

New Orleans After Katrina: A Superfund Site?

Norman A. Dupont

Does it make sense to apply the CERCLA “procrustean bed” to the situation in New Orleans? Is there not an immediate and absolute act of God defense for the undoubted release of hazardous substances in the greater metropolitan area of New Orleans? This article addresses these two initial questions and also discusses why, as a practical matter, it might actually make sense to apply the CERCLA statutory framework to the cleanup in New Orleans.

CERCLA, the so-called Superfund statute, imposes strict liability upon four covered classes of parties for a “release” of a “hazardous substance” at a “facility.” 42 U.S.C. § 9607(a). Three of the statutory requirements for liability are easily met in the situation facing the City of New Orleans after Hurricane Katrina. There were clearly multiple “releases” of materials, including chemicals from refineries, energy facilities, and other industrial sites that easily includes at least multiple “hazardous substances.” One pending congressional bill suggests that the hurricane caused more than 7 million gallons of oil to spill and that over 450 facilities handling quantities of “dangerous chemicals” were impacted by the Hurricane. H.R. 4197 § 201 (2005 session). EPA’s report on its initial surveys of floodwater in New Orleans revealed a variety of metals (manganese, vanadium, arsenic), and other hazardous substances. Available at www.epa.gov/katrina/testresults/water/index.html.

Although it might be somewhat unusual to deem an entire city a Superfund site, there is ample precedent for EPA to follow the plume of contaminants and determine that large impacted area is part of a CERCLA “site.” For example, in the San Gabriel area of California, EPA identified multiple plumes of underground water contamination and designated broad areas underlying the cities of Azusa, Baldwin Park, South El Monte, Whittier, and unincorporated areas of the County of Los Angeles as part of the San Gabriel Valley Superfund Site. This major urban area in Los Angeles includes more than 1 million individual city residents. The statutory definition of “facility” under CERCLA includes “any site or area where a hazardous substance has been deposited, stored . . . or

otherwise come to be located.” 42 U.S.C. § 9601(9). Courts have long construed this language to allow EPA to regulate an area beyond any particular property boundary. See *United States v. Stringfellow*, 661 F. Supp. 1053, 1059 (C.D. Cal. 1987).

This leaves the fourth portion of the CERCLA liability requirement—a person falling within one of the four specified categories of liable parties: a current owner of a property, an “operator” of industrial or other activities on the property involving the hazardous substances, a past owner during the time of releases from the property, or a transporter of hazardous substances. 42 U.S.C. § 9607(a). In the instance of New Orleans, multiple parties would fit within the statutory categories: current owners or operators of oil refineries or chemical facilities that experienced releases during the hurricane and current owners or operators of levees that broke and caused releases of contaminated floodwaters into the city. These are just a few of the potential examples of entities falling within the broad net of CERCLA §107(a).

An Act of God Defense?

Would not each of the potentially liable parties have an immediate defense provided by CERCLA § 107(b)(2) for an act of God? Indeed, if Hurricane Katrina, a Category 3 to 4 hurricane, is not an act of God, then one might well ask what would constitute an act of God within the meaning of CERCLA?

The act of God defense under CERCLA requires that one establish three basic elements: (1) that the release of hazardous substances was caused “solely” by the act of God, 42 U.S.C. § 9607(b)(1); (2) that the event was of an “unanticipated grave nature of . . . an exceptional, inevitable, and irresistible character”; and (3) that the effects of this force “could not have been prevented or avoided by exercise of due care or foresight.” 42 U.S.C. § 9601(1).

On first reading, it appears that Hurricane Katrina easily fits within the statutory act of God provision. Unfortunately, however, judicial construction of the act of God defense under CERCLA is a very limited one; indeed, it is a defense that is so limited as to be virtually unavailable even in major storm situations. Courts have held that heavy rains, even torrential downpours of rain associated with a hurricane, may not be sufficient to establish an act of God defense under the statute. In *United*

Mr. Dupont is of counsel to the firm of Richards, Watson & Gershon in its Los Angeles office and can be reached at ndupont@rwglaw.com. Mr. Dupont was counsel of record to two of the parties in United States v. Stringfellow, discussed in this article.

States v. Alcan Aluminum Corporation, 892 F. Supp. 648 (M.D. Pa. 1995), the district court found that torrential rainfall caused by Hurricane Gloria in an unexpected part of the country (Pennsylvania) was not sufficient to establish an act of God defense. The district court found that defendant Alcan Aluminum had not established that the storm was the “sole cause” of the release of hazardous substances because, in part, Alcan had poured some 2 million gallons of hazardous waste into a borehole. According to the district court, “were it not for the unlawful disposal of this hazardous waste Hurricane Gloria would not have flushed 100,000 gallons of this chemical soup into the Susquehanna River.” 892 F. Supp. at 658.

Of course, this same analysis could be applied to any owner or operator of an industrial plant or other facility that stored hazardous substances in New Orleans. The mere fact that Hurricane Katrina caused torrential rains that flushed hundreds of thousands of gallons (or more) into the residential portions of New Orleans might not be a sufficient defense; the additional “cause” of the overflow was the fact of storage itself.

Perhaps *Alcan Aluminum* should not be read so broadly; one could emphasize (as did the court in its opinion) that the initial disposal of hazardous wastes in that case was “unlawful.” In New Orleans, one might presume that those storing or using hazardous substances had all appropriate licenses and permits to do so. This argument, however, was essentially raised and denied in a separate case, *United States v. Stringfellow*. In that case, the unfortunately named Stringfellow Acid Pits was a facility licensed by the State of California that accepted hazardous wastes from a variety of southern California industries for years. In 1969, and again in 1979, the container pits overflowed due to extremely heavy rainfall. But, the district court held that even those who legally disposed of hazardous wastes could not invoke an act of God defense in these circumstances. For the court, “the rains were foreseeable based on normal climatic conditions and any harm caused by the rain could have been prevented through design of proper drainage channels.” 661 F. Supp. 1053,1061 (C.D. Cal. 1987). This analysis, if applied to the New Orleans situation, would probably doom most efforts to invoke an act of God defense.

Unlike the situation in *Alcan Aluminum*, hurricanes are part of the “normal” climatic conditions in New Orleans. The fact that Hurricane Katrina was a particularly strong hurricane with Category 4 winds would not be sufficient. Just as in California, where periodically very heavy rain falls, so too in New Orleans one must occasionally expect a very strong hurricane to land near

the city. Indeed, it appears that at least one emergency preparedness exercise in 2004 projected exactly such a storm under the hypothetical name of Hurricane Pam. *See Nova* (PBS television broadcast Nov. 22, 2005). If one adopts the reasoning of Judge Ideman in the *Stringfellow* decision, then relatively rare but predictable heavy rainfalls are simply predictable, not acts of God under CERCLA. Moreover, as the court in *Stringfellow* observed, the impacts of the torrential rains (and winds) in New Orleans might not have been the “sole cause” of the release of hazardous substances. In *Stringfellow*, those who sent wastes to the legal disposal facility were held liable because others (either the site owner or the State of California as the licensing agency) did not install “proper drainage channels.” 661 F. Supp. at 1061. In the case of New Orleans, an oil refinery or a chemical plant might lose its act of God defense because

others (the U.S. Army Corps of Engineers) had not provided for proper levees that could have otherwise held the resulting contamination from impacting the residential areas of New Orleans.

One other case suggests that the act of God defense under CERCLA may simply not be available in the context of Hurricane Katrina for an entirely different, but yet more troublesome reason—the prediction of stormy weather. In *United States v. M/V Santa Clara I*, 887 F. Supp. 825 (D.S.C.1995), the court examined an act of God defense for CERCLA liability based upon a substantial (50 knots, swells of 18 feet) storm in the Atlantic that ultimately caused the

loss of barrels containing a hazardous substance from a vessel. This, however, was again not sufficient, particularly since the court found that: “The evidence in the record is clear that inclement weather offshore was predicted by the National Weather Service and known by the captain and crew prior to their departure from Port Elizabeth.” 887 F. Supp. at 843.

In the instance of Hurricane Katrina, the “evidence” is even more clear that predictions that it was both a major hurricane and likely to land in or around New Orleans were issued regularly and frequently before the actual landfall of the storm on August 29, 2005. If one adopts the reasoning of the court in *M/V Santa Clara I*, then the mere fact that such notice was available and widely disseminated might be sufficient to negate an act of God defense.

Finally, in a case decided by the District Court for the Eastern District of Louisiana, the court upheld a denial of a reimbursement request from the National Pollution Funds Center by utilizing a disturbing post hoc analysis. In that case, a boat that was towing six barges was caught

The mere fact that such notice was available and widely disseminated might be sufficient to negate an act of God defense.

in what its expert termed an extremely high flood of the Mississippi River resulting in the spill of slurry oil from two of the barges. *Apex Oil Co. v. United States*, 208 F. Supp. 2d 642, 645–46 (E.D. La. 2002). This, however, was not enough for either the administrative agency evaluating the initial claim for reimbursement from the fund nor for the court, which analogized this Oil Pollution Act case to CERCLA and its act of God defense. For the district court, the legislative history of CERCLA demonstrated that the act of God defense was intended to be a very narrow one. 208 F. Supp. 2d at 653. But, what was most troublesome was the court's determination that the act of God defense was not available in this case in part because the towing company seeking reimbursement for its costs of cleaning up the slurry oil should have known that its boat was underpowered. Moreover, the "flood conditions" in the Mississippi were both "anticipated and predicted." 208 F. Supp. 2d at 657. The suggestion that the boat was "underpowered" points to the lengths district courts are willing to travel to deny an act of God defense. The claimant in *Apex Oil Company* was second-guessed for what type of boat it chose to put on the river at a particular time in order to determine that the unusual flood conditions did not constitute an act of God.

It is possible to distinguish each of these cases on the specific facts. For example, in the *M/V Santa Clara I* case, the ship's captain chose to sail despite the predictions of bad weather. The same distinction might be applied to the barge-towing captain in *Apex Oil*. But, in New Orleans many facilities were land-based locations that simply could not have "pulled up and left" prior to the landfall of Katrina. Moreover, in *Stringfellow* one might argue that heavy rains that periodically occur in Southern California are simply not the type of overwhelming onslaught that everyone witnessed upon the landfall of Katrina. Finally, *Alcan Aluminum* might also be distinguished based on the fact that the defendant in that case had actively stored hazardous substances "illegally" and in a mine borehole close to the river. In New Orleans, however, one presumes that many of the releases might have come from perfectly legal facilities that were not deliberately located next to a body of water, but rather were overwhelmed by the impact of torrential rains and one hundred-plus miles per hour winds.

The best argument for invocation of an act of God defense in the Hurricane Katrina situation is a statutory purpose argument. By writing this provision into CERCLA, Congress certainly must have intended to provide for some exceptions to the strict liability regime that it was establish-

ing. If one is to ever recognize a force of sufficient magnitude to qualify as an act of God, then certainly Hurricane Katrina is it. No one who watched televised pictures of the storm and its magnitude can deny the overwhelming nature of this force. Although the precise level of Hurricane Katrina's winds in New Orleans itself appear to be less than a full Category 4 storm, there still can be no dispute that this was a very strong hurricane. See NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, HURRICANE KATRINA: A CLIMATOLOGICAL PERSPECTIVE, Technical Report 2005-01 (Oct. 2005). Even if the National Weather Service had predicted that Katrina might land close to New Orleans, similar predictions had been made in the recent past and had ultimately proven to be erroneous. Predictions of the precise landfall of a major hurricane are more art than science and Hurricane Katrina itself veered at the last minute to the west of the City of New Orleans.

Even if one accepts the irresistible and inevitable nature of the storm, there is at least one potential CERCLA defendant in New Orleans who might not qualify for the act of God defense—the U.S. Army Corps of Engineers (Corps). The Corps is certainly either the owner or operator of the levees in New Orleans. Those levees gave way in at least three separate locations, causing the release of contaminated stormwaters (a "chemical soup" to paraphrase the court in *Alcan Aluminum*) into the city, resulting in unspeakable flooding, havoc, and destruction. The Corps meets the statutory criteria for CERCLA liability—a statutorily defined party, that was involved in a release of haz-

ardous substances, and cleanup costs were incurred. The Corps is subject to CERCLA liability as a general matter, at least for ostensible failures to cleanup properly an area under its responsibility. Cf. *Shea Homes Limited Partnership v. United States*, No. C04-0092 TEH (N.D. Cal, Nov. 10, 2005) (noting CERCLA claims filed against the Corps for alleged failure to cleanup a landfill that was part of Hamilton Air Force Base).

Although the Corps might seek to invoke an act of God defense for the broken levees in New Orleans, recent facts suggest that the Corps might have a very difficult time in establishing the third required element of that defense—the "due care of the party." The Corps designed sheet piles to be driven into the soil to anchor the levees. Corps documents at the time of the construction in the 1980s and 1990s suggest that the sheet piles should have been driven to a depth of 17.5 feet. Instead, however, a recent investigative report commissioned by the Corps itself has concluded that the sheet piles reached only 10 feet below sea level in certain spots. See *Nondestructive Testing Investigation, Sheet Pile Foundation Lengths, New*

The best argument for invocation of an act of God defense in the Hurricane Katrina situation is a statutory purpose argument.

Orleans Levees at 1 (“sheet pile depths translate to elevation of approximately 10 feet below mean sea level”) (Dec. 5, 2005), available at <https://ipet.wes.army.mil>. The water levels generated by Hurricane Katrina reached eleven or twelve feet at the time the floodwalls collapsed. This is far less than the standard of flood protection that the Corps itself designed for. *Louisiana’s Levee Inquiry Faults Army Corps*, N.Y. TIMES, Dec. 1, 2005. Moreover, a preliminary report from the Interagency Performance Evaluation Task Force created by the Corps to review the “hurricane protection system” in light of Katrina suggests that at least the 17th Street Canal and London Avenue Canal levee failures were *not* due to a storm surge causing water to “overtop” the levees, but rather because of “failures in the foundation soils underlying the levees.” Interagency Performance Evaluation Task Force Interim Report: *Summary of Field Observations Relevant to Flood Protection in New Orleans, LA* at 4 (Dec. 2005), available at <https://ipet.wes.army.mil>.

If in fact the Corps did not construct the floodwalls to its own specifications and engineering standards, then the Corps cannot now claim the benefits of an act of God defense under CERCLA because it did not exercise “due care.” Just as Judge Ideman found in the *Stringfellow* case, that “proper drainage” could have avoided overflows of hazardous substances during periods of exceptionally heavy rains, so to could a similar argument be made that the Corps cannot claim that Hurricane Katrina was the “sole” cause of the resulting damages. If the Corps constructed substandard flood walls, then it could be susceptible to the same type of post hoc criticism that the district court employed in *Apex Oil*. Indeed, the Corps might also be subject to separate claims under the Federal Tort Claims Act for failing to carry out a “nondiscretionary” obligation—to construct flood control walls to normal engineering specifications.

The Corps might also try to suggest that the collapse of the levees did not directly result in the “release” by it of a “hazardous substance,” but rather that other parties (refineries, chemical plants, and the like) released the hazardous materials that became mixed with the Lake Pontchartrain waters that ultimately entered the city after failure of the levees. Unfortunately for the Corps, the courts have been quite inhospitable to claims that a mixture of items, some environmentally hazardous, somehow will escape CERCLA liability. The court in *Alcan* put it this way: “If thousands of gallons of milk . . . are dumped into a stream and that milk is harmful to the environment, then the fact that it contains elements or compounds classified as ‘hazardous substances’ under CERCLA

may indeed make the generator of that milk liable for the costs incurred in responding to the release.” *Alcan*, 892 F. Supp. at 655–56, n.13. Here, the Corps’ deficient walls purportedly allowed the release of millions of gallons of water which contained hazardous substances, and the water itself caused severe damage to the New Orleans environment.

The ultimate ability of the Corps to invoke the act of God defense to CERCLA liability will depend on more extensive factual investigation. If the final report from the engineering review group sustains a complaint that the Corps built the seawalls in violation of its own standards, then its ability to invoke the statutory act of God defense would seem to be very limited. The “due care” element of that standard would be difficult indeed for the Corps to establish if it built substandard walls. On the other hand, if the Corps can ultimately establish that it built the floodwalls up to all applicable standards and they were ultimately overwhelmed by the “irresistible and inevitable force” of a massive hurricane, then the Corps’ defense could be quite strong.

*The “due care” element
of the standard would
be difficult for the
Corps to establish if
it built substandard walls.*

Why Invoke CERCLA?

Apart from particular defenses or liability actions under CERCLA, a larger question remains: Why would one ever want to impose CERCLA, with its related procedural complications from the National Contingency Plan (NCP), on a cleanup project as big and complicated as that of New Orleans? EPA itself suggests only that it is “committed to collecting and providing scientific data to decision makers and the public” about the possible health and environmental hazards posed by returning to and reopening the city. EPA, ENVIRONMENTAL HEALTH NEEDS AND HABITABILITY ASSESSMENT REPORT (Sept. 17, 2005). The American Bar Association’s Section of Environment, Energy, and Resources has suggested that no specific legislation providing for widespread statutory exemptions for environmental statutes (including CERCLA) is necessary because those statutes, including CERCLA, already provide for various exemptions. See *Comments of the ABA Section of Environment, Energy, and Resources* at 6–7, available at www.abanet.org/enviro/katrina/home.html.

Why then, would one want to even begin to apply the CERCLA standards to New Orleans in the aftermath of Katrina? There are two possible answers. First, as to particular claims by the city or its inhabitants against the Corps or other potentially liable parties under the statute, CERCLA § 107 establishes a strict liability standard that provides an impetus for funding what would otherwise be an exceedingly expensive cleanup. While the Supreme Court’s decision in

Cooper Industries, Inc. v. Aviall Services, Inc., 543 U.S. 157 (2004), might limit the ability of some parties to bring contribution actions, the City of New Orleans could presumably sue as an innocent party with a direct right of action under Section 107. The number of major private corporations that have paid untold millions (if not billions) to settle Superfund cleanup claims by the government needs no recitation. Sources of cleanup costs (beyond federal relief funds) might be welcome and necessary to fund specific aspects of the remedial action needed for the City of New Orleans. Second, CERCLA itself can provide for considerable flexibility for federal cleanup officers acting to cut through red tape.

While one typically associates CERCLA liability suits as being filed by EPA, there is no limitation on actions brought by nonfederal entities. Both state and city governments have filed multiple suits making claims under CERCLA and there is certainly no statutory “standing” limitation to preclude a suit by the City of New Orleans in this case. See *Fireman’s Fund Insur. Co. v. City of Lodi*, 302 F.3d 928, 942 (9th Cir. 2002) (noting that “the text of CERCLA indicates that Congress anticipated remedial actions undertaken by local governments independent of CERCLA’s own provisions”).

CERCLA provides for at least three specific red tape-cutting provisions that merit consideration. The Act allows the President to choose cleanup levels not meeting the normal required standards when “compliance would result in greater risk to human health.” 42 U.S.C. § 9621(d)(4). CERCLA provides for express preemption of local zoning and permit requirements for those cleanups that are conducted “on-site”: “No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section.” 42 U.S.C. § 9621(e). This provision has been applied to preempt local ordinances requiring permits that might in any way delay or hamper the progress of the cleanup. See *United States v. City and County of Denver*, 110 F.3d 1509 (10th Cir. 1996). As noted before, the definition of “site” can be quite broad. In at least one other urban area, EPA has invoked this authority to suspend the need for detailed planning checks and permits for a cleanup facility’s capital construction. It is the significant power of the possible invocation of CERCLA Section 121(e) that might merit consideration in the rebuilding efforts that must now proceed in the City of New Orleans. The NCP also allows for dispensation of EPA’s own “off-site rule” for disposal of hazardous wastes generated from the aftermath of Katrina. 40 C.F.R. § 300.440.

Finally, there is one other provision of CERCLA that

deserves consideration as a potentially powerful assistance to the city in its rebuilding efforts. CERCLA provides for damages for injury to natural resources—a wide scope of land, fish, wildlife, biota, air, and water resources managed by the United States or a local government. 42 U.S.C. § 9601(16) (defining natural resources). Given the inevitable demands on the federal budget, one might expect a situation where many of the immediate human needs—housing, clothing, interim funds—are met, but the wider and less visible needs of restoring parks, waterways, lakes, and animal sanctuaries are lost in the frenzy of competition for federal dollars. The city, however, might well be able to utilize the natural resource damage provisions of CERCLA as a vehicle to establish funds to study and potentially repair the ecosystem damages in New Orleans.

There is legislation in Congress that might provide for some funding of “ecosystem restoration projects” by the Corps for damages caused by Hurricanes Katrina and Rita. S.B. 2006 § (1)(a)(3) (pending in Senate). Of course, neither the City of New Orleans nor anyone else can count on pending legislation until it is enacted and signed. Moreover, the funding in that particular bill is limited to funding initial studies to be performed by the Corps. There is no certainty of additional funding and authorization by Congress for the actual “ecosystem restoration.” To the contrary, there are already indications of a new federal skepticism about additional funding for a wide variety of relief measures for Louisiana. See *Image Problem is Costing Louisiana*,

L.A. TIMES, Dec. 3, 2005, §1. On the other hand, CERCLA is an existing federal statute that could provide the City of New Orleans (or other municipal or state entities) with a strict liability statute that could raise additional millions to pay for the devastation of natural resources caused by Hurricane Katrina.

CERCLA may well apply to the City of New Orleans as a site that has been impacted by the release of hazardous substances by entities that fall within one of the four statutory categories of liable parties. While those parties may have a defense under the act of God exemption, that defense has to date received an extremely narrow reading from district courts. It may be possible to argue that Hurricane Katrina is the exception to this narrow construction, but specific facts may still preclude particular parties, such as the Corps, from successfully invoking this defense. Finally, while CERCLA is typically seen as a procedurally cumbersome statutory scheme to be avoided at all costs it does have certain red tape-cutting provisions and at least one unique damages provision that might make it an interesting statutory avenue for pursuit of at least some of the cleanup necessary after Hurricane Katrina. 

*The city might well be able
to use the natural resource
damage provisions of
CERCLA to establish funds to
study and repair the ecosystem
damages in New Orleans.*
