



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JAN 24 2014

OFFICE OF  
WATER

Donald R. Schregardus  
Deputy Assistant Secretary of the Navy (Environment)  
Office of the Assistant Secretary of the Navy (Energy, Installations, and Environment)  
1000 Navy Pentagon  
Washington, DC 20350-1000

Dear Mr. Schregardus:

The Environmental Protection Agency (EPA) has been evaluating the provisions of the Marine Protection, Research, and Sanctuaries Act (MPRSA) general permit for the Sinking Exercise (SINKEX) program conducted by the Department of the Navy (Navy). The general permit is captioned "Transport of Target Vessels" and is published at 40 C.F.R. 229.2 (Permit). SINKEX involves the targeting and sinking of obsolete Navy vessels in ocean waters for ship survivability or weapons lethality evaluation, major joint or multi-national exercises, or the evaluation of significant new multi-unit tactics or tactics and weapons combinations. The Navy's conduct of the SINKEX program is subject to the Permit.

Polychlorinated biphenyls (PCBs) were raised as an issue in the late 1980s, when they were found to be present in certain solid shipboard materials on SINKEX vessels. Potential shipboard materials that could contain PCBs include, but are not limited to, insulation, wires, felts, and rubber gaskets; a more extensive list is provided in Attachment 1. By letter dated August 2, 1999 (1999 Letter), from EPA's Robert H. Wayland III to Navy's Elsie Munsell, EPA interpreted the Permit's requirements applicable to PCBs and the manner in which the Navy would proceed with SINKEX activities under the Permit. At that time, EPA affirmed that SINKEX operations could continue under the Permit and its requirements, including those related to PCBs as described in the 1999 Letter, the terms and conditions of which were accepted by Navy the same day.

MPRSA section 104(d) directs EPA to periodically review, and if appropriate, revise permits issued under the MPRSA. EPA has recently conducted such a periodic review focused on the Permit's provisions applicable to SINKEX vessel preparation, specifically the PCB-related requirements as interpreted in the 1999 Letter. EPA also reviewed the Navy's verification and reporting of SINKEX vessel preparation activities.

Upon review, EPA has determined that the activity authorized under the Permit for the SINKEX program conducted by Navy does not pose an unreasonable risk of injury to human health or the environment. Based on further review of available data and advancements in technology since the 1999 Letter, EPA has determined that additional clarification of the Permit's requirements will ensure the continued protection of human health and the environment, while also providing greater transparency regarding SINKEX vessel preparation and Navy's subsequent verification and reporting. Today's Determination and Agreement clarifies EPA's interpretations of the Permit, and also identifies Navy's specific agreements related to SINKEX vessel preparation, the removal of PCBs, and the documentation of each, when Navy conducts future SINKEX activities under the Permit. SINKEX operations may continue in accordance with the requirements of the Permit, including the clarifications discussed below. Today's Determination and Agreement supersedes the 1999 Letter.

### **Verification of Navy SINKEX Process**

- 1) SINKEX vessels include, but are not limited to, destroyers, tenders, cutters, frigates, cruisers, tugs, and amphibious and transport ships. Navy agrees that SINKEX vessels will not likely, in the future, include aircraft carriers or submarines. Additionally, consistent with the assumptions that Navy employed for the 1994 "modeling study" to assess the risks associated with PCBs remaining on SINKEX vessels, Navy agrees that future SINKEX vessels will not include PCBs in amounts that exceed the worst-case estimate of 100 pounds of PCBs remaining onboard. If a vessel required for a critical weapons testing or ship survivability exercise contains more than 100 pounds of PCBs, which cannot be reduced below the 100 pounds threshold or removed without damaging the integrity of the ship, Navy agrees to apply for a special permit under the MPRSA.
- 2) Navy agrees to provide to EPA notice of SINKEX vessel selection approvals. Navy agrees to provide EPA with this information no later than 90 days after such selection approvals have been made. EPA may request additional follow-up information. Navy agrees to respond to follow-up information requests from EPA within 30 days of receipt.
- 3) Prior to each future SINKEX activity, but no later than 45 days prior to the SINKEX activity, the Navy agrees to provide electronic notification to EPA's Director of the Oceans and Coastal Protection Division the following:
  - a. SSINKEX vessel name,
  - b. SSINKEX vessel class,
  - c. SSINKEX vessel tonnage,
  - d. location of SINKEX vessel,
  - e. Sestimated weight of PCBs (based on potential PCB-containing shipboard materials as listed in Attachment 1) to remain on board the SINKEX vessel,
  - f. description of efforts taken to clean the SINKEX vessel prior to a SINKEX activity, and
  - g. Sestimated number and types of shipboard materials that may contain PCBs (based on potential PCB-containing shipboard materials as listed in Attachment 1) to be removed and estimated weight of PCBs in these materials, if known.

4) Navy agrees to develop implementation procedures consistent with the requirements of the Permit and interpretation in this Determination and Agreement within one year of the dated signatures of today's Determination and Agreement, and provide an electronic copy of these procedures to the EPA's Director of the Oceans and Coastal Protection Division.

#### **SINKEX Vessel Preparation Requirements Relating to PCB Removal under Permit**

The Permit for SINKEX requires that appropriate measures be taken to remove, to the maximum extent practicable, all materials that may degrade the marine environment (40 CFR 229.2(a)(4)). The requirements described below for SINKEX vessel preparation related to PCBs are practicable and appropriate measures to remove materials that may degrade the marine environment. Therefore, SINKEX vessel preparation according to the provisions below is required by the Permit. The Permit requires that:

5) Before engaging in a SINKEX activity, Navy must conduct a PCB survey and sampling of each SINKEX vessel to ascertain the possible presence of PCBs in shipboard materials, as well as the presence of liquid PCBs. When preparing the PCB survey and sampling plan, refer to Attachment 1 for a list of shipboard materials that may contain PCBs onboard Navy vessels proposed for SINKEX. Based on the data provided to EPA in the past, EPA anticipates that some potential PCB containing shipboard materials will already have been removed prior to vessel preparation.

a. Before sinking a SINKEX vessel, qualified personnel at a Navy or other certified facility must take appropriate measures to remove all transformers containing 3 pounds or more of dielectric fluid and all capacitors containing 3 pounds or more of dielectric fluid and to drain and flush hydraulic equipment, heat transfer equipment, high/low pressure systems, cutting power machinery that uses cooling or cutting oil, and containers containing liquid PCBs, regardless of concentration. In addition, such personnel must make reasonable efforts to remove capacitors and transformers containing less than 3 pounds of dielectric fluid from the vessel. Reasonable efforts include, but are not necessarily limited to, the removal of such capacitors from electrical and control panels by using hand tools, such as wire or bolt cutters, screw drivers, and wrenches, as well as hand-held battery-operated power tools, such as reciprocating saws and drills or electric screwdrivers.

b. Before sinking a SINKEX vessel, qualified personnel at a Navy or other certified facility must take appropriate measures and make reasonable efforts to remove all readily detachable shipboard materials that deliberately or unintentionally contain any PCBs (see Attachment 1) capable of creating debris or contributing to chemical pollution. Reasonable efforts include, but are not necessarily limited to, use of hand tools, such as wire or bolt cutters, screw drivers, hand-held scrapers, and wrenches, as well as hand-held battery-operated power tools, such as electric screwdrivers.



c. Before the sinking of a SINKEX vessel, the Navy, however, is not required to remove shipboard materials containing PCBs that cannot be practicably removed or their removal will threaten the structural integrity of the vessels so as to impede the SINKEX (e.g., removal of materials mounted under heavy equipment). Navy may leave such shipboard materials in place. If removal of shipboard materials containing PCBs would require heat, chemical stripping, abrasive blasting, or if removal would endanger human safety or health, even when conducted with protective equipment and reasonable safety measures, Navy may leave these shipboard materials in place.

6) Navy shall dispose of all removed PCBs or shipboard materials containing PCBs in accordance with the Toxic Substances Control Act PCB regulations.

#### **Pre-sink SINKEX Vessel Preparation Verification**

7) Navy agrees to provide the opportunity to representatives of EPA to conduct a vessel walkthrough. Navy agrees to provide EPA access to the SINKEX vessel and the supporting area, as well as access to records, reports, data, schedules, or other documents related to today's Determination and Agreement, to verify completion or conduct of actions taken by Navy or agreed to by Navy in this Determination and Agreement.

#### **Post-sink SINKEX Vessel Information to submit to EPA**

8) Navy must report annually to EPA:

- a. Sdocumentation regarding efforts taken to clean each vessel prior to a SINKEX activity; amendments to documentation as provided in section 3 should be clearly identified;
- b. Sdocumentation regarding estimates of the weight of PCBs (based on potential PCB-containing shipboard materials as listed in Appendix 1) remaining on board at the time of sinking; amendments to documentation as provided in section 3 of this Determination and Agreement should be clearly identified;
- c. Sestimated number and types of shipboard materials that may contain PCBs (based on potential PCB-containing shipboard materials as listed in Attachment 1) removed and calculations with supporting information (including the results of the PCB sampling conducted) used to estimate the total weight of PCBs in these materials, if known; amendments to documentation as provided in section 3 of this Determination and Agreement should be clearly identified;
- d. Scalculations and supporting information (including the results of the PCB sampling conducted) used to estimate the total weight of non-liquid PCBs remaining onboard the SINKEX vessel; calculations will be presented based on potential PCB-containing shipboard material as listed in Attachment 1;
- e. Slocation of all SINKEX vessels sunk that year, presented as the vessels' location on the bottom within 500 yards; and
- f. S water depth at which the vessel rests.

A copy of the annual report must be submitted electronically to EPA's Director of the Oceans and Coastal Protection Division by February 1 of each year, covering the previous calendar year's SINKEX activities. EPA will make these reports publically available at the conclusion of our review.

Consistent with today's Determination and Agreement, SINKEX operations may continue in compliance with the Permit, including the SINKEX vessel preparation and documentation related requirements described above. We are pleased to be working with the Navy on the importance of Permit rigor and transparency. Please feel free to contact David Redford, Chief of the Marine Pollution Control Branch (202-566-1288), if you or your staff have any questions regarding the above requirements.

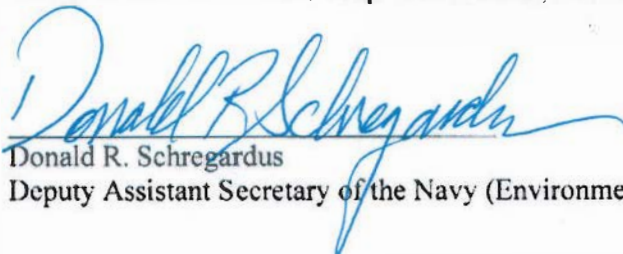
Sincerely,



Benita Best-Wong  
Director  
Office of Wetlands, Oceans, and Watersheds

Attachment

The terms and conditions, as specified herein, have been accepted by:



1/27/2014

Donald R. Schregardus  
Deputy Assistant Secretary of the Navy (Environment)

**Attachment 1. *Potential PCB-Containing Shipboard Materials that May Be Onboard Navy Vessels Proposed for SINKEX***

*Examples of Shipboard Materials that could contain solid PCBs*

- Cable insulation
- Rubber and felt ventilation gaskets
- Thermal insulation material
- Double backed adhesives and tapes
- Paint (aluminized)
- Rubber products including rubber isolation mounts, rubber gaskets, foundation mounts, pipe hangers

*Examples of Shipboard Materials that could contain liquid PCBs*

- Oils, greases, and lubricants, including drained electrical equipment:
  - ✓ Oil used in electrical equipment such as capacitors, transformers, rectifiers, motors, anchor windlasses, hydraulic systems, and vacuum pumps
  - ✓ Cutting oil
  - ✓ Heat transfer fluids
  - ✓ Air compressor lubricants