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Due To Loopholes In The Clean Water Act, What Can A State Do To Combat Cruise Ship Discharge Of Sewage And Gray Water?

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COMMENT: DUE TO LOOPHOLES IN THE CLEAN WATER ACT, WHAT CAN A STATE DO TO COMBAT CRUISE SHIP DISCHARGE OF SEWAGE AND GRAY WATER?

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I. INTRODUCTION

Cruise ships, commonly referred to as "floating cities,"[1] generate an astronomical amount of waste as they carry thousands of people from port to port.[2] While cruise ships may contribute significantly to a local economy, they can also leave their mark by discharging a variety of pollutants[3] into the local waters. In one day a cruise ship produces about 30,000 gallons of sewage, 255,000 gallons of gray water,[4] and 37,000 gallons of oily bilge water.[5] Unlike land-based cities, cruise ships are held to a much lower standard for discharge of effluent under the Clean Water Act (CWA).[6] In fact, shore-based waste treatment facilities are required to

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1. *See* DR. MICHAEL HERZ & JOSEPH DAVIS, CRUISE CONTROL: A REPORT ON HOW CRUISE SHIPS AFFECT THE MARINE ENVIRONMENT 3 (Tim Eichenberg ed., 2002); KIRA SCHMIDT, CRUISING FOR TROUBLE: STEMMING THE TIDE OF CRUISE SHIP POLLUTION, Bluewater Network (2000), *available at* http://www.bluewaternetwork.org/reports/rep_ss_cruise_trouble.pdf (last visited Jan. 15, 2003); Arne Pearson & Mary Lou Wendell, *Floating Cities: Cruise Ship Exemption From Clean Water Act puts Casco Bay at Risk*, ISLAND TIMES, Oct. 2002, at 1.

2. HERZ & DAVIS, *supra* note 1, at 1. The author indicates that the largest cruise ships have the capacity to "transport more than 5,000 passengers and crew." *Id.*

3. Cruise ships provide numerous services on board such as photo processing and dry cleaning. Both services generate pollutants that often find their way into coastal waters. While these pollutants are definitely harmful, this comment focuses on wastewater discharges such as black and gray water.

4. Under the Clean Water Act "gray water" is defined as "galley, bath, and shower water." Clean Water Act, 33 U.S.C. § 1322(a)(11) (2000).

5. HERZ & DAVIS, *supra* note 1, at 3.

6. The Clean Water Act is officially entitled the Federal Water Pollution Control Act

not only meet much higher levels of sewage treatment, but must also monitor and report any discharges.[7] Cruise ships, on the other hand, are exempted[8] from obtaining a discharge permit[9] and are permitted to discharge sewage after very little treatment. Additionally, gray water discharge, thought by some to present an even greater threat to public health than sewage, remains essentially unregulated[10] by the United States Environmental Protection Agency (EPA).[11]

The loopholes currently present in existing law frustrate a state's ability to address the many environmental problems that can arise from cruise ship wastewater discharge.[12] Both black water (sewage) and gray water can have adverse affects on human health and marine ecosystems.[13] Human

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(FWPCA). *See* 33 U.S.C. § 1251 (2000).

7. *Id.* § 1281.

8. Many ports prohibit cruise ships from discharging sewage or gray water while they are berthed at municipal facilities. The port of Portland, Maine explicitly states in its terminal rules and regulations that "[p]umping sewage into the waters of Maine is strictly prohibited by Federal and State law. The discharge of gray water [and] dirty ballast . . . while berthed at municipal facilities is prohibited." CITY OF PORTLAND, ME., TERMINAL TARIFF FMC NO. 4, § 3(o), *available at* http://www.portofportlandmaine.org/tariff_idx.html (last visited Mar. 30, 2003). Similarly the port of Seattle prohibits the "discharge of any substance while at the dock." *Port of Seattle, Fact Sheet: Cruise Industry in Seattle Environmental Practices, available at* http://www.portseattle.org/factsheet.htm (last visited Mar. 30, 2003).

9. Under the CWA, it is illegal to discharge any pollutant into the Nation's waters without first obtaining a National Discharge Pollutant Elimination System (NPDES) permit. 33 U.S.C. § 1311(a) (2000). The CWA authorizes the United States Environmental Protection Agency (EPA) to administer the NPDES permitting system. 33 U.S.C. § 1251(d) (2000). In 1973, the EPA promulgated regulations that expressly exempted certain types of discharges, including sewage and gray water. 40 C.F.R. § 122.3(a) (2002).

10. Gray water may be legally discharged anywhere in U.S. waters with the exception of the Great Lakes. 33 U.S.C. § 1322(6) (2000). Gray water is included in the definition of sewage only as a means for regulating commercial vessels on the Great Lakes. EPA, CRUISE SHIP WHITE PAPER, 14 (2000), *available at* http://www.epa.gov/owow/oceans/cruise_ships/white_paper.pdf (last visited Jan. 17, 2003) [hereinafter EPA WHITEPAPER].

11. HERZ & DAVIS, *supra* note 1, at 15.

12. Wastewater discharge encompasses sewage (also referred to as "black water") and gray water. *Id.* at 13.

13. According to the EPA's Vessel Sewage Discharge Program report, the discharge of untreated or partially treated sewage can push bacteria levels to unsafe levels, resulting in the need to close both swimming areas and shellfish beds. EPA Office of Water, *Vessel Sewage Discharge Program, available at* http://www.epa.gov/owow/oceans/vessel_sewage/ (last visited Feb. 23, 2003).

sewage, if not treated properly, can cause fecal coliform[14] levels to sky rocket, resulting in states having to close beaches to swimming and shellfish beds to harvesting. A high level of fecal coliform, defined as "over 200 colonies/100 milliliters,"[15] indicates that the water is most likely contaminated with disease-producing organisms.[16] Swimming or eating fish from such waters increases the likelihood of contracting[17] diseases or illnesses such as hepatitis, dysentery, typhoid fever, gastroenteritis, and ear infections.[18] Surprisingly, fecal coliform can also be found in gray water discharge,[19] along with certain inorganic compounds[20] and other hazardous substances.[21]

The CWA attempts to ameliorate these public health risks by requiring all vessels to install a Coast Guard certified Marine Sanitation Device (MSD).[22] MSDs[23] provide some protection against high levels of fecal

14. Fecal coliform is bacteria found in the intestinal tracts of warm blooded animals. Beth Spracklin, *Environmentally Friendly Cruise Ships an Oxymoron?* 21ST CENTURY STUDENT VOICE, *available at* http://oncampus.richmond.edu/academics/journalism/outlook/cruise.html (last visited Mar. 30, 2003).

15. Sheila Murphy, *General Information on Fecal Coliform*, BASIN PROJECT, *available at* http://bcn.boulder.co.us/basin/data/ FECAL/info/FColi.html (last visited Mar. 30, 2003).

16. Kentucky Water Watch, *Fecal Coliform Bacteria*, *available at* http://www.state.ky.us/nrepc/water/wcpfcol.htm (last visited Mar. 30, 2003).

17. Murphy, *supra* note 15, at 1. These disease producing organisms can enter "the body through the mouth, nose, ears, or cuts in the skin." *Id.*

18. *Id. See also* AMBER S. WARD, VESSEL SEWAGE POLLUTION: FINAL REPORT AND RECOMMENDATION (Apr. 1999) (on file with OCLJ).

19. HERZ & DAVIS, *supra* note 1, at 15.

20. *Id.* Some of the inorganic compounds found in gray water discharge include "detergents, shampoos, cleaners, pesticides, heavy metals, and . . . medical and dental wastes." *Id.*

21. *Id.* Both nitrogen and phosphorous can be detected in gray water discharge. These substances affect marine life by reducing the amount of dissolved oxygen found in the water. *Id.*

22. 33 U.S.C. § 1322 (2000). Under this section of the Clean Water Act, the Coast Guard is authorized to promulgate regulations "governing the design, construction, installation, and operation of any marine sanitation device" found on board vessels. *Id.* § 1322(b)(1). A MSD "includes any equipment for installation on board a vessel which is designed to receive, retain, treat, or discharge sewage, and any process to treat such sewage. *Id.* § 1322(a)(5). This section also enables a state to establish a no discharge zone (NDZ). *Id.* §§ 1322(f)(3), 1322(f)(4). A NDZ prohibits all discharge of sewage in a particular body of water. *Id.* Presently there are six states that have most of their waters designated as NDZs. These states include: New Hampshire, Michigan, Missouri, New Mexico, Wisconsin, and Rhode Island. Eleven other states have portions of their waters as NDZs. These include: Florida, California, Massachusetts, Vermont, Minnesota, South Carolina, New York, New Jersey, Nevada, Texas, and Georgia. About fifty percent of these NDZs are in fresh water and the remaining fifty percent are in coastal waters, including estuaries. EPA Office of Water, *supra* note 13, at 1.

23. There are three types of MSDs. Type I and Type II "macerate the sewage and then

coliform,[24] but it falls short by not requiring stricter standards that mirror shore-based facilities.[25] Moreover, it does not factor gray water into the equation. This shortfall is problematic, especially when existing federal regulations expressly exempt gray water discharge (and black water) from the National Pollutant Discharge Elimination System (NPDES) permit requirement—resulting in absolutely no regulation of gray water discharge.[26]

The preemptive language in section 312(f)(1)[27] coupled with the regulations of 40 C.F.R. § 122.3(a) create a difficult situation for those coastal states wishing to impose discharge regulations on black water and gray water. State initiatives may face federal preemption issues. If a state passes legislation prohibiting or otherwise restricting discharge of this kind, it may be preempted because it conflicts with the express language found in the federal regulations. Courts have found that regulations pertaining to vessel design often warrant uniform national standards; therefore, state laws regulating vessel design or operation have been consistently held invalid.[28] Case law, however, suggests that while vessel design is strictly controlled by the federal government, ocean pollutant discharges can fall within a state's police powers.[29] Currently, it is not clear whether a state may adopt its own laws directed towards curtailing cruise ship discharge of waste water.

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treat it with chemicals or other means to reduce the bacterial count before it is discharged overboard." The Type III MSD acts as a holding tank. Here, the waste is safely stored on-board until it can be properly disposed of on shore. California Department of Boating and Waterways, *Shipshape Sanitation*, *available at* http://dbw.ca.govPubs/Sanitation/ (last visited Jan. 25, 2004).

24. Under current regulations, a cruise ship is required to install a Type II MSD. If there is a discharge, "the effluent shall not have a fecal coliform bacterial count of greater than 200 per 100 milliliters, nor suspended solids greater than 150 mg/1." 40 C.F.R. § 140.3(d) (2002).

25. *See* HERZ & DAVIS, *supra* note 1, at 13. Cruise ship sewage is more concentrated than sewage on land. This is a result of smaller volumes of water diluting the sewage per flush. The difference, is shore-based water volume equals about three to five gallons while ships equal about three quarts per flush. *Id.*

26. 40 C.F.R. § 122.3(a) (2002). The regulation states that "[t]he following discharges do not require NPDES permits: (a) Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel." *Id.*

27. 33 U.S.C. § 1322(f)(1) (2000). With the Federal Pollution Control Act Amendments of 1972, Congress "provided for federal preemption of state laws in § 1322(f)(1)...." Lake Carriers' Ass'n v. Kelley, 527 F. Supp. 1114, 1118 (E.D. Mich. 1981).

28. *See* U.S. v. Locke, 529 U.S. 89 (2000); Ray v. Atlantic Richfield Co., 435 U.S. 151 (1978).

29. *See* Chevron v. Hammond, 726 F.2d 483 (9th Cir. 1984), *cert. denied*, 471 U.S. 1140 (1985).

Without adequate gray water regulations, cruise lines are bound to manipulate their disposal practices. This proved true in the 1990s when a number of cruise lines were caught using their gray water systems to dump illegal substances.[30] In 1998, Royal Caribbean Cruises paid nine million dollars in fines for illegally disposing of oil and other hazardous pollutants through its ships' gray water system.[31] The cruise line eventually entered into a plea agreement where it admitted that it had routinely discharged oil from its fleet of cruise ships.[32]

Studies also indicate that sewage regulations need improvements.[33] Under section 312 of the CWA, cruise ships only have to install a Type II MSD.[34] They are not required to test the discharge to make sure that it is meeting federal standards.[35] Moreover, these large ships are not obligated

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30. GAO, MARINE POLLUTION: PROGRESS MADE TO REDUCE MARINE POLLUTION BY CRUISE SHIPS, BUT IMPORTANT ISSUES REMAIN (2000) *available at* www.bluewaternetwork.org/reports/rep_ss_cruise_gaoreport.pdf (last visited Feb. 22, 2003) [hereinafter GAO REPORT]. The GAO REPORT describes one particular incident where a Coast Guard aircraft witnessed a "foreign-flagged cruise ship discharging oil near Puerto Rico." *Id.* at 14. When the ship arrived in Puerto Rico, the Coast Guard boarded and inspected the engine room. Due to the ship's tight schedule, there was not enough time to finish the inspection. During the investigation, the inspectors videotaped the engine room. When the ship arrived in Miami, another Coast Guard team boarded the ship and continued the inspection. This team "also videotaped the engine room." *Id.* When the two tapes were compared, the tapes "revealed that between the two videotapings, inappropriately installed piping had been removed in an attempt to hide the crew's practice of bypassing the oily water separator and illegally discharging untreated oily water at sea." *Id.*

31. HERZ & DAVIS, *supra* note 1, at 15.

32. U.S. Dept. of Justice, *Royal Caribbean to Pay Record $18 Million Criminal Fine for Dumping Oil and Hazardous Chemicals, Making False Statements* (July 21, 1999), *available at* http://www.usdoj.gov/opa/pr/1999/July/316enr.htm (last visited Feb. 23, 2003). Royal Caribbean entered into plea agreements after the Coast Guard caught a number of its ships violating federal environmental laws. The plea agreements were filed in six cities: Miami, Los Angeles, San Juan, Puerto Rico, Anchorage, New York City, and St. Thomas, U.S. Virgin Islands. *Id.*

33. During the 2000 cruise ship season, Alaska formed a cruise ship initiative through the Alaska Department of Environmental Conservation. Representatives of the initiative boarded twenty-one cruise ships and reported that only "[forty-three percent] of the samples for fecal coliform were in compliance with the MSD standard." Ala. Dep't of Envtl. Conservation, WASTE WATER MONITORING, *available at* http://www.state.ak.us/local/akpages/ENV.CONSERV/press/cruise/pdf/wastewatr1100.pdf (last visited Feb. 25, 2003) [hereinafter WASTE WATER MONITORING].

34. 3 U.S.C. § 1322 (2000).

35. *Id. See* HERZ & DAVIS, *supra* note 1, at 13–14. There are a number of reported instances where cruise ship's discharged treated sewage (treated through the Type II MSD) that did not meet federal standards. In May 2001, the Norwegian Sky "discharged treated sewage in the Alexander Archipelago." The fecal coliform levels were "3500 times the allowable federal standard. . . ." Sierra Club, *California Law Prohibits Cruise Ship Discharges: Lingle Administration Again Meets in Private With the Cruise Industry Over*

to use the latest technologies. In fact, the Type II MSD used by most of the cruise ship industry has not been modified since 1976.[36]

With cruise ship traffic on the rise and passenger capacity increasing,[37] it is not surprising that coastal states want to implement stricter standards regarding gray water and black water discharge. Now that the impacts of wastewater discharge are becoming more known, states have a legitimate interest in imposing regulations on these "floating cities." However, an important question remains: Will a state law regulating gray water and black water be preempted by federal regulations that exclude these types of discharges from having to obtain a CWA discharging permit?

This comment concludes that the law in this area remains relatively unclear, making it difficult to predict whether a state statute will be preempted by the federal regulation 40 C.F.R. § 122.3(a) (excluding gray water and sewage from the NPDES requirement). Analysis begins with an overview of the Clean Water Act (section II), moves on to preemption (section III), and ends with the numerous options available to coastal states that are interested in curtailing cruise ship discharge (section IV).

II. THE CLEAN WATER ACT

A. Overview of the Act

In 1972, Congress adopted the Federal Water Pollution Act Amendments, establishing what we know today as the Clean Water Act (CWA).[38]

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a Voluntary Pollution Agreement (Sept. 25, 2003), *available at* http://www.hi.sierraclub.org/press/releases03/0925cruise.pdf (last visited Feb. 22, 2004).

36. *Pollution Solutions to Cruise Ship Discharges*, THE CASCO BAY BULLETIN, Autumn 2002, at 2. At a forum focusing on cruise ships, Lieutenant Commander Kenneth Albee of the U.S. Coast Guard's Marine Safety Office in Portland, Maine, discussed the current regulations covering cruise ships. "He acknowledged that gray water . . . is not regulated at all. He also noted that although cruise ships are required to have MSD [Type] IIs, . . . their specifications have not been updated since 1976, indicating that cruise ships [are not] required to use the latest technologies." *Id.*

37. GAO REPORT, *supra* note 30, at 5. The United States General Accounting Office [hereinafter GAO] conducted research on the cruise industry and found that "[o]ver a six year period, (1993–1998), cruise ship embarkations from North American ports increased by almost [fifty] percent. . . ." *Id.* The GAO REPORT further indicated that this increase was in no way static, as the cruise ship industry plans to "add [thirty-three] new and/or bigger cruise ships to this market. . . ." *Id.* The end result will be more cruise ships in U.S. waters with more passengers (passenger capacity will increase by about thirty-five percent). *Id.*

38. William H. Rogers, Jr., ENVIRONMENTAL LAW § 4.1 at 247 (2d ed. 1994). The Federal Water Pollution Control Act (FWPCA) was first enacted in 1948. *Id.* at 252. Prior to the FWPCA, most water quality standards were under the Rivers and Harbors Appropriations Act of 1899 (referred to as the Refuse Act). *Id.*

The central purpose of the amendments was to restore and maintain the "chemical, physical and biological integrity of the Nation's waters."[39] An additional goal of the act was to establish water quality standards that would provide for the "protection and propagation of fish, shellfish, and wildlife" as well as recreational enjoyment in and on the water.[40] In order to accomplish these goals, Congress designed a permitting system "to regulate the discharge of any pollutant into the nation's navigable waters."[41]

The overall framework of the CWA seeks to involve both federal and state government in improving the nation's waters. The Administrator of the EPA sets and enforces national effluent limitations[42] for all point sources.[43] States may then set their own water quality standards, based on the designated use of the water and the water quality criteria required for such use, and administer their own state pollutant discharge elimination system.[44] In establishing their own standards, states need to obtain EPA approval and meet the minimum federal standards.[45]

B. Federal and State Authority

States no longer enjoy the same authority that they did under the original Federal Water Pollution Control Act (FWPCA).[46] Prior to 1972,

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39. 33 U.S.C. § 1251(a) (2000).

40. *See id.* § 1251(a)(2).

41. Chevron v. Hammond, 726 F.2d 483, 489 (9th Cir. 1984), *cert. denied*, 471 U.S. 1140 (1985).

42. The CWA defines the term "effluent limitation" as "any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable water, the waters of the contigous zone, or the ocean, including schedules of compliance." 33 U.S.C. § 1362(11) (2000). Case law indicates that the "primary purpose of the effluent limitations and guidelines was to provide uniformity among the federal and state jurisdictions enforcing the NPDES [permitting] program and [to] prevent the 'Tragedy of the Commons' [from occurring]." NRDC v. Costle, 568 F.2d 1369, 1378 (D.C. Cir. 1977) (quoting NRDC v. Train, 510 F.2d 692, 709 (D.C. Cir. 1975)). Essentially, the "effluent limitations were intended to create floors that had to be respected by state permit programs." *Id.*

43. *See* 33 U.S.C. § 1311 (2000). The CWA defines a "point source" as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel . . . or vessel or other floating craft, from which pollutants are or may be discharged." *See id.* § 1362(14).

44. 33 U.S.C. § 1313(c)(2)(A) (2000). The "water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." *See id.*

45. *See id.* § 1313(a).

46. 33 U.S.C. § 1361(a) (2000); S. REP. NO. 93-1, (1973), *reprinted in* 1973 U.S.C.C.A.N. 3668, 3669.

states assumed primary responsibility for regulating water pollution.[47] The 1948 FWPCA specifically gave states the leading role in preventing, abating, and controlling water pollution.[48] With Congress assigning state governors the role of enforcement, the federal government was forced to take a back seat.[49] In fact, "[f]ederal agencies were authorized only to support research in water pollution, projects in new technology, and limited loans to assist the financing of treatment plants."[50] This limited role, however, changed in 1956 when Congress amended the FWPCA to increase federal involvement and promote federal/state cooperation in regulating water pollution.[51]

Gradually Congress began to allocate more and more authority to the federal government.[52] When Congress adopted the FWPCA Amendments in 1972, it appointed the EPA to oversee the newly established CWA.[53] State authority was not completely lost to the EPA, but it was greatly reduced. While states retained the ability to set their own water quality standards, they now needed to meet the minimum federal standards.[54] In establishing standards, the CWA encourages states to set stricter standards than those imposed by the EPA.[55]

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47. S. REP. No. 93-1, (1973), *reprinted in* 1973 U.S.C.C.A.N. 3668, 3669.

48. *Id.*

49. *Id.* Congress intended for the states to "lead the national effort to prevent, control and abate water pollution. As a corollary, the Federal role has been limited to support of, and assistance to, the States." *Id.*

50. *Id.*

51. *Id.* Legislative history suggests that the 1948 abatement procedures were inadequate, for "records show an almost total lack of enforcement." *Id.* at 3672.

52. S. REP. NO. 93-1, (1973), *reprinted in* 1973 U.S.C.C.A.N. 3668, 3669. In 1965, Congress approved legislation that required all states to "develop standards for water quality within its boundaries." *Id.* Once the state standards were set, before a state could enforce them, they needed to obtain the new federal agency's approval. *Id.* This federal agency later became the Environmental Protection Agency. *Id.* at 3670.

53. 33 U.S.C. § 1361(a) (2000). This section states that "[t]he Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this chapter." *Id.*

54. 33 U.S.C. § 1251(b) (2000). The CWA states that "[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution." *Id.* Courts have consistently reaffirmed a state's authority to set water quality standards. *See* Mississippi Comm'n on Natural Res. v. Costle, 625 F.2d 1269, 1275 (5th Cir. 1980).

55. 33 U.S.C. § 1370 (2000). "Except as expressly provided . . . nothing in this chapter shall (1) preclude or deny the right of any State . . . to adopt or enforce (A) any standard . . . respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution . . . such State . . . may not adopt or enforce any standard . . . which is less stringent than the effluent limitation . . . under this chapter." *Id.*

Additionally, states have the opportunity to oversee their own NPDES permitting program.[56] To qualify for such status, a state must submit to the EPA Administrator "a full and complete description of the program it proposes to establish and administer under State law."[57] Once a state gains approval, the state NPDES program functions as the primary permitting authority.[58] This delegation of authority supports Congress's intent "to recognize, preserve, and protect the primary responsibilities and rights of the States to prevent, reduce, and eliminate pollution."[59] Although state NPDES programs definitely offer states the opportunity to act independently, the EPA Administrator still maintains the power to either veto or suspend the state permits.[60] This "veto" power serves as a check on the state to ensure that its permitting program is still meeting the requirements of the CWA.

C. NPDES Permits

In 1972, the National Pollutant Discharge Elimination System permit became the means for controlling water pollution. Under the CWA, it is illegal to discharge any pollutant into the navigable waters[61] of the United States without first obtaining a NPDES permit from the EPA or a state

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56. *See id.* § 1342(a)(5). This section provides that "[t]he Administrator shall authorize a State, which he determines has the capability of administering a permit program which will carry out the objectives of this chapter to issue permits for discharges into the navigable waters within the jurisdiction of such State." *Id.*

57. *See id.* § 1342(b). This section sets forth the guidelines that a state must follow in order to obtain authority to administer its own permit program. Additionally, the state must adhere to the "minimum requirements of 40 C.F.R. 123.22." Application to Administer the NPDES Program, 64 Fed. Reg. 73,552–73,553 (Dec. 30, 1999).

58. The State of Maine obtained NPDES delegation on January 12, 2001. *See* Approval of Application by Maine to Administer the NPDES Program, 66 Fed. Reg. 12,791 (Feb. 28, 2001). Now that Maine is a delegated state, it may issue the NPDES permits. Maine will take the lead in administrating the NPDES program, yet the EPA still retains an important role. For it ensures, through review, that Maine's program is meeting the requirements of the CWA. Bureau of Land and Water Quality, *The NPDES Delegation Process*, *available at* http://www.state.me.us/dep/blwq/delegation/delegation.htm (last visited Feb. 18, 2003). *See also* U.S. Pub. Interest Research Group v. Atl. Salmon of Me., LLC., 257 F. Supp. 2d 407, 425 (D. Me. 2003).

59. Mianus River Pres. Comm. v. E.P.A., 541 F.2d 899, 905 (2d Cir. 1976) (quoting 33 U.S.C. § 1251(b) (Supp. IV)).

60. *See* 33 U.S.C. § 1342 (2000).

61. Under the CWA, navigable waters refer to the "territorial seas." The "territorial seas" are defined as those "seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles." 33 U.S.C. § 1362(8) (2000).

certified NPDES program.[62] If a point source[63] meets the requirements of the CWA, then the EPA may issue a permit for the discharge of the particular pollutants.[64]

Broadly stated, a NPDES permit is required when any pollutant is discharged from a point source into the navigable waters of the United States. Like many laws, there are exceptions. Vessels and other floating crafts do not fit neatly within the confines of the NPDES program. First of all, sewage qualifies as a pollutant, yet sewage from vessels does not. The statute defines a "pollutant" as dredged spoil, sewage, garbage, and so on.[65] It expressly leaves out sewage from vessels: "[t]his term does not mean . . . 'sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces.'"[66]

To make matters even more confusing, the CWA defines the term "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source. . . ."[67] Vessels qualify as a point source. The CWA provides that "[t]he term 'point source' means any discernible, confined and discrete conveyance, including but not limited to any . . . vessel or other floating craft, from which pollutants are or may be discharged."[68] Thus a vessel, as a point source, needs to obtain a NPDES permit when it discharges any pollutants into the waters of the United States. This requirement makes sense when considering the main objectives of the CWA; however, because sewage from vessels does not qualify as a pollutant, it is outside the NPDES permitting system.

D. Marine Sanitation Devices

Section 312 of the CWA attempts to remedy this loophole by making it unlawful to discharge "untreated [sewage] or inadequately treated

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62. 33 U.S.C. § 1311(a) (2000). The actual language states "the discharge of any pollutant by any person shall be unlawful." *Id.*

63. Defined at 33 U.S.C. § 1362(14) (2000).

64. *See id.* § 1342(a)(1). This section states that "the Administrator may, after opportunity for public hearing issue a permit for the discharge of any pollutant, or combination of pollutants . . . upon condition that such discharge will meet either (A) all applicable requirements . . . or (B) . . . such conditions as the Administrator determines are necessary to carry out the provisions of this chapter." *Id.*

65. *See id.* § 1362(6).

66. *Id.*

67. 33 U.S.C. § 1362(12)(A) (2000). The term also means "any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft." *Id.* § 1362 (12)(B).

68. *See id.* § 1362(14).

sewage" into the navigable waters of the United States.[69] Under this section, the Coast Guard has the authority to oversee vessels, including their marine sanitation devices (MSDs).[70] The EPA and Coast Guard work together in setting the appropriate standards; however, it is the Coast Guard alone who regulates the "design, construction, installation, and operation of the marine sanitation device[s] on board" the vessels.[71] Vessels that are equipped with toilets (referred to as "heads" in the boating world) must have a certified[72] MSD.[73]

While section 312 provides some regulation of sewage, it falls short in many respects. First, the level of treatment required is not equivalent to shore-based facilities. Second, the standards have not been updated since 1976. Third, the MSD effectiveness may decrease over time. Fourth, vessels are not required to test the sewage discharge to ensure that the content is meeting federal MSD standards.[74] Fifth, section 312 only applies

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69. *See id.* § 1322(b)(1).

70. *See id.*

71. *See id.* §§ 1322(b), 1322(f)(1)(A). There is one exception to this provision. A State may regulate the "design, manufacture, or installation or use of any [MSD] on a houseboat..." *Id.* § 1322(f)(1)(B). Under this provision, a "houseboat" is "a vessel which, for a period of time determined by the State in which the vessel is located, is used primarily as a residence and is not used primarily as a means of transportation." *Id.*

72. Under section 312(g) of the CWA, the Coast Guard must certify all MSDs that are installed on vessels registered in the United States. 33 U.S.C. § 1322(g)(2) (2000). Once an MSD complies with the design and testing criteria of 33 C.F.R. 159, the Coast Guard will send a letter of "certification for acceptance for installation" to the U.S. vessel. U.S. COAST GUARD, Marine Sanitation Devices: Frequently Asked Questions "The Approval Process," *available at* http://www.uscg.mil/hq/gm/mse/msd.htm (last visited Apr. 12, 2003) [hereinafter USCG Questions]. The certification is effective for five years. *Id.* at "Expired Certifications." If a MSD is manufactured within the five year period, it can be used "onboard a vessel as long as [it] complies with current environmental standards and is in good and serviceable condition." *Id.*

73. EPA, Marine Sanitation Devices, *available at* http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/vsdmsd.html (last visited Feb. 23, 2003). There are three types of MSDs: Type I (sixty-five feet or less in length); Type II (greater than sixty-five feet); and Type III (any length). MSD Type I is "a flow through device where the sewage travels through an on-board treatment system and is directly discharged." EPA WHITE PAPER, *supra* note 10, at 7. Under the Type I classification, the effluent must contain a fecal coliform level of 1000 per 100 milliliters of water or less. MSD Type II mirrors Type I in many ways, however "it is required to produce an effluent having a fecal coliform bacteria count not greater than 200 per 100 milliliters of water and suspended solids not greater than 150 milligrams per liter of water." *Id.* at 8. MSD Type III is referred to as a holding tank. These tanks are designed to hold sewage "until it can be properly disposed." *Id.*

74. The only time a vessel is required to sample the MSD effluent is if a marine inspector questions the function ability of the MSD. If a marine inspector finds the operation questionable, then vessel owner is required to "have the effluent sample taken by a qualified wastewater laboratory, with the results reported to the USCG." USCG Questions,

to vessels within three miles from the shore; therefore, beyond three miles ships can legally dump raw sewage.[75] This can affect a coastal state's water quality because the waste can wash back to shore. Sixth, gray water is not included in the treatment (with the exception of the Great Lakes). Finally, the Coast Guard lacks the resources to adequately enforce this section of the CWA.[76]

E. No Discharge Zones (NDZs)

Section 312 provides one additional avenue for those states wishing to protect their coastal ecosystems from sewage discharge. Under section 312(f)(3), a state, after determining that the waters within the state need more protection, may apply to the Administrator of the EPA to establish a No Discharge Zone (NDZ).[77] Once the EPA receives the application, it must determine within ninety days whether or not the state qualifies for the NDZ designation.[78]

There are essentially three ways to establish a NDZ. First, a state, after determining the need for enhanced environmental protection, must show that there are adequate pump out facilities available for vessels.[79] Second, some waters are regarded as "special waters" or "waters of concern." These bodies often include: national parks, established sanctuaries, national recreation areas, national wilderness areas, and waters where Endangered

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supra note 72, at "Effluent Sampling." If the effluent sample exceeds the EPA criteria, then the vessel operator could be subject to a $2000 fine for violating section 312 of the CWA. *See* 33 U.S.C. § 1322(j) (2000).

75. EPA WHITE PAPER, *supra* note 10, at 7.

76. *See* GAO REPORT, *supra* note 30, at 13. According to the GAO REPORT, the primary focus of cruise ship inspection is to ensure the ship is meeting all safety requirements. A typical inspection consists of "a Coast Guard team of two to four people [who] spend four to six hours . . . performing . . . fire drills, life-boat launchings, fire door inspections, and record checks." *Id.* The combination of limited time and limited staff "make it very difficult to perform detailed examinations of environmental functions. . . ." *Id. See also* HERZ & DAVIS, *supra* note 1, at 38. With resources decreasing, Coast Guard "emphasizes safety rather than environmental compliance." *Id.*

77. 33 U.S.C. § 1322(f)(3) (2000). This section provides that "if any State determines that the protection and enhancement of the quality of some or all of the waters within such State require greater environmental protection, such State may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into such waters. . . ." *Id.*

78. *Id.*

79. A pump out facility is usually located on the shore or on the water. It is a facility that serves an important purpose, for it not only removes the sewage (safely and in a sanitary way) from the vessel, but it also treats it. EPA, *No Discharge Zones: How They Work, available at* http://epa.gov/owow/regulatory/vessel_sewage/vsdarticle.h tm (last visited Mar. 2, 2003).

or Threatened Species reside.[80] With "special waters," there is no need for states to demonstrate that there are adequate pump out facilities.[81] Finally, those waters used for drinking purposes may be protected without a state proving the need for enhancement or a showing that there are adequate facilities to remove the sewage from vessels.[82]

When the EPA approves a state's application for a NDZ, the state can prohibit all "discharge of sewage from vessels within that zone."[83] NDZ's provide some relief from vessels; however, there is one major drawback—gray water does not fall within this provision. Gray water is only prohibited by a NDZ on the Great Lakes.[84] Once again, gray water essentially escapes regulation.

F. NPDES Exemptions

As the primary administrator of the CWA, the EPA has the authority to promulgate regulations that are consistent with the purpose of the Act.[85] For example, the EPA may exercise their discretion in either granting or refusing to grant a NPDES permit. In 1973, the EPA used their discretionary power to enact a regulation that exempted certain types of discharges from the NPDES permit requirement.[86] It reads as follows:

> The following discharges do not require NPDES permits: (a) Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel. This

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80. *Id.*

81. *Id.*

82. *Id.*

83. 33 U.S.C. § 1322(f)(4)(B) (2000).

84. Since sewage is defined under this section as "human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes *except that, with respect to commercial vessels on the Great Lakes, such term shall include gray water.*" 33 U.S.C. § 1322(a)(6) (2000) (emphasis added).

85. 33 U.S.C. § 1251(d) (2000). "Except as otherwise expressly provided in this chapter, the Administrator of the Environmental Protection Agency . . . shall administer this chapter." *See also* 33 U.S.C. § 1361(a) (2000) (saying that "[t]he Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this chapter").

86. *See* NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977) (where the court found that the 1973 NPDES exemptions of certain point sources directly conflicts with Congress's intent "to require permits in any situation of pollution from point sources"). *Id.* at 1383.

> exclusion does not apply to rubbish, trash, garbage, or other such materials discharged overboard.[87]

EPA gave two rationales for this exemption: (1) this type of pollution does not pose too great a threat to the environment and (2) it will "reduce administrative costs drastically."[88] In 1979, the EPA modified this exemption so that only those ships operating in a transportation capacity would qualify for the exemption.[89] Therefore, all vessels, including cruise ships, employed in transportation fall within the NPDES exemption.

By enacting this NPDES exemption, the EPA created a major loophole in the CWA. It essentially enables cruise ships and other vessels to pollute the very waters that the CWA sought to protect. As mentioned in the introduction, the cruise ship industry is growing astronomically. Not only are more ships being built, but the carrying capacity is increasing. In 1973, this amount of discharge may not have presented a "threat to the environment," but now it does. The time has come to rethink certain aspects of the CWA.

Since cruise ships are not adequately policed under the CWA, coastal states need an avenue by which to address the harmful affects of cruise ship visitation. Enacting state laws may be the only option available to remedy this situation.[90] However, before states rush to their respective legislatures, they should consider whether federal law will preempt their efforts.

III. PREEMPTION

Under Article VI of the Constitution, the "laws of the United States . . . shall be the supreme Law of the Land; . . . any Thing in the Constitution or Laws of any state to the Contrary notwithstanding."[91] In other words, "state law that conflicts with federal law is 'without effect.'"[92] Therefore,

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87. 40 C.F.R. § 122.3(a) (2002).

88. NPDES, 38 Fed. Reg. 13,528 (May 22, 1973).

89. EPA WHITEPAPER, *supra* note 10, at 14. The modified portion of the regulation reads: "This exclusion does not apply to . . . other discharges when the vessel is operating in a capacity other than as a means of transportation such as when used as an energy or mining facility, a storage facility or a seafood processing facility . . . " 40 C.F.R. § 122.3(a) (2002).

90. This Comment will later discuss the numerous options available to states in curtailing cruise ship water pollution.

91. U.S. CONST. art. VI, cl. 2.

92. Cipollone v. Liggett Group, Inc., 505 U.S. 504, 516 (1992) (quoting Maryland v. Louisiana, 451 U.S. 725, 746 (1981)).

preemption of state law becomes an issue when a state exercises its police powers and those powers directly conflict with a federal law.

Under the CWA, both the federal and state governments work together to control water pollution. As stated earlier in this comment, Congress wished to establish a cooperative approach between the two forms of government. The EPA sets minimum national standards while the states retain the authority to enact stricter standards. With this co-existence comes the difficulty in determining whether or not a state regulation conflicts with a federal law. In certain areas, the boundaries are clear;[93] however, in other areas the line is more obscure.[94]

A. Standards for Determining Preemption Issues

Legal analysis begins with "the assumption that the historic police powers of the States [are] not to be superseded by . . . Federal Act unless that [is] the clear and manifest purpose of Congress."[95] Hence, "[t]he purpose of Congress is the ultimate touchstone."[96] Legal precedent indicates that congressional intent may be either "explicitly stated in the statute's language or implicitly contained in its structure and purpose."[97] Where Congress is silent, state law may be preempted in two ways: (1) if it conflicts with federal law[98] or (2) if it attempts to occupy a field that

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93. Section 312 expressly states that only the U.S. Coast Guard may oversee the regulations pertaining to MSDs. This means that a state can not enact any laws that would interfere with the Coast Guard's jurisdiction over the MSDs. Section 312(f)(1)(A) provides that "no State or political subdivision thereof shall adopt or enforce any statute or regulation of such State or political subdivision with respect to the design, manufacture, or installation or use of any marine sanitation device on any vessel subject to the provisions of this section." 33 U.S.C. § 1322(f)(1)(A) (2000). Again, States may regulate houseboats—the only exception stated in this provision. *See id.* § 1322(f)(1)(B).

94. *See* Chevron v. Hammond, 726 F.2d 483 (9th Cir. 1984), *cert. denied*, 471 U.S. 1140 (1985). In *Hammond*, the Ninth Circuit held that an Alaskan deballasting statute did not conflict with federal law and so it was not preempted. Since the subject matter regulated dealt with "ocean pollutant discharges" instead of "vessel design discharges," the court was willing to uphold the statute. *Id.* at 489. Both Justice Stevens and Justice White wrote dissenting opinions respecting the denial of the petition for writ of certiorari. *See* Chevron v. Hammond, 471 U.S. 1140 (1985). Justice White's dissent reinforces the notion that the distinction between vessel design and vessel operations is not always black and white. *Id.* at 1142 n.3.

95. *Chevron*, 726 F.2d at 488 (quoting Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947)).

96. Malone v. White Motor Corp., 435 U.S. 497, 504 (1978) (quoting Retail Clerks v. Schermerhorn, 375 U.S. 96, 103 (1963)).

97. *Cipollone*, 505 U.S. at 516 (quoting Jones v. Rath Packing Co., 430 U.S. 519, 525 (1977)).

98. U.S. v. Locke, 529 U.S. 89, 109 (2000). Here, the Court explained that conflict

Congress has left to federal law.[99] Mere tension between state and federal law does not amount to preemption.[100]

1. Field Preemption

In *Fidelity Federal Savings & Loan Ass'n v. De La Cuesta*,[101] the Court outlined three ways field preemption may be inferred: (1) "the scheme of federal regulation may be so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it[;]"[102] (2) "the Act of Congress may touch a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject[;]"[103] and (3) "the object sought to be obtained by the federal law and the character of obligations imposed by it may reveal the same purpose."[104] Both statutory patterns[105] and case law[106] can provide courts with the necessary tools to discern whether or not Congress intended to occupy a particular field.

2. Conflict Preemption

In *Gade v. National Solid Wastes Management Ass'n*, the Court provided a framework for determining whether or not conflict preemption exists between a state and federal law.[107] The *Gade* Court stated that conflict preemption can occur where (1) "compliance with both federal and state regulations is a physical impossibility"[108] and (2) "where state law

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preemption occurs "when compliance with both state and federal law is impossible, or when the state law stands as an obstacle to the accomplishment and execution of the full purposes and objective of Congress." *Id.* (quoting California v. ARC America Corp., 490 U.S. 93, 100–01 (1989)).

99. Fidelity Federal Savings & Loan Ass'n v. De La Cuesta, 458 U.S. 141, 153 (1982).

100. Silkwood v. Kerr-McGee Corp., 464 U.S. 238, 256 (1984).

101. 458 U.S. at 141.

102. *Id.* at 152 (quoting Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947)).

103. *Id.*

104. *Id.*

105. Ray v. Atlantic Co., 435 U.S. 151, 163 (1978). Here, the Court emphasized that it was the statutory pattern that served as the primary indicator in holding that the State of Washington's tanker law was preempted by federal law. The Court went on to state that the statutory pattern "indicates to us that Congress intended uniform national standards for design and construction of tankers that would foreclose the imposition of different or more stringent state requirements." *Id.*

106. *Locke*, 529 U.S. at 90.

107. 505 U.S. 88, 98 (1992).

108. *Id.* at 98 (quoting *Rice*, 331 U.S. at 230).

'stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.'"[109] As mentioned above, courts can look to legislative history and case law to assist them in determining whether a state law conflicts with a federal law.

B. Applying Preemption Analysis to the CWA

As stated earlier in this comment, questions remain as to whether a state law regulating sewage and gray water may be preempted by federal regulations. These two types of discharge require separate consideration in determining whether they are preempted. While sewage is regulated to some extent by federal law, gray water remains essentially unregulated.

Section 312 of the CWA grants the Coast Guard the authority to regulate sewage by requiring vessels to be equipped with MSDs. This provision of the CWA explicitly preempts all states from developing their own MSD design standards.[110] By expressly granting the Coast Guard sole jurisdiction over MSDs, Congress preserved an area of law traditionally occupied by federal law. Case law also supports this theory that "vessel design" in general is occupied by federal law.[111] Since sewage standards are so intertwined with the MSD design, states are essentially prevented from enacting stricter sewage regulations. Thus, any state looking to enact legislation regarding sewage discharge from vessels should abandon their efforts because the law will most likely be preempted by section 312 of the CWA.

While states may not possess the authority to regulate MSDs, they do hold the ability to enforce the provisions of section 312 of the CWA. Under section 312(k), the Coast Guard, other federal agencies, and the states all have the authority to ensure that vessels are meeting the federal requirements.[112] With this enforcement authority States may board and inspect vessels (except public vessels) to ensure that they are complying with federal standards.[113] Thus, states may not regulate the design or

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109. *Id.*

110. 33 U.S.C. § 1322(f)(1)(A) (2000). Houseboats are the only exceptions. *Id.* § 1322(f)(1)(B).

111. *See Ray*, 435 U.S. at 151; *Askew*, 412 U.S. at 933; *Locke*, 529 U.S. at 89; and *Chevron*, 726 F.2d at 483.

112. 33 U.S.C. § 1322(k) (2000). This section states that "[t]he provision of this section shall be enforced by the Secretary of the department in which the Coast Guard is operating . . . The provisions of this section may also be enforced by a State." *Id.*

113. *See id.* § 1322(l). This section indicates that those personnel authorized to enforce the provisions of this section may (with the exception of public vessels) "board and inspect any vessel upon the navigable waters of the United States." *Id. See also* Tom Ankersen, Allison Dowling & Richard Hamann, *Florida Marine Sewage Discharge Regulation*,

construction, but they may ensure that the design standards are being adhered to by the cruise ship industry.

Presently, gray water is unregulated by federal law (Great Lakes is the exception). As mentioned earlier, this means that a ship can legally discharge gray water into the navigable waters of the United States without treating it. Case law suggests that local environmental regulations, specifically those regulations addressing "ocean discharge pollutants," are not subject to the same federal preemption constraints as those regulations focusing on "vessel design."[114] The underlying rationale for this differential treatment rests on the principle that design standards need to be uniform "so that vessels do not confront conflicting requirements in different ports and so that the Coast Guard can promote international consensus on design standards. . . ."[115] The Ninth Circuit stated in *Chevron v. Hammond*[116] that at the present time there is no "corresponding dominant national interest in uniformity in the area of coastal environmental regulation."[117] In fact, the Ninth Circuit went on to suggest that local governments are more capable in crafting environmental legislation because they are more aware of the intricacies of the local environmental issues.[118]

IV. OPTIONS

While this comment has focused primarily on the shortfalls of the CWA in addressing certain cruise ship activities, attention will now turn to what states can do to ameliorate the harms caused by the industry. First, states can try to do what Alaska did in 2000: lobby Congress to pass federal legislation. Second, states, without EPA approval, can enact their own laws that regulate gray water discharge. Third, states, with EPA approval, can enact legislation that will prevent cruise ships (and other vessels) from discharging wastewater into coastal waters. Fourth, a state can establish a

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available at http://www.law.ufl.edu/conservation/pdf/marine_sanitation.pdf (last visited Jan. 23, 2004).

114. *Chevron*, 726 F.2d at 492.

115. *Id.*

116. The *Chevron* case offers some guidance into the preemption issue regarding local environmental regulations and federal regulations. The CWA encourages a federal-state coexistence in enacting environmental regulations. The *Chevron* court dealt with a state statute that required tankers to deballast before entering state waters. Deballasting is defined as a discharge incidental to the normal operation of a vessel. The Alaska statute seeks to regulate that discharge which is expressly excluded from the NPDES permitting program. Regardless of the 1973 NPDES exemption, the Ninth Circuit upheld the Alaska statute, reasoning that the state and federal laws could be read in harmony. *Id.*

117. *Id.*

118. *Id.* at 493.

NDZ. Fifth, amend the portions of the CWA that serve as loopholes. Sixth, draft Memorandums of Understanding (MOUs).[119] Finally, challenge the 1973 NPDES exemption as being outside the authority of the EPA.

A. Federal Legislation

Frustrated with the cruise ship industry, Alaska lobbied Congress to pass federal legislation that would restrict cruise ship discharge activity.[120] On December 21, 2000, Congress enacted Title XIV. This federal legislation set stricter standards on the cruise lines. It not only requires monitoring by ships, but it also prohibits cruise ships from discharging sewage and black water into the waters of the state of Alaska.[121] This federal legislation signaled the first attempt to address cruise ship wastewater disposal practices. By going this route, Alaska bypassed federal-state preemption issues.

B. State Legislation (without EPA approval) that Regulates Gray Water

Section 312 of the Clean Water Act does not apply to gray water (with the exception of the Great Lakes). Therefore, gray water may be discharged into the navigable waters of the United States without passing through any form of treatment. As stated throughout this comment, gray water is more harmful to public health and local ecosystems than originally thought by the EPA.[122] Since the CWA does not adequately address gray

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119. A Memorandum of Understanding (MOU) is essentially a letter of intent between two or more entities (i.e. a state and the cruise line industry).

120. During the 2000 cruise ship season, the State of Alaska began to monitor cruise ship discharge (gray water and black water). What they found was not good. As stated earlier, many of the fecal coliform levels were not meeting federal standards. With a full season of data, the State of Alaska lobbied Congress to enact federal legislation that addressed the cruise ship industry.

121. Under section 1404, "(a) No person shall discharge any treated sewage or gray water from a cruise vessel into the waters of the Alexander Archipelago or the navigable waters of the United States within the State of Alaska or within the Kachemak Bay National Estuarine Research Reserve unless: (1) the cruise vessel is underway and proceeding at a speed of not less than six knots; (2) the cruise vessel is not less than one nautical mile from the nearest shore, except in areas designated by the Secretary, in consultation with the State of Alaska; (3) the discharge complies with all applicable cruise vessel effluent standards established pursuant to this title and any other applicable law; and (4) the cruise vessel is not in an area where the discharge of treated sewage or gray water is prohibited." 33 U.S.C. § 1901 (2002). It is important to note that Title XIV is hidden away in section 1901.

122. During the 2000 cruise ship season, the Alaska Department of Environmental

water discharge, coastal states are at a crossroads as to whether or not they should pass state legislation that would regulate the disposal of gray water within state waters. The short answer is yes; coastal states should and can go ahead in implementing their own regulations.

Unlike vessel sewage, gray water, by not having to pass through any type of treatment device, is not integrated in vessel design. As stated earlier in section III (B), state legislation, without EPA approval, pertaining to sewage will be preempted by section 312 of the CWA. By taking vessel design out of the picture, state gray water legislation presents an entirely different situation. In fact, a state law enacted to regulate gray water will probably not be preempted by federal law. The reasons are as follows: (1) the state legislation does not interfere with design; (2) the legislation furthers Congress's intent to have the state and federal governments share the duties of protecting the navigable waters of the United States; and (3) states are better equipped to manage local environmental issues because they are more aware of the intricacies involved. The Ninth Circuit upheld an Alaska deballasting statute for the above reasons, regardless of the NPDES 40 C.F.R. § 122.3(a) exemption.[123] Thus, state gray water legislation will most likely not be preempted.

C. State Legislation with EPA Approval

Presently, California is in the process of passing legislation that would enable it to apply to the EPA for approval to prohibit the discharge of both black and gray water into the state's waters.[124] Whoever drafted the

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Conservation found that seventy-five percent of the gray water samples taken exceeded the fecal coliform MSD standard (over five times). WASTE WATER MONITORING, *supra* note 33, at 1. In general, gray water is not as safe as originally thought by many. A California State Department of Health Services study conducted in 1979–1980 found that "[c]ontrary to popular belief, gray water is not always as safe as we would like, and may in fact contain substantial concentrations of excreta that can be a mode of transmission of infection and disease." Background and Recommended Practices and Procedures, *available at* http://www.info/departments/environment/emhp/sewage/GrayWater.asp (last visited Apr. 13, 2003).

123. *See Chevron*, 726 F.2d at 483. In *Chevron*, the Ninth Circuit upheld an Alaska deballasting statute. Similar to gray water, ballast water, defined as discharge incidental to the normal operation of a vessel, is expressly excluded from the NPDES permitting program. *Id.*

124. A.B. 121, 2003–04 Reg. Sess. (Ca. 2003), *available at* http://www.leginfo.ca.gov/pub/bill/asm/ab_0101-0150/ab_121_bill_20030115_introduced.pdf (last visited Feb. 2, 2003). The preamble to the proposed bill emphasizes that in order for a state to prohibit vessel sewage and gray water discharge, it must first apply to the EPA for approval. The language reads "[f]ederal law prohibits a state from prohibiting vessels from discharging sewage or gray water, unless the state applies to, and receives approval from the United

California legislation seemed to believe that EPA approval is a necessary step in implementing a state statute that seeks to prevent the discharge of sewage and gray water.[125] As discussed above in section III (B) and part B of this section, a state does need EPA approval for regulating sewage discharge. However, a state wishing to regulate gray water does not need EPA permission to enact a state law.

D. Establishing a NDZ

As stated previously in this comment, section 312(f)(3) of the CWA enables states to establish no discharge zones (NDZs) for vessel sewage. Several states, as a means for combating sewage discharge, are applying to the EPA for NDZ designations. Rhode Island,[126] Massachusetts,[127] New Jersey,[128] and Florida[129] are among the many states securing NDZ approvals. Once a NDZ is established, all vessels are prohibited from discharging sewage into the specified waters. Usually NDZs encompass a portion of a state's waters; however, some states have obtained state wide NDZs.[130] While NDZs are effective, they fall short in not applying to gray water.

States Environmental Protection Agency." *Id.* at 1.

125. *Id.* at 2. "The bill would direct the [State Water Resources Control Board] to apply to the Administrator of the [EPA] to authorize the state to prohibit the discharge of both sewage and gray water by large passenger vessels operating in the marine waters of the state." *Id.*

126. John Torgan, *Narragansett Bay Marine Pump-Out Facilities Performance Survey* (Fall/Winter 2002), *available at* http://www.savebay.org/aboutus/bb_winter_01/html/pump_out.htm (last visited Mar. 30, 2003). In 1998, Rhode Island waters were designated as NDZs. *Id.*

127. Marine Environmental Update, *No-Discharge Zone Designated In Massachusetts*, 25 ENV'T REP., 1228 (1994), *available at* http://meso.spawar.navy.mil/Newsltr/Fy95/No_1/massachusetts.html (last visited Mar. 30, 2003). The article reports that "ninety-one miles of coastline in New England are currently designated as No-Discharge Zones, including Wareham and Nantucket harbors." *Id.*

128. New Jersey Discharger, *DEP Proposes No Discharge Zone For Navesink River* (Summer 1998), *available at* http://www.state.nj.us/dep/dwq/discharg/v6n1b.htm (last visited Mar. 30, 2003). The State of New Jersey's Clean Vessel Program (CVP) has already helped the DEP establish two NDZs. *Id.*

129. National Marine Sanctuaries, *No Discharge Zone to Protect Sanctuary Waters: New Rules Take Effect June 19, 2002* (May 22, 2002), *available at* http://www.sanctuaries.nos.noaa.gov/news/pressreleases/pressrelease05_22_02.html (last visited Mar. 30, 2003). As of June 19, 2002, the Florida Keys National Sanctuary is confirmed as a NDZ. *Id.*

130. Torgan, *supra* note 126, at 1.

E. Amend Portions of the CWA

In order to adequately address cruise ship discharge, states could petition Congress to fill in the loopholes by amending specific sections of the CWA. First, Congress should repeal the 1973 NPDES exclusion (40 CFR § 122.3(a)). By doing so, all discharges of gray water, sewage, and other discharges incidental to the normal operation of a vessel will need a NPDES permit to pollute. Second, gray water should be required to undergo some sort of treatment before being discharged into coastal waters. The only bodies of water where gray water must undergo treatment are the Great Lakes. Since gray water is included in the sewage definition (under section 312) when pertaining to the Great Lakes, it must pass through an MSD.[131] Third, vessel sewage should be defined as a "pollutant" so that it will be regulated by the NPDES permitting system.[132]

These proposed amendments are not likely to occur anytime soon. Currently, Congress is busy addressing more pressing foreign[133] and domestic issues.[134] Even if states did petition Congress to change certain sections of the CWA, the process is long and arduous. Therefore, amending the CWA ranks low as a means for addressing vessel sewage and gray water discharge.

F. Draft Memorandums of Understanding (MOUs)

Both Hawaii and Florida have signed MOUs with the cruise line industry. MOUs are employed as a means for establishing codes of conduct that "promote better environmental behavior."[135] While MOUs may provide some guidelines for cruise line conduct, they are essentially inadequate in combating environmental pollution because they are unenforceable.[136]

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131. This exception is due to efforts made in the late 1970s to have gray water be included in the sewage definition when pertaining to the Great Lakes. (Author's note).

132. It will be difficult to change this aspect of the CWA because vessel sewage is so connected to vessel design. By going this route, uniformity in design would be at stake. Therefore, it is unlikely that Congress would amend this section of the CWA. (Author's note).

133. The war in Iraq and the War on Terrorism.

134. Rising unemployment.

135. EPA WHITE PAPER, *supra* note 10, at 17.

136. Sierra Club, *State, Cruise Ships to Sign Toothless MOU* (Oct. 24, 2002), *available at* http://www.hi.sierraclub.org/press/releases02/cruise1024.pdf (last visited Mar. 30, 2003). In this news release, the Hawaii Sierra Club Chapter stated that the MOU between the State of Hawaii and many of the cruise ship companies is unenforceable. While the MOU outlines certain expectations, it falls short in failing to provide provisions that "deal with penalties

G. *Judicial Challenge to EPA's 1973 NPDES Exemptions*

Questions arise regarding EPA's authority to exempt certain point sources from the NPDES permitting requirements. *NRDC v. Costle*[137] provides guidance in assessing whether or not the EPA abused its discretion when it enacted the 1973 NPDES exemptions. Under the *NRDC* decision, the EPA faces an uphill battle in convincing the courts that it did not step outside the authority granted by the CWA.[138]

In concluding that the EPA overstepped its boundaries, the *NRDC* court focused on the legislative history of the CWA.[139] Both House and Senate reports indicate that it was Congress's intent to employ the NPDES permit as the "only means by which a discharge from a point source may escape the total prohibition of [section] 301(a)."[140] After careful study, the D.C. Circuit held that the CWA did not grant the EPA Administrator the authority to exempt certain point sources from the NPDES requirement.[141] The *NRDC* court went on to reject the EPA's "administrative infeasibility"

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for non-compliance, fees for cruise ship compliance monitoring, or environmental impacts from ballast water or increased marine mammal interactions." *Id.* Jeff Mikulina, Director of the Sierra Club, Hawaii Chapter states that "[i]f the cruise ship industry had a clean record, perhaps an MOU would suffice.... But with their track record of chronic criminal behavior, [a] state must do more to hold the industry accountable to their promises." Sierra Club, *supra* note 35, at 1.

137. NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977).

138. *Id.* at 1383. In this case, the D.C. Circuit found that the EPA's point source exemptions frustrated the "Congressional intent to require permits in any situation of pollution from point sources." *Id.*

139. *Id.* at 1373.

140. *Id.* at 1374. The House Report emphasized that "[a]ny discharge of a pollutant without a permit issued by the Administrator under section 318, or by the Administrator or the State under section 402 or by the Secretary of the Army under section 404 is unlawful. Any discharge of a pollutant not in compliance with the conditions or limitations of such a permit is also unlawful." *Id.* (quoting H.R. No. 92-911, 92d Cong., 2d Sess. 100 (1972)), *reprinted in* 2 Env. Policy Div., Congressional Reference Serv., A Legislative History of the Water Pollution Control Act Amendments of 1972, [hereinafter referred to as Legislative History]. The Senate Report furthered this interpretation of the CWA amendments by stating that "[s]ection [301] clearly establishes that the discharge of pollutants is unlawful. Unlike its predecessor program which permitted the discharge of certain amounts of pollutants under the conditions described above, this legislation would clearly establish that no one has the right to pollute—that pollution continues because of technological limits, not because of any inherent right to use the nation's waterways for the purpose of disposing of wastes." *Id.* (quoting S. REP. NO. 92-414, 92d Cong., 1st Sess. 42 (1971), *reprinted in* Legislative History at 1460).

141. *NRDC*, 568 F.2d at 1377. The *NRDC* court held that "[t]he wording of the statute, legislative history, and precedents are clear: the EPA Administrator does not have [the] authority to exempt categories of point sources from the permit requirements of [section] 402." *Id.*

argument as to why it was necessary to exclude particular point sources from the NPDES requirement.[142] This court warned that an exemption can hold undesirable consequences, for "the problem drops out of sight, into a pool of inertia, unlikely to be recalled in the absence of crisis or a strong political protagonist."[143]

As expressed earlier in this comment, the EPA justified its exemption of sewage and gray water from the NPDES requirement by claiming that (1) "[t]his type of discharge generally causes little pollution" and (2) the exclusion "will reduce administrative costs drastically."[144] The *NRDC* decision suggests that the 1973 NPDES exclusions, regardless of whether the EPA found it too burdensome to set effluent limitations and issue NPDES permits, frustrate the clear intent of Congress in enacting the CWA.[145] Thus, the NPDES exemption of sewage and gray water, if challenged in the courts, should be struck down as outside the EPA's authority in administering the CWA.[146]

V. CONCLUSION

As asserted throughout this comment, cruise ship discharge of sewage and gray water affects both public health and local ecosystems. While the CWA seeks to eliminate water pollution, it fails in that it legalizes certain types of discharges. Under the CWA, it is legal to discharge pollutants, but only if the discharger obtains a NPDES permit first. Cruise ships are exempted from this major aspect of the CWA, for they do not need to obtain a NPDES permit for either sewage or gray water discharges. As long as sewage is going through a certified MSD, all is well. Moreover, gray water needs absolutely no treatment. In attempts to fill in these gaping

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142. *Id.* at 1379. Here, the court concluded that "to require the EPA Administrator to include silvicultural, agricultural, and storm sewer point sources in the NPDES program is not to require him 'to do an impossibility.'" *Id.*

143. *Id.* at 1382.

144. 38 Fed. Reg. 13,528 (May 22, 1973). The EPA WHITE PAPER recently acknowledged this early rationale for excluding certain vessel discharges from the NPDES permit requirements. The report states "[t]he NPDES vessel exclusion was premised on the assumption that vessel discharges, including gray water, were minor sources of pollutants as compared to other dischargers." EPA WHITE PAPER, *supra* note 10, at 14.

145. *NRDC*, 568 F.2d at 1383. "We find a plain Congressional intent to require permits in any situation of pollution from point sources." *Id.*

146. *Id.* at 1382. In its decision, the *NRDC* court explicitly narrowed its finding to "whether the [EPA] Administrator has authority to exempt point sources from the NPDES program." *Id.* The court, as discussed in the text, held that the EPA Administrator cannot "exempt point sources from the NPDES program." *Id.* Under section 502 (14) of the CWA, a vessel or other floating craft qualifies as a "point source." 33 U.S.C. § 1362(14) (2000).

holes, states are beginning to enact laws that regulate both vessel sewage and gray water discharge.

Enacting state laws becomes difficult, if not impossible, when the proposed law conflicts with federal law. A state may pass a law, but if it conflicts with federal law, it will be preempted. As expressed in the introduction, the law in this area is relatively unclear; therefore, it is difficult to predict whether a state law will be preempted by federal regulations, specifically 40 CFR § 122.3(a) and section 312 of the CWA. Due to these preemption issues, drafting state legislation in this area of law requires careful crafting and much precision.

Legislative history and case law suggest that states are not completely helpless in seeking to address cruise ship discharge. Vessel sewage requires some hurdle jumping, but gray water, for the most part, does not. For those coastal states facing "floating cities," the best options to be employed appear to be (1) the combination of the NDZ with the enactment of state legislation regulating gray water[147] or (2) lobbying Congress to enact federal legislation. While both options are complex, they provide hope for those states wishing to protect their coastal waters from the harms imposed upon them by cruise ship travel. Moreover, the options enable states to carry out the main objectives of the Clean Water Act.

147. Currently, Maine state legislators are entertaining two bills that would prevent cruise ships from discharging wastewater into coastal waters and more specifically into Casco Bay. State Senator Michael Brennan submitted L.D. 1158 which seeks to set new coastal standards regarding gray water and other wastewater. State Representative Herb Adams submitted L.D. 1271 which seeks to create a NDZ, plus prohibit the discharge of gray water into Casco Bay. Brennan's bill is state wide whereas Adams' bill pertains only to Casco Bay. David Tyler and Mary Lou Wendell, *State to Study Cruise Ship Discharges*, ISLAND TIMES, Apr. 2003, at 1. The Adams bill represents the combination of the NDZ and the state gray water legislation options.