



TULANE ENVIRONMENTAL LAW CLINIC

April 30, 2015

Via U.S. Mail & Email

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RE: Request for Hydrogen Sulfide Health Impact Study in Oakville, Louisiana

Dear Dr. Rodenbeck,

The Oakville Community Action Group respectfully requests the Agency for Toxic Substances and Disease evaluate the health impacts of hydrogen sulfide exposure to residents of the Oakville community of Belle Chasse, Louisiana. Residents are being adversely impacted from landfill gas emissions in the community.

Introduction

The Industrial Pipe Landfill (a large construction and demolition debris landfill) operates 50 feet from homes in Oakville. Oakville residents complain of sickening odors from the landfill. Residents say that they smell odors from the landfill whenever the wind is coming from the direction of the landfill towards the community. They describe the odors as smelling like rotten eggs, sulfur or “a burning stink.” A former resident said that he had to move from the community because the landfill gases caused his baby to suffer severe respiratory problems. Another resident wonders if emissions from the landfill caused the crib death of her grandchild who died after a fire at the landfill burned for several weeks after accepting huge volumes of hurricane debris. During a recent trial involving the landfill, a resident said that the odors from the landfill can be so bad that at times “he can’t be outside.” Others say that they shut their windows to keep the odors out.

Limited air sampling was performed on behalf of the Oakville Community Action Group. Air samples taken downwind of the landfill with a portable Jerome® J605 Hydrogen Sulfide Analyzer measured concentrations of Hydrogen Sulfide in the air at levels exceeding ATSDR health based guideline criteria. Community sampling was performed for a few hours over a six-day period (May 30, 2014 – June 6, 2014) due to limited access to the monitor. While this monitoring only captured moments in time, it did confirm the presence of Hydrogen Sulfide in the ambient air in Oakville and that the source of the emissions is the Industrial Pipe Landfill. The Oakville Community Action Group requests that ATSDR/DCHI more fully investigate hydrogen sulfide exposure in the community.

Tulane Environmental Law Clinic

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The Oakville Community

Oakville is a rural community of approximately 300 residents in Plaquemines Parish, located in the southeastern tip of Louisiana. The area is very low and swampy, and receives over 65 inches of rain annually. The area has seen many hurricanes. Indeed, Hurricane Katrina made landfall just below Oakville in Plaquemines Parish.

Oakville is a historic community. The Oakville subdivision was established in the 1860s around the time the United States abolished slavery. Many of the residents can trace their ancestors to those who first lived in the subdivision. For instance, Allen Green, President of the Oakville Community Action Group and long-time resident of Oakville, is the great-grandson of Rene Sarpy who subdivided the land and sold lots to former slaves from the neighboring plantations. The Army Corps of Engineers, which conducted an archeological study of the area in conjunction with choosing the placement of a levee in the area, found many artifacts indicative of a post-slavery settlement and stated that Oakville is eligible for the National Registration Register of Historic Places.¹

Today, Oakville has approximately 300 residents, a recreational park, a historic cemetery, and three churches—including the Greater St. Peter Baptist Church, which opened its doors in 1874. It is an isolated and rural community in the southern end of Belle Chasse. Nearly 100% of the Oakville residents are African-American. A majority of the residents are lower income.

The Industrial Pipe Landfill

The Industrial Pipe Landfill is located at 11266 Highway 23, Belle Chasse, Louisiana. This landfill operates just 50 feet from the Oakville community. The following link to GoogleEarth shows the landfill abutting the Oakville community:
<https://www.google.com/maps/place/11266+LA-23,+Belle+Chasse,+LA+70037/@29.7846566,90.0267621,673m/data=!3m1!1e3!4m2!3m1!1s0x86209f89221b028d:0x20a08388beae17c4>.
The attached photos taken in December 2014 show the proximity of an *active waste cell* to the community.

The Industrial Pipe Landfill began as an unpermitted dump in the 1980s. In 2004 it received a solid waste permit from Louisiana Department of Environmental Quality. LDEQ issued a proposed a renewal permit that would allow the landfill to continue operating for another 15 years. The agency accepted public comments on the proposed permit but has not yet issued a final decision.

¹ See Coastal Environments, Inc. (CEI), *Management Summary: Reconnaissance Survey and Phase II Testing of Items Related to the Belle Chasse Segment (IER 13), West Bank and Vicinity Hurricane Protection Levee, Plaquemines Parish, Louisiana*, 2009, prepared for the U.S. Army Corps of Engineers, New Orleans District.

The Industrial Pipe Landfill facility comprises 86.5 acres with a disposal area of 65.7 acres.² The landfill has already disposed approximately 2.3 million cubic yards of C&D waste and has a remaining capacity of approximately 1.3 million cubic yards.³ During June 2013-June 2014, the facility disposed 232,376 cubic yards of waste.⁴ The waste is disposed in unlined pits to a depth of 15 feet, which is significantly below the water table in the area. The permitted height of the landfill is 60 feet. Open ditches run throughout the facility to convey stormwater and water that has come in contact with wastes. A heavily polluted drainage ditch runs between and landfill and Oakville. LDEQ inspectors have observed seepage from the landfill into the drainage ditch.

No area of the facility has received final cover. The permit does not require final cover or capping of landfill cells until the mounds reach the permitted height of 60 feet. So long as the cells remain under 60 feet in height, LDEQ will not require final cover or capping. This means that cells can remain uncapped indefinitely.

The interim cover that the facility applies to the cells has repeatedly failed by eroding or sliding off the face of the cell and exposing the buried debris. Indeed, the Oakville Community Action Group just filed a complaint less than a week ago with LDEQ to alert the agency that once again a waste disposal cell is severely eroded on the south side of the facility. Additionally, just last month, LDEQ issued a Compliance Order and Notice of Potential Penalties against the Industrial Pipe Landfill for lack of interim cover on the north side of the facility.⁵ In addition to being cited for failure to apply adequate cover material, the facility was also cited for failure to keep a log detailing the date of cover material application, volume of cover material applied, description of the location where the cover material was applied, and the depth of the cover material.⁶ Approximately a year ago, the Oakville Community Action Group reported that a portion of landfill on the south side collapsed. An LDEQ inspector confirmed the problem stating that “the part of the landfill facing Oakville slipped or failed exposing landfill waste. As such the side slope . . . did not meet the requirements of 721.A.2.a.”⁷ Eight months later, on December 4, 2014, the Oakville Community Action Group again reported that interim cover material had eroded from the same area.⁸

² Industrial Pipe Jan. 2013 Solid Waste Permit Renewal Application.

³ Industrial Pipe June 27, 2013 letter to LDEQ re capacity.

⁴ 2014 Solid Waste Annual Disposal Report for the Industrial Pipe Landfill.

⁵ Industrial Pipe, Inc., Consolidated Compliance Order & Notice of Potential Penalty Enforcement Tracking No. SE-CN-14-00747 Agency Interest No. 14689 (LDEQ Mar. 4, 2015), EDMS Doc. ID 9699220, available at:

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=9699220&ob=yes&child=yes>.

⁶ *Id.*

⁷ LDEQ Insp. Rpt., 4/10/14, EDMS Doc. ID. 9413570 (citing LDEQ Solid Waste Regulations governing interim cover requirements), available on the LDEQ document database at:

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=9413570&ob=yes&child=yes>

⁸ See Complaint, EDMS Doc. ID 9595312, available at:

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=9595312&ob=yes&child=yes>

The lack of interim cover allows landfill gases such as Hydrogen Sulfide to escape, creates vector-breeding areas, attracts animals, allows leachate generation, increases fire hazards, and is unsightly. *See* 33 LAC Pt VII, § 721.A.2.a (LDEQ solid waste regulations describing purpose of interim cover). The lack of interim cover at the Industrial Pipe Landfill is especially problematic because the landfill exists directly next to the Oakville neighborhood.

The Industrial Pipe Landfill has all of the ingredients for being a significant producer of Hydrogen Sulfide. It is a construction and demolition debris landfill, which accepts gypsum dry wall. After Hurricane Katrina (and more recently Hurricane Isaac), the landfill disposed of huge volumes of dry wall. As mentioned above, the Industrial Pipe landfill cells are unlined and are excavated to depths below the water table, meaning that the wastes come in contact with water. “When gypsum drywall is exposed to water, the calcium sulfate component dissolves. As conditions in the landfill become anaerobic (without oxygen), sulfate reducing bacteria digest the sulfate and release hydrogen sulfide.”⁹ Furthermore, the landfill has no gas collection system so gas will seep out of the cells. Given the fact that the cells are not capped and that the interim cover often fails, the gases can seep more easily.

The landfill may be emitting gases produced by unauthorized wastes. The recent LDEQ enforcement action also cites the facility for failure to prohibit unauthorized waste.¹⁰ The unauthorized wastes found at the facility included, among other things, industrial wastes and buckets “containing what appeared to be hydrocarbon residue.”¹¹ The report also stated that the disposal of unauthorized waste at the site is “a repeat Area of Concern.”¹² Indeed, the dumping of unauthorized waste is a flagrant occurrence at this landfill. An LDEQ inspector reported witnessing a load of unauthorized waste from a shipyard, which included a 55-gallon drum and cans of hazardous coating materials, being dumped directly onto the working face of the landfill.¹³ Further, during another inspection, an LDEQ inspector observed the following waste pushed into the working face of the landfill: 55 gallon plastic drums of chemicals with visible liquid still inside, five gallon buckets of oil with lids still on and oil inside, gallon cans of paint spilling onto the ground, bags of municipal solid waste, and a bag of used medical waste.¹⁴ The inspector also observed used hydraulic hoses and various containers of petroleum products at the facility.

⁹ S. Lee, *Reduced Sulfur Compounds in Gas from Construction and Demolition Debris Landfills*, Waste Management (2006), Vol: 26, Issue: 5, pp. 526-533.

¹⁰ Industrial Pipe, Inc., Consolidated Compliance Order & Notice of Potential Penalty Enforcement Tracking No. SE-CN-14-00747 Agency Interest No. 14689 (LDEQ Mar. 4, 2015), EDMS Doc. ID 9699220, available at:

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=9699220&ob=yes&child=yes>.

¹¹ EDMS Doc. ID 9359295, available at:

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=9359295&ob=yes&child=yes>

¹² *Id.* (emphasis added).

¹³ EDMS Doc. ID 9331761, available at:

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=9154097&ob=yes&child=yes>

¹⁴ LDEQ Insp. Rpt. 1/27/07, EDMS Doc. ID 5802623, available at

<http://edms.deq.louisiana.gov/app/doc/view.aspx?doc=5802623&ob=yes&child=yes>

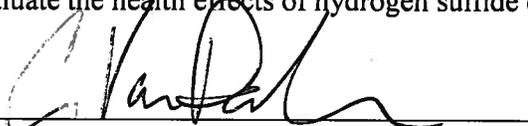
Community Concerns

Oakville residents are concerned that the landfill exposes them to harmful landfill gases such as Hydrogen Sulfide and other toxins. Hydrogen sulfide in the air affects the eyes, lungs, and nervous system. *See* ATSDR, Toxicological Profile for Hydrogen Sulfide. People with preexisting respiratory problems (e.g., asthma and restrictive lung disease), children, and the elderly are more sensitive to adverse health effects from exposure to hydrogen sulfide. *Id.*

The community playground—where children play every day—sits in the shadows of an active landfill cell. The residents of Oakville want to know if it is safe for their children to breathe the air at the playground day after day. They worry that long-term exposure to the landfill gases will impair their health. Further, many community members suffer from asthma and respiratory ailments year-round. The residents of Oakville worry that long-term exposure to landfill gases will exacerbate these respiratory problems.

Conclusion

For the reasons expressed, the Oakville Community Action Group requests that ATSDR/DCHI accept a petition to evaluate the health effects of hydrogen sulfide exposure in this community.



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On behalf of Oakville Community Action Group

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Open and active landfill cell visible from northwest corner of Oakville – December 2014.



Closer view of landfill operations from the community playground – December 2014.



Oakville children and teenager pausing for a photo while playing in the community playground—with active landfill cell in background- December 2014.



Oakville children and teenagers pausing for a photo while playing in the community playground—with active landfill cell in background- December 2014.



Closer view of landfill operations from Oakville residence- December 2014.



Closer view of landfill operations continuing weeks later behind Oakville residence- December 2014.



Closer view of landfill operations behind Oakville residence- December 2014.



Closer view of landfill operations from Oakville residence- December 2014.



Oakville child playing after school—with landfill operations in background-December 2014.