not to meet more stringent standards. The MPCA cannot issue a permit if it does not find that permittees can comply with permit requirements; the MPCA does not have evidence to support more stringent discharge limits at this time and proposes to final issue the permit according to Minn. R. 7001.0140, subp. 1.

**Comments from the Minnesota Center for Environmental Advocacy:**

MPCA is responding to MCEA’s comments directed at the draft permit entitled, “Actions MPCA Should Take”. The remainder of the letter contains the rationale supporting the comments listed in the Actions section.

1. **Actions MPCA Should Take**

MCEA strongly supports several elements of the draft SDS permit reissuance:

- The application of the same standard to all vessels in Minnesota waters regardless of the type of vessel;
- The option for emergency control of ballast water discharges; and
- The requirement for saltwater exchange even after installation of a treatment system.

These are all critical components of the Draft Permit that the final permit should retain.

**MPCA response:** noted
2. **MCEA suggests that the MPCA should modify the permit in the following manner:**

   - 2a. Sunset the option for Lakers constructed before January 1, 2009, to claim an exemption from meeting the EPA Vessel General Permit (VGP) numeric discharge requirements for no type approved system available no later than 10-years from reissuance of the permit;

   **MPCA response:** MPCA relies on the USCG for approval of ballast management systems (BWMS). For that reason, MPCA is seeking to accelerate treatment technology development through the Treatability Study, and timing and installation of BWMSs, but Minnesota must rely on the USCG for approval of these systems. See 46 C.F.R. § 162.060-10. MCEA argues that to be consistent with the Clean Water Act, the permit must be technology-forcing and remedy the deficiencies in the VGP. The comment’s argument does not acknowledge that the permit issued by the MPCA is not an NPDES permit under the Clean Water Act.

   - 2b. Retain the requirement for each vessel entering Minnesota waters to transfer the ballast water report and extend the deadline to 48-hours before arrival;

   **MPCA response:** See MPCA response to comment #2 from the NGO Group comments

   - 2c. Modify the Ballast Water Treatability Study (BWTS) requirement to:
     - Make the goal only to develop systems to meet the requirements of the permit on Lakers constructed before January 1, 2009;

   **MPCA response:** MPCA agrees that the goal of the Treatability Study is to develop a BWMS for Lakers and will add the following language to the draft permit:

   > Section 1.1.14 c. develop a BWMS for Lakers that can meet the VGP discharge limits and obtain type-approval from the USCG.

   - 2d. Add a review board that will:
     - ensure the study has clearly understood and agreed-upon objectives;
     - ensure fair, unbiased project selection;
     - ensure accountability and transparency;
     - develop review mechanisms for research projects and study results and ensure that those reviews occur; and
     - pursue potential private and public funding.

   **MPCA response:** See MPCA response #3 to the NGO Group comments.

   - 2e. Include non-shipboard treatment systems in the study; and

   **MPCA response:** Please see MPCA response #4 to comments to the Alliance for the Great Lakes.

   - 2f. Prioritize pilot studies.
MPCA response: Please see MPCA responses to Comment #3 to the NGO Group comments.

2g. Exemption requests for no current type-approved systems compatible with a Laker built before January 1, 2009, should include a specific and quantifiable need for the exemption and include an engineering report on available technologies;

MPCA response: In the 2013 permit issuance, MPCA included the requirement that permittees must either meet the VGP numeric discharge requirements of demonstrate a lack of compatible USCG type approved BWMSs. MPCA reviewed these demonstration reports that were submitted and reviewed the USCG type approved BWMSs, including the operational limitations that are a part of those type approvals. The demonstration reports included several assumptions of incompatibility that may not currently be adequately quantified (e.g. see section 1.1.15 of the permit). As a result of this documentation, MPCA proposed the Treatability Study for the 2018 permit issuance as a means to better define the shortfalls of existing BWMSs and develop workable BWMSs for the Laker fleet. The MPCA believes that the incompatibility demonstration, working in concert with the Treatability Study, will help to define specific incompatibility issues with existing BWMSs; this information will be valuable for pilot testing. Although MPCA does not necessarily disagree with the commenter’s suggestion to require an engineering report, MPCA believes that the approach taken in the permit is a reasonable alternative by requiring research, testing and pilot equipment installation as part of the Treatability Study.

2h. Maintain the permit term at 5-years; and

MPCA response: Please see MPCA response to comment #2 to the Great Lakes Alliance comments.

2i. Include conditions necessary to achieve compliance with state water quality standards including a WQBEL.

2j. Impose standards more stringent than the IMO Treatment Standards

MPCA response: The narrative restrictions in the permit, in combination with the VGP requirements, are sufficient to ensure that the water quality standards in Minnesota waters of Lake Superior will not be exceeded. MPCA staff also considered numeric Water Quality Based Effluent Limits (WQBELs) when it issued the permit in 2013 and determined it was not feasible. As described in the 2013 Fact Sheet and in the National Research Council (NRC) study from 2011, entitled “Assessing the Relationship Between Propagule Pressure and Invasion Risk in Ballast Water”, there is currently insufficient information to calculate a numeric WQBEL. Since 2013, limited scientific progress has been made on the relationship between concentrations of an individual invasive species and its ability to form a viable community in Lake Superior. Additional study and data collection is necessary to develop a numeric WQBEL. EPA support is necessary to accomplish this research, and it has not been accomplished yet.
3. **Unrelated to the present proposal to modify the permit language, MCEA recommends MPCA take these additional actions:**

- **3a.** Work with the Smithsonian to improve the Nonindigenous Aquatic Species Alert Risk Mapper (NAS ARM) to be more useful for emergency response to high-risk ballast water;

**MPCA response:** This comment is outside the scope of the permit. MPCA will continue to communicate with federal partners, including USGS, USCG, and EPA, that further actions are necessary at the federal level to help Minnesota protect Minnesota waters of Lake Superior.

- **3b.** Ensure that the staff and systems are in place to improve the robustness of the emergency control program and use it to protect Minnesota waters;

**MPCA response:** See MPCA response #2 to the NGO Group comments.

- **3c.** Develop a detailed risk assessment and rapid response process for the emergency control program that includes an evaluation of control measures based upon risk reduction; and

- **3d.** Investigate modifying the discharge standards to be more protective, similar to the California Ballast Water Performance Standards, and to better consider the impact of high-risk species.

**MPCA response:** Since vessels carry and discharge ballast water across the Great Lakes, MPCA must rely on the EPA and USCG to conduct research across the Great Lakes to be able to have information on propagule pressure in order to conduct a risk assessment or to consider a valid WQBEL. Data collection to support a risk assessment of AIS in waterbodies throughout the state is outside the scope of the draft permit. MPCA has long maintained a preference and support for the federal government to lead in conducting research and proposing Great Lakes-wide standards that would be protective of Minnesota waters. We will continue to do so. Please also see MPCA response to comment #5 from the NGO Group comments.