A Sinking Ship: EPA Regulation of the Navy Training Program SINKEX under the Ocean Dumping Act and the Toxic Substances Control Act

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A SINKING SHIP: EPA REGULATION OF THE NAVY
TRAINING PROGRAM SINKEX UNDER THE OCEAN
DUMPING ACT AND THE TOXIC SUBSTANCES
CONTROL ACT

Laura Zippel

ABSTRACT: The EPA currently regulates the Navy program Sink Exercise (SINKEX) under a permit issued under the Ocean Dumping Act. The Navy regards SINKEX as both a “live fire exercise,” important for the training of sailors in tactics and operations, and as a ship disposal program. Due to the toxic materials used to construct the derelict ships—including PCBs, asbestos, and lead—a case was filed in San Francisco District Court alleging that the EPA is required to regulate and permit SINKEX under the Toxic Substances Control Act (TSCA). This comment addresses the complexities arising from EPA permitting of SINKEX, including a comparison of the Ocean Dumping Act with the TSCA, military waivers and exemptions present in both statutes, and a discussion of possible interagency cooperation and enforcement measures this may implicate. This comment concludes that the most effective method for disposing of derelict ships while maintaining environmental and human health as well as national security is legislative reform and an increased budget for disposal.

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I. INTRODUCTION

The U.S. Navy has a ship problem—a problem of old, derelict ships constructed with hazardous materials such as polychlorinated biphenyls (PCBs), asbestos, and lead. The Navy also has a disposal problem. Many of these ships are floating in inner harbors leaching chemicals into waters close to shore, presenting a health hazard to nearby communities.

One way the Navy disposes of these ships is to use them as target practice in a program called Sink Exercise (SINKEX). In this program, the Navy tows the derelict ships out to the ocean and sinks them in “live fire exercises.” The Navy primarily classifies the program as a live training program that helps not only tactical and operation training but also “weapons effect testing” and future ship construction. Therefore, the program can be regarded as important to the protection of national security as well as a means of ship disposal.

The Environmental Protection Agency (EPA) regulates the Navy’s activities during SINKEX through a general permit issued under the Marine Protection Research and Sanctuaries Act, also known as the Ocean Dumping Act. When originally

2. Id.
4. Id.
5. Id.
6. The navy describes the objective of the program as “[supporting fleet readiness and training of the active duty Navy personnel by providing environmentally clean target ships for at-sea live-fire exercises.” Id.
enacted, the Ocean Dumping Act replaced common law and state actions, becoming the main statute regulating the dumping and transport of materials in and through the U.S. coastal and territorial waters making it the legislative structure for EPA regulation of SINKEX.8 Due to the toxic materials used in the construction of the derelict Navy ships—such as PCBs, asbestos, and lead—the EPA could also arguably be required to regulate the program under the Toxic Substances Control Act (TSCA).9 The TSCA deals primarily with the regulation of toxic materials in all stages of the manufacture of goods, including their disposal.10 Regardless of Navy objectives, SINKEX is a disposal operation as well as a training operation, making the TSCA a relevant regulatory framework.11

The marine pollution caused by SINKEX brings to the surface a common clash between often conflicting public goods, the protection of the environment, human health, and the United States' national security.12 Although both wish to promote the public good, the EPA and the Navy have fundamentally different primary missions and differ in their understanding of the SINKEX program.13

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13. See Jones Letter, supra note 8; Wayland Letter, supra note 1; SEA 21, supra
The EPA’s purpose in regulating SINKEX is the protection of human health and the environment. Therefore, the EPA is concerned less with the actual nature of the training exercise than with the towing and disposal of the ships in the ocean. In contrast, the Navy’s goal with the program is to promote the readiness of its fleet through training, weapons development, and ship design. Therefore, the Navy is less concerned, at least in their core purposes, with the disposal of the ships and the environmental hazard they pose. The clash between what each agency views as a public good is important because it highlights deficiencies in our statutory, regulatory, and judicial frameworks in addressing inter-agency conflicts of interest.

This comment will explore how the EPA is caught between complying with statutory requirements under the Ocean Dumping Act and the TSCA, as well as the limitations on its enforcement mission caused by the Navy’s national defense mission. Part I of this comment details the history and impact of both SINKEX and PCBs domestically. Part II outlines the relevant part of both the Ocean Dumping Act and the TSCA. It also explores the potential use of military waivers present in both Acts and argues that they should not apply in the context of SINKEX. Part III argues that the EPA, even if able to permit the Navy under the TSCA, needs political backing in able to enforce a stricter permit on the Navy unless a citizen suit forces Navy compliance. Part IV highlights how difficult it is to ensure—without higher level political cooperation—the inter-agency cooperation that will benefit both the public good of national security and the public good of environmental and human health.

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15. See Jones Letter, supra note 8.
17. The Navy is aware of the environmental concerns, see, e.g., the Navy description of SINKEX as “[s]upporting fleet readiness and training of the active duty Navy personnel by providing environmentally clean target ships for at-sea live-fire exercises” (emphasis added), SEA 21, supra note 3; SINKEX DISPOSAL, supra note 16; Wayland Letter, supra note 1.
A. The History and Impact of SINKEX

After the Berlin Wall fell in 1989 and the Cold War ended, the Navy, faced with decreased need and budget reductions, moved from aggressively building ships to downsizing.\(^\text{18}\) Prior to 1989, the Navy disposed of the retired ships using SINKEX without official knowledge of the presence of PCBs onboard the sunken ships.\(^\text{19}\) SINKEX drills typically occurred in water greater than 3000 meters, but there were occasional incidents where the ships sank in as little as 600-1000 meters.\(^\text{20}\)

In 1989, the Navy voluntarily suspended SINKEX due to the discovery of PCBs onboard the ships.\(^\text{21}\) At the time, the Navy and the EPA had no concrete studies on the effects of the PCBs and the rate at which the PCBs were contaminating the surrounding waters.\(^\text{22}\) In the 1990s, the Navy turned to other sources for dismantling the ships, including domestic scrapping programs and international scrapping programs in India and Bangladesh.\(^\text{23}\) International scrapping proved problematic after the EPA created regulations restricting the condition of the ships before they could be towed internationally for fear of the ships leaking toxins and oil into the ocean.\(^\text{24}\) Meanwhile, domestic scrapping programs were expensive and of limited availability.\(^\text{25}\) The U.S. ship dismantling industry was hampered by workplace and environmental regulations due to the hazardous waste in the ships.\(^\text{26}\) Thus, the Navy was left with fleets of ships posing environmental risks that it did not have the budget or means to scrap.\(^\text{27}\)

SINKEX was reinstated in part to dispose of the ships in

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19. RISK ASSESSMENT OF THE POTENTIAL RELEASE OF PCBS AND OTHER CONTAMINANTS FROM SUNKEN NAVY SHIPS IN THE DEEP OCEAN: EX-AGERHOLM CASE STUDY 1-1 (March 2006) [hereinafter EX-AGERHOLM CASE STUDY].

20. Id.
21. Id.
22. Id.
23. Luster, supra note 18, at 82.
24. Id.
25. Id.
26. Id.
27. Id.
what the Navy deemed a cost effective and useful manner. The Navy and the EPA came to an agreement in which the Navy was exempted from regulation under the TSCA and issued a permit under the Ocean Dumping Act so long as the Navy agreed to strip the ships of all liquid PCBs and oil before sinking them. The Navy then reinstated SINKEX under a general permit, codifying the agreement promulgated by the EPA. To date, with 117 ships sunk, there is no evidence that the Navy has violated the general permit, although there continues to be questions regarding the accuracy of Navy reporting of the true hazards associated with the program.

In 2011, the Chief of Naval Operations announced that the Navy would sink three inactive warships towed from California to waters off Hawaii as part of the Rim of the Pacific war games in the summer of 2012, increasing the number of ships sunk since 1999 to 117. In response, the Basel Action Network, the Center for Biological Diversity, and Earthjustice filed a petition against the EPA to compel rulemaking under the TSCA. When the EPA rejected the petition, the petitioners filed suit in federal district court in San Francisco, alleging that the EPA was violating the TSCA with their dismissal of the petition. This case, for the first time, shifted the focus from the Ocean Dumping Act to the TSCA in regards to programs like SINKEX. Traditionally, the Ocean Dumping Act...
Act was the primary statute regulating disposal at sea.\textsuperscript{36} This case raises the unique argument that other statutes, such as the TSCA, may provide additional safeguards for ocean dumping that are more restrictive than the often-amended Ocean Dumping Act.\textsuperscript{37}

B. The History and Impact of PCBs on the Marine Environment and Human Health

PCBs are synthetically manufactured chemicals that belong to the chlorinated hydrocarbon family of chemicals.\textsuperscript{38} They have a high boiling point, are chemically stable, and have low electrical conductivity.\textsuperscript{39} These qualities made them widely used in a variety of manufactured goods including electrical equipment, hydraulic equipment, paints, plastics, and even copy paper.\textsuperscript{40} PCBs were domestically manufactured in the U.S. from 1929 until their manufacture was prohibited under the TSCA in 1979.\textsuperscript{41} PCBs do not dissolve or break down easily, allowing them to be carried long distances and cycle between air, water, and soil.\textsuperscript{42} The more heavily chlorinated the PCBs are, the longer they persist in the environment.\textsuperscript{43} Additionally, PCBs rarely dissolve in the ocean, have a tendency to absorb sediments and organic particulate matter, 

\textsuperscript{36} “The MPRSA has had more influence on restricting ocean dumping practices than any other statute; thus it deserves considerable attention.” Steven V. Moore, \textit{Troubles in the High Seas: A New Era in the Regulation of U.S. Ocean Dumping}, 22 \textit{ENVTL. L.} 913, 928 (1992).

\textsuperscript{37} \textit{Id.}


\textsuperscript{40} Trost, supra note 39, at 118; \textit{Basic Information: Polychlorinated Biphenyl (PCB)}, supra note 39.

\textsuperscript{41} \textit{Id.}

\textsuperscript{42} \textit{Id.}

\textsuperscript{43} MONITORING REPORT, supra note 38, at 11.
and can accumulate in lipid-rich fatty tissues of organisms, making them transferable up the marine food chain. The EPA notes that PCBs “can be carried long distances and have been found in snow and sea water in areas far away from where they were released into the environment.” Scientific studies have shown that PCBs are harmful to humans even at low levels. Exposure to PCBs has been linked to a wide range of adverse health problems including cancer, birth defects, disfiguring skin conditions, eye disorders, and reproductive failure. In addition to negative impacts on human health, PCBs negatively impact aquatic life. Studies show that PCBs can impair reproductive function and survival rates in organisms from unicellular phytoplankton to fish, birds and larger mammals. Because PCBs easily enter the environment and are transferred great distances, the introduction of large quantities of them through SINKEX to the marine environment is problematic both to human health and marine environmental health.

PCBs in the Navy ships used in the SINKEX program are primarily found in insulation materials such as fiberglass, felt, foam, and cork. Other sources of PCBs include paint, electrical insulation, hydraulic systems, motor systems, transformers and capacitors, caulking materials, and other adhesives such as tape and plastics. Since some of these materials are part of the structural stability of the ships, the Navy is unable to strip all the PCBs before towing the ships out to sea for sinking. As stated above, PCBs do not readily break down in a natural environment and can travel great distances through water and air.

44. Id.
45. Basic Information: Polychlorinated Biphenyl (PCB), supra note 39.
46. MONITORING REPORT, supra note 38, at 12.
47. Additionally these affects are not limited to sensitive populations but can affect anyone exposed. Trost, supra note 39, at 118; Health Effects of PCBs, EPA WEBSITE, http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/effects.htm (last visited Nov. 23, 2013).
48. MONITORING REPORT, supra note 38, at 12; Trost, supra note 39, at 118.
49. Trost, supra note 39, at 118.
50. Id.
51. Id.
52. MONITORING REPORT, supra note 38, at 15.
53. Basic Information: Polychlorinated Biphenyl (PCB), supra note 39.
By sinking these ships, which can cause the PCBs to leach into the marine environment, there is a possibility that the Navy is increasing the PCBs found in the fish eaten all over the United States. PCBs can travel through marine environments by systems such as upwelling, biographic transport, and meridional circulation. Once spread out, they are often stored in the fatty tissues of fish commonly consumed by humans, such as snapper. By sinking these ships, the Navy is increasing the PCB exposure in the United States, potentially harming not only the marine environment but also the human populations the Navy is safeguarding militarily.

In 2011, a report was compiled in Florida that showed just how fast and in what quantities PCBs could leach into the surrounding marine environment from the sunken ships. In a program similar to SINKEX the Navy began to sink ships for artificial reef development (REEFEX). Before the Navy was allowed to sink ships for REEFEX programs, the EPA, acting under statutory requirements of the TSCA, required a finding of “no unreasonable risk of injury to human health and the environment.” In order to determine if sinking a ship close to

54. Upwelling occurs when winds blow perpendicular to the coastline pushing surface water away from the shoreline to be replaced by cold, nutrient rich water from deeper layers of the Ocean. This is particularly notable on the west coast of the U.S where the coastline is oriented North-South. Dr. Steve Gaines, Dr. Satie Airame, Upwelling, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, http://oceanexplorer.noaa.gov/explorations/02quest/background/upwelling/upwelling.html (last visited Nov. 23, 2013).

55. Biographic Transport occurs through the food chain where smaller organisms are eaten by larger ones. The larger organisms thus accumulate toxins in their fat stores making them dangerous for human consumption. In addition, the types of PCBs that accumulate in fish tissues are the PCB mixtures most potentially carcinogenic to humans. MONITORING REPORT, supra note 38, at 12.


57. MONITORING REPORT, supra note 38, at 12.

58. Id.

59. SINKEX DISPOSAL, supra note 16.

60. MARINE ENVIRONMENTAL SUPPORT OFFICE SPAWARSYSTEMS CENTER, EX- ORISKANY ARTIFICIAL REEF PROJECT ECOLOGICAL RISK ASSESSMENT 2-1 (January
shore for REEFEX would harm human health or the environment, the Navy completed an ecological risk assessment and a human health risk assessment on previously sunk ships which were used to create a risk assessment model showing the potential release of PCBs from future artificial reefs made from Navy ships.61

In 2006, the Navy conducted an environmental assessment prior to sinking the ex-ORINSKANY off the coast of Florida for the REEFEX program.62 The assessment stated that although the ship still contained anywhere from 327.79 kilograms (kg) to 608.85 kg (134.3 lbs to 722.7 lbs) of PCBs on board, as well as numerous other toxins, the toxins would have a negligible impact on the surrounding marine environment.63 The EPA mandated the Florida Fish and Wildlife Conservation Commission (FWC) to monitor the ex-ORINSKANY for signs that the toxins (specifically PCBs) were leaching into the marine environment.64 In 2008, the FWC reported that toxins were entering the marine environment and creating unsafe human consumption levels of PCBs in fish.65 In response to the report, the U.S. Maritime Administration (MRAD) effectively ended artificial reefing projects.66 SINKEX, however, continues to operate and deposit large amounts of PCBs into the marine environment.67

II. STATUTORY AND REGULATORY CONTROL OVER SINKEX

Two statues potentially apply to SINKEX—the Ocean Dumping Act and the TSCA.68 The Ocean Dumping Act has been, and continues to be, the primary statutory authority the

61. Id.
62. Id.
63. See id. at 1-1, 1-3.
64. MONITORING REPORT, supra note 38, at 9.
65. See id. at 13; PETITION TO EPA, supra note 9, at 12.
66. See U.S. Government Ends the Sinking of Old Ships as Artificial Reefs: Green Groups Claim Victory, Call to End SINKEX, supra note 32.
67. Id.
68. PETITION TO EPA, supra note 9, at 22.
EPA uses to regulate the transportation and dumping of material at sea. 69 The TSCA has primarily been used by the EPA to regulate PCBs and other toxins ashore. 70 Compared to the Ocean Dumping Act, the TSCA has stricter requirements as to the disposal of PCBs and if applied could require the EPA to reduce the amount of PCBs on the ships while sunk through programs like SINKEX.

A. Marine Protection Research and Sanctuaries Act (Ocean Dumping Act): The Primary Statutory Control Over Ocean Dumping

The Ocean Dumping Act was passed in 1972 and sought to reduce industrial and municipal waste dumping in connection with the Clean Water Act. 71 It contains three titles: the first concerns the transportation of material and the dumping of that material into the ocean; the second provides for research programs; and the third calls for the Secretary of Commerce to create ocean sanctuaries to preserve and restore marine areas. 72 When passed, the Ocean Dumping Act displaced both federal common law—such as nuisance actions—and various state claims, primarily statutes pertaining to the dumping and transport of materials off the U.S. coastline and in territorial waters. 73

The EPA has considerable discretion under the Ocean Dumping Act when making permit decisions. The EPA’s discretion extends to various forms of ocean dumping except for “radiological, chemical, and biological warfare agents, high-level radioactive waste, and medical waste,” which have stricter requirements under the statute. 74 When making permit decisions, the EPA is required to consider the need for the proposed dumping, the effect of the dumping on human health and the environment, the effect on fisheries resources, the effect on marine ecosystems, the permanence of the effects

69. See Middlesex Cnty. Sewerage Auth. v. Nat’l Sea Clammer’s Ass’n, 453 U.S. 1, 21 (1981); Rodgers, supra note 8, at § 4:34.


71. Rodgers, supra note 8, at § 4:34.

72. Id.

73. See Middlesex, 453 U.S. at 21; Rodgers, supra note 8, at § 4:34.

of the dumping, the volume and concentration of the material
being dumped, the appropriateness of dumping and
alternatives including land based alternatives, and the
dumping’s effects on other uses for the ocean such as resource
exploitation and research. As part of these considerations,
the EPA promulgated regulations defining materials that
would be given permits based on the environmental impact.
Permits which do not meet the environmental criteria set forth
in the EPA’s own regulations will be denied with no discretion
given to the EPA Administrator. However, the environmental
criteria leaves the agency with considerable discretion, stating
that there need be no “unacceptable adverse effects” on human
health, marine resources, marine ecosystem, or other uses of
the ocean.

The EPA’s broad discretion was confirmed in National
Wildlife Federation v. Costle, a case challenging the EPA’s
less stringent environmental standards for the dumping of
dredged material compared with nondredged material. The
court stated, “[t]he [Ocean Dumping] Act gives unqualifiedly
broad authority to the Administrator to weigh and consider the
evaluation factors” and there is no indication that “Congress
intended to limit the Administrator’s discretion.” Although
this decision is based on the EPA’s ability to define its own
criteria under the Act, it also suggests that the EPA’s
interpretation of its criteria would be respected in light of its
expertise.

In National Wildlife Foundation, the Court focused on the
agency’s expertise in the area of ocean pollution as well as
Congress’s intent to give the EPA broad discretion. The
Supreme Court in 1984 confirmed that federal courts should
deferr to agency expertise in Chevron v. Natural Resources
Defense Council. After Chevron, the Supreme Court

75. Id.
77. Id. § 227.3 (2013).
78. Id. § 227.4 (2013).
79. 629 F.2d 118 (D.C. Cir. 1980).
80. Id. at 132.
consider alternatives when giving out dumping permits under their own regulations).
to agency interpretation of statutes see Evan J. Criddle, Chevron’s Consensus, 88
continued to support broad discretion to agency interpretation of statutes as well as the agency’s own regulations. In Auer v. Robbins, the Court affirmed that agency interpretation of its own regulations should be given deference: “Because the salary-basis test is a creature of the Secretary’s own regulations, his interpretation of it is, under our jurisprudence, controlling unless ‘plainly erroneous or inconsistent with the regulation.’” Therefore, although National Wildlife Foundation was decided before Chevron and Auer, it is in line with the direction the Supreme Court has been trending, suggesting that the EPA will be given broad discretion in applying the Ocean Dumping Act’s environmental criteria so long as it is not “plainly erroneous or inconsistent with the regulation.”

B. The Toxic Substances Control Act’s Stricter Limits on PCB Disposal

Congress passed the Toxic Substances Control Act (TSCA) in 1976 to address the dangers toxins pose both to both human health and the environment. Upon passage, the TSCA became part of the federal patchwork of statutory and regulatory authority—including the Clean Air Act, Clean Water Act, and Occupational Safety and Health Act—aimed to address environmental concerns. The TSCA has a broad scope both because of the definitions of chemical substances in the Act as well as the long reach of the statute from the manufacture to the disposal of materials. The TSCA’s wide-range coverage of chemical substances makes it a versatile statute for the EPA, making it applicable to programs like SINKEX that might already be permitted under other


84. Auer, 519 U.S. at 461 (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 359 (1989)).

85. Id.

86. Markell, supra note 70.

87. Id. at 337.

88. Id. at 351.
The TSCA was specifically designed out of the need to protect human health, leading Congress to delegate powers to the EPA to prevent harmful chemicals from not just being released into the environment, but also from being created in the first place. Under the TSCA, the EPA established a registry of all chemicals processed or manufactured in the U.S. and was delegated the authority to ban or restrict a chemical’s manufacture, use, transport, and disposal. Any new chemical substance must first be approved by the EPA. The manufacturer of the chemical bears the burden of proof to prove that the chemical is safe and to defend any potential risk. The Act therefore sets up strict standards governing the manufacture, use, and disposal of all chemicals in the U.S. making it an extremely powerful statutory tool in the regulation of toxic substances, such as those on the Navy ships.

The TSCA not only gives broad powers to the EPA; it also has specific sections and statutory mandates focusing on particularly harmful chemicals. In particular, PCBs are a focus of the statute. Under §2605(e), by 1977 the EPA was required to ban the “manufacture, process, or distribute in commerce or use any polychlorinated biphenyl in any manner other than in a totally enclosed manner.” The only exception to this provision is if the EPA determines that a particular use “will not present an unreasonable risk of injury to health or the environment.” The act defines “totally enclosed manner” as meaning “any manner which will ensure that any exposure of human beings or the environment to a polychlorinated biphenyl will be insignificant as determined by the Administrator by rule.”

89. Id.
90. Id. at 365.
92. Id. § 2604 (2012).
93. Id. § 2603 (2012).
95. Id. § 2605(e), (f) (2012).
96. Id. § 2605(e)(2)(A) (2012).
97. Id. § 2605(e)(2)(B) (2012).
98. Id. § 2605(e)(2)(C) (2012).
Following the passage of the TSCA, the EPA almost fully prohibited PCBs in the U.S. The EPA promulgated regulations specifically prohibiting the manufacture, sale, distribution, and export of items containing PCBs under fifty parts per million (ppm) in concentration unless the items were manufactured, sold, distributed, or exported in a “totally enclosed manner” as required by the Act. These items include a laundry list of “dielectric fluids; solvents; oils; waste oils; heat transfer fluids; hydraulic fluids; paints or coatings; sludges; slurries; sediments; dredge spoils; soils; materials containing PCBs as a result of spills; and other chemical substances or combinations of substances, including impurities and byproducts and any byproduct, intermediate, or impurity manufactured at any point in a process.” Certain items containing PCBs over fifty ppm are prohibited under the regulation, based on their impact to human health and the environment. The regulations specifically provide that “totally enclosed” items include “intact, nonleaking electrical equipment.” The EPA’s regulations make it clear that a failure to comply could lead to civil and criminal penalties.

Subsection D of the regulations covers the storage and disposal of PCB items. This section requires that PCB liquids, PCB articles, and PCB containers all meet specific storage and disposal requirements. Liquids with concentrations greater than 500 ppm must be disposed of in an incinerator. Conversely liquids with concentrations between fifty ppm and 500 ppm can be disposed of in a high efficiency boiler, or in the case of incidental source liquids in a chemical landfill. Materials containing PCBs must generally

100. Id. § 761.20(a) (2012); see also 15 U.S.C. § 2605 (e)(2)(C).
102. Id. § 761.20.
103. Id.
104. Trost, supra note 39, at 120.
105. 40 C.F.R. § 761.60(a) (2013).
106. Id. § 761.60(b).
107. Id. § 761.60(c).
108. Id. § 761.60(a)(1), (2).
109. For boiler requirements see Id. § 761.71(a), (b).
110. Id. § 761.60(a)(3) (2012). For regulations on chemical landfill requirements see 40 C.F.R. § 761.75 (2012).
be disposed of in an incinerator\textsuperscript{111} or chemical landfill\textsuperscript{112} except for specific items such as natural gas pipelines that may be “abandoned” or removed to regulated solid waste disposal facilities\textsuperscript{113}. However, under Subsection (e), the EPA can authorize alternative disposal methods after a written request is submitted with evidence that the method of disposal will not “present an unreasonable risk of injury to health or the environment.”\textsuperscript{114} Based on the detailed regulations promulgated by the EPA, as well as the language in the TSCA, it is clear that the TSCA specifically regulates PCBs and PCB disposal. Therefore, there is a strong argument that the TSCA does specifically apply to SINKEX, as the ships contain levels of PCBs defined as dangerous to human health and the environment by the EPA\textsuperscript{115}.

If the EPA either denies a permit or fails to respond, the TSCA allows for citizen petitions and enforcement unless the EPA has a current regulation or permit on a particular substance\textsuperscript{116}. The citizen suit provision regarding rulemaking in the TSCA is somewhat unique in that it requires a de novo standard of review by the court\textsuperscript{117}. The de novo standard precludes the traditional deference given agencies under the Administrative Procedure Act (APA), leaving the court more freedom to interpret the application of the statute\textsuperscript{118}. In doing so, it also cuts petitioners off from utilizing both the de novo standard and an APA standard\textsuperscript{119}. Thus, the decision of the court would rest on the language of the TSCA, and the arguments put forth by the parties without deference to EPA

\textsuperscript{111} 40 C.F.R. § 761.60(b) (2013).
\textsuperscript{112} Id.
\textsuperscript{113} Id. § 761.60(b)(5)(i) and (ii).
\textsuperscript{114} Id. § 761.60(e).
\textsuperscript{115} For PCB levels on the Navy ships see EX-AGERHOLM CASE STUDY, supra note 19, at 2-10-2-11. For allowed levels by the EPA see 40 C.F.R. § 229.2 (2012).
\textsuperscript{117} Id. § 2620(b)(4)(B); Citizens for a Better Env’t v. Thomas, 704 F. Supp 149 (N.D. Illinois, 1989) (scrutinizing the EPA’s denial of a petition under a de novo standard of review). Compare with the silence in other pollution control acts including the CAA, 42 U.S.C. § 7604 (2012), the CWA, 33 U. S. C § 1365 (2012), and RCRA, 42 U.S.C. § 6972 (2012).
\textsuperscript{118} Envtl. Def. Fund v. Reilly, 909 F.2d 1497, 1505 (D.C. circuit, 1990) (applying both APA and de novo standards of review would be judicially inconsistent).
\textsuperscript{119} Id.
interpretations of the TSCA.120

Compared with the Ocean Dumping Act, the TSCA has stricter regulations regarding the disposal of toxic waste in connection with specific chemicals. But unlike the Ocean Dumping Act it did not fully preempt all state and common law claims, leaving potentially stricter regulations in place.121

C. National Defense Exemptions in Both the TSCA and Ocean Dumping Act Allow for a Military Escape Hatch

The TSCA contains an express military defense waiver,122 while the Ocean Dumping Act provides that the President may exempt any federal facility from state dumping laws if “it is in the paramount interest of the United States to do so.”123 Defense waivers are present in most environmental statutes, providing a built-in escape hatch for the military.124 However, these waivers have rarely been invoked by any military branch domestically, suggesting that they were designed for specific unavoidable moments such as war on U.S. soil, or for international military actions.125

120. Id.; Thomas, 704 F. Supp at 152.
The TSCA’s military waiver is express and clear. The language states in unequivocal terms that the EPA “shall waive compliance with any provision of this chapter upon a request and determination by the President that the requested waiver is necessary in the interest of national defense.” 126 If the EPA is asked to grant such a waiver and does so, it is required to publish a notice in the Federal Register that the waiver was granted for national defense purposes. 127 In addition, the EPA must provide its reasoning for issuing the waiver in the event of a judicial proceeding requesting in camera review. 128

The Ocean Dumping Act does not have an express national defense waiver. Instead, it has an exemption from state dumping laws for federal facilities when the President determines the exemption to be in the best interest of the U.S. 129 The exemption is much narrower than the broad exemption under the TSCA and in some ways more practical for military use. 130 For instance the TSCA waiver seems, by both its language and lack of use, to be focused on waiver for emergency defense situations, such as an attack on U.S. soil. 131 The Ocean Dumping Act exemption, by contrast, seems to be more focused on routine issues, such as when military bases do not want to have to comply with permitting regimes. 132

The presence of a defense waiver in the TSCA and the exemption in the Ocean Dumping Act show Congressional awareness of the potential conflict between environmental laws and concerns about national defense. 133 The military, though not always in conflict with environmental statutes, is a major source of pollution in the U.S. 134 The military also has a trump card that many other private and governmental actors

127. Id.
128. Id.
130. See Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982) (refusing to enjoin the Navy's bombing a common fishing grounds off the coast of Puerto Rico under Clean Water Act, which has a similar waiver to the Ocean Dumping Act, and instead stating that a waiver would promote eventual compliance).
131. See Dycus, supra note 18, at 149; Babcock, supra note 124, at 117-120.
133. Babcock, supra note 124, at 110.
134. Dycus, supra note 18, at 4.
do not have—national defense. While other agencies can argue their actions are for the public good, the military’s ability to argue an action is necessary for national defense draws on a deeper issue of safety and concern for our nation's existence. Thus, including such exemptions in environmental statutes, especially in the TSCA and Ocean Dumping Act, is one example of congressional inclination to give national defense more weight than environmental safety and public health.

D. SINKEX Should Not Be Exempted Under a National Defense Waiver

The Navy SINKEX program does not appear to fall directly under the national defense exceptions found in the TSCA or the Ocean Dumping Act. The SINKEX program is a training and disposal program. Although the Navy may argue it is vital to national security to train sailors using live firing drills, no military branch has successfully invoked the waiver on this basis. Based on the argument that the TSCA waiver was intended by Congress to be used in national defense emergencies, SINKEX as a training exercise would not qualify. Indeed the President has a strong incentive to not


136. “[E]ven if plaintiffs have shown irreparable injury from the Navy's training exercises, any such injury is outweighed by the public interest and the Navy's interest in effective, realistic training of its sailors.” Winter, 555 U.S. at 23.

137. “Obviously, the nation's very existence should not be imperiled by a wooden adherence to formal rules and procedures for environmental protection. Yet any variance should be carefully tailored to the emergency, promptly publicized . . . and documented to ensure agency accountability and enable judicial review.” Dycus, supra note 18, at 152.

138. SEA 21, supra note 3.

139. See Babcock, supra note 124, at 117-120; Sislin, supra note 125, at 666-667; Dycus, supra note 18, at 149.

140. Courts have applied these waivers strictly, reading them narrowly. See Babcock, supra note 124, at 118 (citing Colonel E.G. Willard, Lieutenant Colonel Tom Zimmerman, Lieutenant Colonel Eric Bee, Environmental Law and National Security: Can Existing Exemptions in Environmental Laws Preserve DOD Training and Operational Prerogatives without New Legislation?, 54 A.F. L. REV. 65, 70). The Military may also be hesitant to invoke them as they may require disclosure of
waive the TSCA for the SINKEX program. For instance, waiving the TSCA’s environmental protections could set a precedent used for a wide variety of other military training programs that could potentially cause public outrage. One program may go unnoticed by the general public, especially when it occurs in the middle of the Pacific Ocean. However, if other military training exercises conducted by the Army, Air Force, Coast Guard, or Marines seek an exemption, the public will notice serious problems affecting environmental and human health. SINKEX would also not qualify under the exemption to the Ocean Dumping Act as it is a training program and not a federal facility. Additionally, SINKEX does not occur within state territorial waters, making state law inapplicable and the waiver unneeded.

III. INTERAGENCY COOPERATION AND LIMITS ON ENFORCEMENT

In order to more strictly regulate SINKEX the Navy must cooperate with the EPA and comply with the permit. If not, the EPA must have a mechanism to enforce the permit. The EPA’s permitting of the Navy SINKEX program under either the Ocean Dumping Act or the TSCA raises questions about the ability of agencies to issue permits to one another and the court system’s ability to review such action.

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142. Id.

143. 33 U.S.C. § 1416(d)(3) (2012); SEA 21, supra note 3.

144. State territorial waters reach three geographical miles offshore. 43 U.S.C. § 1312 (2012). SINKEX sinkings typically occur much further from shore, such as the ex-AGERHOLM, which was sunk 120 miles from the coast of California. EX-AGERHOLM CASE STUDY, supra note 19, at 1-1.
A. The EPA is Constrained from Issuing a Stricter Permit
Because of Political Pressures

The EPA issues permits to the Navy for SINKEX under the Ocean Dumping Act, yet it could also do so under the TSCA.\textsuperscript{145} The TSCA allows for EPA discretion to choose the regulating statute if the EPA is adequately regulating and controlling the risk under another statute.\textsuperscript{146} In choosing whether to regulate SINKEX under the Ocean Dumping Act or the TSCA the EPA may consider a variety of factors, but one factor that seems to play a prominent role is the Navy’s willingness to cooperate.\textsuperscript{147} Regulating the Navy under the Ocean Dumping Act gives the EPA flexibility to work with the Navy to create a general permit that satisfies the goals of both agencies.\textsuperscript{148}

Political pressure by the executive is a large influence on the EPAs permitting of the Navy due to their status as executive agencies.\textsuperscript{149} However, if a court mandate required the EPA to enforce a stricter permit against the Navy, Navy compliance with a stricter permit would be a major hurdle for the EPA to overcome. Two methods besides political routes could be used to obtain Navy compliance with a stricter permit. The first is the EPA could sue the Navy. But there is a real question of whether it is even constitutional for the EPA to do so.\textsuperscript{150} Separation of powers issues under the “unitary executive theory,”\textsuperscript{151} as well as questions as to whether such a suit would constitute a true “case or controversy” under Article Three make the viability of litigation uncertain.\textsuperscript{152}


\textsuperscript{146} 15 U.S.C. § 2608(b) (2012).

\textsuperscript{147} Jones Letter, supra note 8; Wayland Letter, supra note 1.

\textsuperscript{148} See Jones Letter, supra note 8; Wayland Letter, supra note 1.

\textsuperscript{149} 42 U.S.C. § 4321(i)(b) (2012); U.S. Const. art. II, § 2, cl. 1.

\textsuperscript{150} The EPA has never sued another agency for compliance. For a discussion of why see Michael W. Steinberg, Can EPA Sue Other Federal Agencies?, 17 ECOLOGY L.Q. 317, 320-21 (1990). (Arguing that there is no constitutional bar to inter-agency suits).

\textsuperscript{151} “The executive Power shall be vested in a President of the United States of America.” U.S. Const. art. II, § 1, cl. 1. For a detailed overview of the “unitary executive theory” and its constitutional basis see Steven G. Calabresi, Saikrishna B. Prakash, The President’s Power to Execute the Laws, 104 YALE L. J. 541 (1994-1995).

\textsuperscript{152} “The judicial Power shall extend to all Cases . . . to Controversies . . . .” U.S. Const. art. III, § 2, cl. 1; S. Spring Hill Gold Mining Co. v. Amador Medean Gold Mining Co., 145 U.S. 300, 301 (1892) (parties are not adverse if under the control of the same person or corporation).
executive theory” argues that the President has sole control over agency actions, making judicial enforcement or intervention a separation of powers concern. Article Three jurisdiction is also uncertain because of the nature of agencies as part of the executive branch. It is unclear whether a suit by one federal agency, such as the EPA, against another, such as the Navy, could constitute a true “case or controversy” as they are both ultimately accountable to the President.

The “unitary executive theory” is based in the constitutional doctrine of separation of powers. It finds its roots in the Constitution: “[t]he executive Power shall be vested in a President of the United States.” As Justice Scalia explains, the Constitution “does not mean some of the executive power, but all of the executive power.” According to the “unitary executive theory” any dispute between the Navy and the EPA, both of which are ultimately under the control of the President, should be resolved within the executive branch without the involvement of the judiciary.

The “unitary executive theory” illustrates the difficulties the EPA would face filing a suit against the Navy to enforce a stricter permit. Courts are reluctant to interfere in what they see as policy choices within an agency so long as the agency is acting in compliance with the law. In this case, if the EPA...
did sue the Navy to force compliance with a stricter permit, the court most likely would hesitate to look too closely at what, on the surface, seems an inter-agency, inner executive branch dispute.160 Although courts may hesitate to resolve these disputes, there is a possibility they would force compliance if the court determined the law demanded it.161 If the Navy did not comply with an EPA permit requirement required by statute, the Navy would be acting “not in accordance with law,”162 an action that is judicially reviewable under the APA.163 Therefore, the court could potentially hear the merits of the case so long as it fulfills other jurisdictional requirements.

Interwoven with concerns stemming from separation of powers infringement by the courts are Constitutional jurisdictional limits on federal courts.164 If the EPA sued the Navy the executive branch would be on both sides of the dispute. Article Three of the U.S. Constitution precludes suits where the same person or power controls the adverse parties.165 Here, the interests of the EPA would be enforcing compliance with its permit issued under the Ocean Dumping Act or TSCA to fulfill its statutory duties.166 The Navy’s interests would be the training of their sailors for national security and defense.167 It could be argued that those interests, both for the public good, are different enough from each other to provide a real “case or controversy,” overcoming this of ambiguous statutory language).

160. See Flast, 392 U.S. at 96.
161. U.S. v. Interstate Commerce Comm’n, 337 U.S. 426, 430 (1949) (even though the case involved the United States on both sides it still was a “justiciable controversy”).
163. “The reviewing court shall . . . (2) hold unlawful and set aside agency action, findings, and conclusions found to be— (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” id.; “agency action” includes the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act[,]” 5 U.S.C. § 551(13) (2012).
164. See U.S. Const. art. III, § 2, cl. 1.
165. See S. Spring Hill Gold Mining Co. v. Amador Medean Gold Mining Co., 145 U.S. 300, 301 (1892) (parties are not adverse if under the control of the same person or corporation); See also Cleveland v. Chamberlain, 66 U.S. 419, 425 (1861) (parties not adverse when the interests on both sides rested in the same person).
jurisdictional hurdle. However, the EPA may also be restricted from suing the Navy due to political and policy reasons.

Executive pressure is one example of such a political and policy reason. Under the U.S. Constitution it is the duty of the President to make sure the “Laws be faithfully executed.” Included within that duty is control over the regulatory framework and political accountability for agency action. With political accountability comes a reason and desire to more closely control agency decisions based on political and policy choices. Interagency disputes involving legal matters are required to go through the Office of Legal Counsel (OLC), which is part of the Department of Justice (DOJ). The executive branch requests agencies to resolve disputes within the branch instead of solving problems within the court system. The President could order the EPA not to pressure the Navy into a stricter permit so long as the permit complies with the relevant statutes.

B. Executive Branch Limits Enforcement of Environmental Permits on the Military

The political will to impose environmental restrictions on the department of defense shifts from administration to administration. During the Clinton and Obama Administrations there were some markers to suggest that the

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168. See U.S. v. Interstate Commerce Comm’n, 337 U.S. 426, 430 (1949) (even though the case involved the United States on both sides it still was a “justiciable controversy”).


171. “Whenever two or more Executive agencies whose heads serve at the pleasure of the President are unable to resolve such a legal dispute, the agencies shall submit the dispute to the Attorney General prior to proceeding in any court, except where there is specific statutory vesting of responsibility for a resolution elsewhere.” Exec. Order No. 12,146 Management of Federal Legal Resources, 44 Fed. Reg. 42,657, §1-402 (July 18, 1979). The Attorney General delegated this authority to the Office of Legal Counsel, The United States Department of Justice Office of Legal Counsel, http://www.justice.gov/olc/ (last visited Nov. 23, 2013).

172. Id. at § 1-401.

EPA’s best method to enforce a stricter permit would be through the executive branch.174 Some indications of support were based on executive orders pushing for federal agencies to cooperate with environmental mandates.175

Using executive orders to encourage agency compliance with environmental statutes and permits began in 1978, when President Jimmy Carter signed executive order 12,088.176 It stated: “[e]ach Executive agency shall cooperate with the Administrator of the Environmental Protection Agency . . . and State, interstate, and local agencies in the prevention, control, and abatement of environmental pollution.”177 Executive Order 12,088 suggested that an EPA determination would be backed by the President, and that other agencies would be expected to comply.178 However, Executive Order 12,088 contained several exemptions comparable to the waivers in the TSCA and Ocean Dumping Act.179 For example, § 1-701 provided that the President might exempt agencies from complying with the TSCA “in the interest of national security.”180 Furthermore, the executive order required conflicts between the EPA and other executive agencies over pollution statutes be resolved within the executive branch either through compromise between the agencies or by asking the Director of the Office of Management and Budget to intervene.181 Executive Order 12,088 was revoked by Executive Order 13,148182 in 2000 under President Clinton, which was later revoked in 2007 by Executive Order 13,423 signed by President Bush.183 Executive


177. Id. at § 1-202.

178. Id. at §1-1.

179. Id. at §§ 1-701, 1-602.

180. Id. at § 1-701.

181. Id. at § 1-602.


Order 13,423 still stands today under President Obama.\textsuperscript{184}

The new language in Executive Order 13,148 built upon and strengthened the language in Executive Order 12,088 by requiring agencies to comply with environmental regulations.\textsuperscript{185} It also included two specific provisions regarding toxic chemicals, requiring reporting on release of toxic chemicals and reduction of use as well as specific instructions on compliance assurance.\textsuperscript{186} The national security exemption was also kept, and expanded to allow exemptions based on lack of funds appropriated by Congress, so long as the agency showed it asked for the funds in its budget.\textsuperscript{187} It also provided a backdoor for agency non-compliance, stating that “OMB...may modify the compliance requirements for an agency under this order, if the agency is unable to comply...”\textsuperscript{188}

President Bush changed the language in Executive Order 13,423 to a general policy statement.\textsuperscript{189} Instead of requiring all executive agencies to comply with environmental regulations, the order states that all federal agencies must “conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.”\textsuperscript{190}

This broad language takes away the requirement to comply with EPA regulation and instead presents a policy based on fulfilling amorphous environmental goals. While noble, the language takes support away from EPA regulations and places it in a discretionary policy zone to be determined by the

\textsuperscript{184} Id.

\textsuperscript{185} “Each agency shall comply with environmental regulations by establishing and implementing environmental compliance audit programs and policies that emphasize pollution prevention as a means to both achieve and maintain environmental compliance.” Exec. Order No. 13,148 Greening the Government Through Leadership in Environmental Management, 65 Fed. Reg. 24,595, § 202 (April 21, 2000).

\textsuperscript{186} Id. at § 204-05, § 406.

\textsuperscript{187} Id. at § 801.

\textsuperscript{188} Id. at § 802.

\textsuperscript{189} “It is the policy of the United States that Federal agencies conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.” Exec. Order No. 13,423 Strengthening Federal Environmental, Energy, and Transportation Management, 72 Fed. Reg. 3919 § 1 (Jan. 24, 2007).

\textsuperscript{190} Id.
agencies whose activities are regulated by the EPA. However, unlike in the previous two executive orders, there is no broad exemption for national defense. The closest Executive Order 13,423 comes to an exemption for national defense is one for intelligence operations when compliance would force unauthorized disclosure of intelligence sources. The lack of compliance enforcement may undercut the need for a national defense exemption. The current order suggests that the EPA might have difficulties forcing the Navy to comply with a stricter permit without additional support from the president.

C. Judicial Enforcement in Citizen Suits is Possible

The second way a stricter EPA permit under the TSCA could be enforced is through citizen suits. Citizen suits have become an important method of forcing federal compliance with environmental statutes. In 2008, the Supreme Court set out a balancing test between the public good of environmental health and national defense in Winter v. Natural Resources Defense Council. Winter arose out of Navy sonar training exercises off the coast of California. The training exercises used mid-frequency active (MFA) sonar, which research in other areas linked to adverse effects on marine mammals including behavioral disruptions, hearing disruptions, and mass strandings. The area off the California coast in question in Winter contained at least thirty-seven species of marine mammals including nine protected under the Endangered Species Act (ESA). There was some dispute of the facts, but the Navy claimed no mammals had been injured in the training exercises, which had been taking place for over forty years. The plaintiffs indicated the injuries might have occurred as outlined above. Although not involving the TSCA, Winter resolved the dispute in favor of national

191. Id. at § 8(a).
192. For a discussion of the importance of citizen suits in environmental law see Matthew D. Zinn, Policing Environmental Regulatory Enforcement: Cooperation, Capture, and Citizen Suits, 21 STAN. ENVTL. L.J. 81 (2002).
194. Id. at 13. See also Milne, supra note 135, at 187; Reynolds, Kiekow, Smith, supra note 135, at 756.
195. 555 U.S. at 14; Milne, supra note 135, at 187.
197. Id.
Any case attempting to force compliance or to stop SINKEX through an injunction until the ships were further stripped of PCBs would have to show that the environmental and human health concerns resulting from SINKEX were greater than the military benefit of the live fire training.

IV. CONCLUSION: BALANCING THE PUBLIC GOOD OF ENVIRONMENTAL SAFETY AND HUMAN HEALTH WITH THE PUBLIC GOOD OF NATIONAL DEFENSE

Although a case forcing stricter permitting by the EPA would not directly involve the Navy as a party, looking at the policies and arguments behind the tension between environmental concerns and national defense concerns is essential. Both the Navy and the EPA are required by law to act according to their enabling and governing statutes. SINKEX is an example of badly aligned agency mandates and unresolved tensions in government purposes. Any consideration of EPA permitting of the Navy will have to take into account the reasons behind having a more lenient or stricter permit because of that tension. Even given the tension, the EPA cannot choose to ignore the TSCA’s requirements because it is difficult for them politically and legally to do so.

SINKEX is not the first example of military training programs causing tension between environmental laws and military goals of national defense nor will it be the last. Furthermore, it should not be left to citizen suits to force compliance with environmental statutes when the situation becomes politically uncomfortable for the EPA and executive branch. A fundamental change needs to take place between all three branches of the government acknowledging both are necessary for a successful nation.

Legislative reform should be the driving force for the change. As this paper examined, the executive branch is bound to the conflicting mandates in the legislation passed by Congress. One way to resolve this conflict might be as simple as “throwing money at it.” Although cliché, the Navy seems

198. Id. at 20. See also Milne, supra note 135.
199. Winter, 555 U.S. at 33.
201. Id.
202. See Winter, 555 U.S. 7; Willard, Zimmerman, Bee, supra note 140.
open to proper disposal of ships so long as the budget for such an expensive endeavor is provided. Although SINKEX does provide some training opportunities, the Navy was willing in the past to suspend it when environmental concerns were first noted. If Congress allocated funds for the disposal of ships instead of just the building and design of new ships the Navy would have an alternative to either sinking the ships in the ocean or letting them sit in inner harbors leaking toxins into waters close to shore.

Additionally, disposal of ships should be considered in new ship designs. Designing new ships to reduce toxic waste or allow for disposal techniques that would reduce contamination in our marine environment would prevent similar situations from arising in the future. If disposal was considered every time a new ship was built it would have a large impact on how ships are designed, what materials they are made of, and how easy it is to remove hazardous and toxic waste before disposal whether that be by a ship breaker or by a program like SINKEX.

Finally, although there is no clear solution to the tensions between environmental safety, public health, and national defense they do not have to be mutually exclusive. Crafting future legislation and policies to address those tensions will make it easier for agencies like the EPA and the Navy to work together in the future to satisfy both mandates.

203. See SEA 21, supra note 3; SINKEX DISPOSAL supra note 16; EX-AGERHOLM CASE STUDY, supra note 19, at 1-1.
204. Id.