Via Registered Mail (Return Receipt Requested)

Col. Thomas F. Julich, District Engineer U.S. Army Corps of Engineers New Orleans District 7400 Leake Ave.
New Orleans, LA 70118-3651

Re: Notice of Endangerment and Intent to File Suit Pursuant to Resource

Conservation and Recovery Act § 7002(b)(2)(A)

To U.S. Army Corps of Engineers:

The Lake Pontchartrain Basin Foundation ("LPBF") and Holy Cross Neighborhood Association ("the Neighborhood Association") hereby provide the United States Army Corps of Engineers ("the Corps") with this Notice of Endangerment and Intent to File Suit pursuant to the Resource Conservation and Recovery Act ("RCRA"), § 7002(b)(2)(A), 42 U.S.C. § 6972(b)(2)(A). Provision of such a notice is required before a lawsuit may be filed under RCRA § 7002(a)(1)(B). In many cases, the party providing notice must wait at least ninety days before filing suit. The purpose of this waiting period is to give the parties a reasonable time to resolve the matter cooperatively. Notice is being provided to the Corps because, pursuant to RCRA § 7002(a), the Corps is liable for the potential endangerment described below.

## Introduction

This Notice concerns solid and hazardous waste that may present an imminent and substantial endangerment to human health and the environment at and in the vicinity of the Florida Avenue, Clairborne Avenue, and St. Claude Avenue bridges in New Orleans, Louisiana. Specifically, the Corps has begun construction on a project that incorporates plans to dredge the Inner Harbor Navigational Canal ("the Industrial Canal"), located in the heart of this area. Industrial Canal sediments are contaminated with toxic materials that qualify as "hazardous waste" and "solid waste" under RCRA. Dredging the canal will stir up and release these poisons into the environment.

We are particularly concerned with the potentially devastating impact that dredging the Canal will have on Lake Pontchartrain. Lake Pontchartrain is only now coming back after years of contamination. A healthy, swimmable Lake Pontchartrain offers a major improvement in the

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<sup>&</sup>lt;sup>1</sup>42 U.S.C. § 6972(b)(2)(A).

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quality of life in the New Orleans area and is a key ingredient to the economic revitalization of this City.<sup>2</sup> The Corps is placing an irreplaceable state and local resource at risk by committing to plans to dredge the Canal without fully characterizing the Canal's sediments and without fully assessing the potential effect on the Lake. We strongly urge the Corps to put all plans to dredge the Canal on hold until these issues are fully resolved.

Our concerns about the Corps' dredging plans are magnified by the Corps' failure to present and analyze a plan to safely manage dredging of contaminated sediments in the Corps' Final Environmental Impact Statement (FEIS). It is very difficult and expensive to dredge contaminated sediments without spreading contamination throughout the ecosystem and into adjacent water bodies as Lake Pontchartrain. An attempt to dredge the Canal without first de-watering it would inevitably stir up a large percentage of the dredged, toxic materials and allow those poisons to escape into the current. Very probably, the only safe method of dredging the Canal – without exposing Lake Pontchartrain and New Orleans' economic future to unreasonable risk – would be to first de-water the Canal. This alternative would dramatically alter the cost-benefit analysis that the Corps relied on when deciding to proceed with this project.

It would be irresponsible and unlawful for the Corps to proceed with its plans for the Industrial Canal without first solving the problem of dredging and managing contaminated sediments. Beginning such an expensive project without understanding the potential costs of safely completing it will create almost irresistible pressure to cut corners and dredge sediments in a way that presents unacceptable risks to Lake Pontchartrain. No matter how well intended, the Industrial Canal project could be devastating to the economic and environmental future of this region if it is not responsibly planned and carried out.

We are also concerned that the Corps has not determined how it will manage dredged contaminated sediments, including the volume of contaminated sediments to be managed and alternatives for the location, design, and reliability of the disposal facility. If, as a price for upgrading the Industrial Canal, the Corps is asking the New Orleans community to shoulder a large new waste disposal structure in a flood prone area, the Corps should fully inform the City and community of all associated risks and benefits before deciding to proceed. We know that every engineered waste containment structure will eventually fail. But the public has no information about how the Corps decided what kind of waste containment structure it intends to build, how large a flood event the Corps will design it to withstand, how much it will cost to build, or whether Congress will pay for it. Neither the Corps nor the public has enough

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<sup>&</sup>lt;sup>2</sup> Lake Pontchartrain is part of an ecological system called the Pontchartrain Basin. Known for its slow flowing rivers and bayous, tranquil swamps, and lush hardwood forests, the Basin provides essential habitat for countless species of fish, birds, mammals, reptiles, and plants. The famous wetlands and marshes that surround the Basin's waters provide a beautiful setting for wildlife and are the heart of the region's commercial and recreational fisheries. In fact, the Pontchartrain Basin is the largest estuarine system on the Gulf Coast. Estuaries are the most productive ecosystems in the world and are the sources of the world's best seafood production. Lake Pontchartrain is an integral part of the Pontchartrain Estuary and the source of the famous shrimp, blue crab, and finfish production in Louisiana.

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information to determine whether the lock replacement project is still justifiable once the price of an adequate and reliable waste containment structure, the cost of the structure's eventual failure, and the risk of early failure is factored in. The Corps cannot responsibly or lawfully proceed with this project until publicly determining the nature and extent of the endangerment that will be posed by dredged materials. Nor may the Corps proceed until a plan is developed to avoid that endangerment.

To abate the endangerment to the public and environment, including Lake Pontchartrain, we ask the Corps to immediately announce that it will suspend further construction on the Industrial Canal project until the Corps: (1) fully characterizes the contaminated sediments in the canal; (2) rigorously analyzes the alternatives available for dredging these sediments safely, including all risks and benefits reasonably presented by these alternatives; (3) rigorously analyzes the alternatives available for safely managing the dredged sediments; (4) presents these alternatives to the public for comment; and (5) selects the best alternative or selects the alternative of "no dredging" if the dredging cannot practically be performed in a cost-effective and protective manner.

## **The Industrial Canal Project**

The endangerment at issue began by at least 1998, when the Corps finalized plans to go forward with the Inner Harbor Navigational Canal lock replacement project (the "Industrial Canal Project"). The purpose of the project is to allow larger barges and deeper draft vessels to reach port facilities along the Industrial Canal and the Mississippi River Gulf Outlet. The Industrial Canal is located entirely within the City of New Orleans and provides access between Lake Pontchartrain and the Mississippi River. Accordingly, the facility is located in the midst of a highly developed and densely populated part of the city. Adjacent communities include two national historic districts, the Holy Cross and Bywater neighborhoods, as well as the St. Claude and Lower Ninth Ward neighborhoods. The Holy Cross neighborhood fronts the Mississippi River and lies east of the project, and south of St. Claude Avenue.

The Industrial Canal Project is a joint project of the Corps and the Port of New Orleans (the "Port"). The Corps has full authority over the project. The project is currently ongoing and the Corps expects it to last at least ten years. Projected costs exceed \$600 million.

Because the Industrial Canal Project involves a "major federal action significantly affecting the human environment," the Corps is required under the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4312 et. seq., to prepare a detailed Environmental Impact Statement (EIS). The Corps issued its Final Environmental Impact Statement (FEIS) for the Industrial Canal Project in March 1997. However, growing concerns regarding the scope and accuracy of the FEIS led the Neighborhood Association to formally request a supplemental EIS on a number of occasions, including January 8, 2000 and February 21, 2000. LPBF followed with its own request on July 10, 2001. Years earlier, LPBF submitted comments to the New Orleans District as part of the Environmental Impact Statement review process. The January 27, 1997 letter, noted "[I]t is apparent that there is a significant problem with contaminated sediments in the area around the current lock facility. In addition, we believe the dredging and

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disposal of the materials, as described in the EIS, have the potential to spread these toxic materials to other areas in the Pontchartrain Basin." These concerns have never been adequately addressed.

LPBF and the Neighborhood Association's concerns stem from the fact that the Corps has begun the Industrial Canal Project which will involve dredging of sediments that contain hazardous and solid waste. Yet, the Corps has not adequately studied that waste nor developed plans to safely dredge and manage it. Instead, the Corps has blindly launched into a construction program that will require the removal of as much as three million yards of sediment from the bottom of the canal.

The Canal's sediments contain many toxins, including Polycyclic Aromatic Hydrocarbons (PAHs) and toxic metals. Toxic metals prevalent in the Canal include but are not limited to arsenic, barium, chromium, and lead. Arsenic is a human carcinogen. In fact, EPA studies have linked "exposure to arsenic in drinking water to cancer of the bladder, lungs, skin, kidney, nasal passages, liver and prostate. Non-cancer effects of ingesting arsenic include cardiovascular, pulmonary, immunological, neurological, and endocrine (e.g., diabetes) effects." Moreover, marine organisms and fish continuously absorb arsenic accumulations.

PAHs can also cause serious health problems due to the fact that most PAHs contain benzene, another highly carcinogenic substance.<sup>5</sup> According to the EPA, long-term exposure to benzene can result in leukemia, damage to the immune system, and in women, menstrual disorders and a decreased size of ovaries.<sup>6</sup> In fact, benzene has been a known blood marrow poison for more than one hundred years, and is causally linked to aplastic anemia (an often fatal disease of the bone marrow).<sup>7</sup> Additionally, like arsenic, PAHs are absorbed by fish.<sup>8</sup>

The Corps has been aware of the existence of these hazardous toxins in the Canal since 1993 when their own samples showed high concentrations of PAHs and trace metals. A May 22, 2001 sampling taken by the LPBF, using the EPA's Risk Evaluation/Corrective Action Program (RECAP) standard, confirmed that these poisons do, in fact, reside in the Canal in dangerous levels. On August 17, 2001, LPBF sent a letter to the Corps apprising them of their frightening results [see attached letter incorporated by reference: August 17, 2001 from LPBF Executive Director, Carlton Dufrechou to Colonel Thomas F. Julich, Corps District Engineer]. The letter states that concentrations of many Canal toxins exceed standards for non-industrial sites (SSni).

<sup>&</sup>lt;sup>3</sup> http://www.epa/gov/safewater/ars/ars rule factsheet.html (visited October 18, 2001).

 $<sup>^{4}</sup>$  E. Merian, Metals and their Compounds in the Environment 1438 (1991).

<sup>&</sup>lt;sup>5</sup> "Several consensus groups have confirmed the carcinogenic potential of benzene. [.]" Occupational Exposure to Benzene, 52 Fed. Reg. 34460, 34468 (29 CFR Part 1910).

<sup>&</sup>lt;sup>6</sup> http://www.epa/gov/ttnuatw1/hlthef/benzene/html; http://www.epa.gov/ncea/benfrn.html (visited October 18, 2001).

<sup>&</sup>lt;sup>7</sup> 52 Fed. Reg. at 34468.

 $<sup>^{8}</sup>$  U. Varanasi, Metabolism of Polycyclic Aromatic Hydrocarbons in the Aquatic Environment 341 (1989).

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It also states that several PAHs exceed the higher Industrial Screening Standard (SSi).<sup>9</sup> These disturbingly high toxic levels are illustrated by Graphs 1-3, attached to this notice and incorporated by reference.

Graph 1 lays out the levels of excess for Benz(a) anthracene, a carcinogenic PAH, in both the 1993 Corps and 2001 LPBF studies. Three of four samples exceed non-industrial standards. Further, the Corps' 1993 sample, at a level of 9.1 ppm (parts per million) and an LPBF sample of 13.5 ppm, far surpass the industrial standard of 3.6 ppm. Other PAHs yielded similar results.

Graph 2 illustrates LPBF's sampling process. The LPBF extracted eight-foot cores at numerous locations. LPBF then analyzed each eight foot core at one-foot intervals at the top, middle, and bottom of the core. Graph 2 depicts this procedure as carried out in Corehole #4 in the turning basin. Due to the high concentrations of PAH in this particular core, LPBF extended their study an additional three feet. While PAHs were scarce at intervals closest to the Canal bottom, they were abundant at lower levels. Therefore, dredging of this canal bottom will bring PAH abundant sediments alarmingly close to the new canal bottom, potentially endangering human health and the environment.

Graph 3 depicts the LPBF results regarding arsenic. All four cores exceeded the non-industrial standard. Like PAHs, arsenic levels increased down core from top, closest to the canal bottom, to the base of each core. Therefore, dredging the Canal will expose higher concentrations of arsenic to the environment, endangering the public and environmental resources.

The Industrial Canal contains a number of dangerous and often carcinogenic toxins. Currently, the highest concentrations of these toxins are located in lower levels below the Canal bottom. Dredging the Canal will strip away the less toxic sediments and expose sediments with higher concentrations of contaminants to the aquatic environment. Consequently, as stated in the LPBF's August 2001 letter, the toxins harbored at the bottom of the Industrial Canal endanger the environment in the following ways:

- 1) Since PAHs are more concentrated at depth, dredging will tend to expose contaminated sediments to the environment causing public health and environmental hazards.
- 2) Many of the sediments, if exposed at the sediment water interface, could kill benthic organisms living in the area to be dredged, as well as in the area used for spoil disposal.
- 3) Since many of the pollutants are hydrophobic, they can be mobilized through dredging and resuspension of finer grained sediments (e.g., clay, organic

<sup>&</sup>lt;sup>9</sup> Industrial property can generally be described as "any property not currently used for human habitation on a permanent or temporary/intermittent basis. . [.]" Accordingly, non-industrial property might include residential, recreational, farming or undeveloped lands. <u>Louisiana Department of Environmental Quality RECAP</u>, June 20, 2000 RECAP, 15, 46 (www.ldeq.org/technology/recap/2000/text jUNE2000.pdf (visited October 18, 2001)).

particles), which could be moved by currents into less polluted areas, including Lake Pontchartrain.

Therefore, the potential endangerment at and in the vicinity of the Industrial Canal Project began by at least 1998 and continues. The Corps is the past and present operator of a disposal facility. Toxic materials in the sediment qualify as "solid waste" under 42 U.S.C. § 6903(27) because they are "discarded material." Those materials qualify as "hazardous waste" under 42 U.S.C. § 6903(5) because they "may... pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed." Therefore, the Industrial Canal is a disposal facility of hazardous waste in that it discharges, deposits, dumps, spills, leaks, or places "any solid or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters." 42 U.S.C. § 6903(3).

The Corps' conduct in commencing a project that will require dredging of approximately 3 million yards of contaminated sediments, without adequate preparations in the form of data analysis and plans, presents a stark potential for an imminent and substantial endangerment to health or the environment and creates a clear threat of harm to Lake Pontchartrain.

## **Persons Giving Notice**

The full name and address of the persons giving notice is:

Lake Pontchartrain Basin Foundation Attn: Carlton Dufrechou, Executive Director P.O. Box 6965 Metairie, LA 70009

Holy Cross Neighborhood Association P.O. Box 3417 New Orleans, LA 70177

These parties, however, should be contacted through their counsel:

Adam Babich Tulane Environmental Law Clinic 6329 Freret Street New Orleans, LA 70118 (504) 865-5789

<sup>&</sup>lt;sup>10</sup> The Corps' conduct in maintaining a canal contaminated with hazardous waste in a major U.S. city, without fully characterizing the risks posed by those toxins, including the risk of mobilization, also poses a potential imminent and substantial endangerment.

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Lake Pontchartrain Basin Foundation shall also be represented by:

Stephen K. Conroy Conroy Law Firm Three Lakeway Center 3838 N. Causway Boulevard, Suite 3010 Metairie, Louisiana 70002

## **Conclusion**

If you believe that any portion of this Notice is in error or if you wish to discuss any portion of this Notice, please contact Adam Babich at the address and phone number listed above within the next 60 days.

Dated: April 17, 2002

Prepared by: Respectfully submitted on Lake Pontchartrain

Basin Foundation and Holy Cross Neighborhood Association's behalf:

Robert Lang, Student, Tulane Environmental

Law Clinic

Adam Babich (SBN: 27177) Tulane Environmental Law Clinic 6329 Freret Street New Orleans, Louisiana 70118 Tel. No. (504) 865-5789

Fax. No. (504) 862-8721

cc:

Ms. Christine Todd Whitman, Administrator U.S. EPA 401 M Street, SW Washington, D.C. 20460

Mr. J. Dale Givens, Secretary Louisiana Department of Environmental Quality P.O. Box 82263 Baton Rouge, LA 70884-2263 Notice of Endangerment April 17, 2002 Page 8 of 8

Mr. Gregg A. Cooke Regional Administrator U.S. EPA, Region 6 1445 Ross Avenue Dallas, TX 75202-2733

Mr. John Ashcroft Attorney General of the United States U.S. Department of Justice 950 Pennsylvania Avenue, NW Washington, DC 20530-0001 Governor M. J. "Mike" Foster Office of the Governor P.O. Box 94004 Baton Rouge, LA 70804