

Irish Channel Odors Investigation

June 2021

Louisiana Department
of Environmental Quality



Synopsis

Since October 2019, LDEQ has been responding to odor complaints in the Irish Channel. LDEQ has followed prescribed response procedures since the complaints began in the Irish Channel area of New Orleans, responding to the complaints and investigating potential sources of odors.

For a three-week period beginning April 5, 2021, the agency prioritized response to odor complaints to address citizen's concerns. LDEQ responders were dispatched to investigate odor complaints as they were received, including on weekends and at night. In addition, LDEQ conducted periodic odor patrols in the area during this time. The complainants' residences were visited first, and findings were recorded (hand-held monitors were used to record readings). Responders then visited the potential sources of odors, including facilities on the West Bank, to determine if a source of the odor could be identified. Staff also requested a log of activities taking place at the time of the complaint at facilities that could have potentially been the source of the odors (based on wind direction at the time of the complaint).

During LDEQ's response to complaints, no odors to slight and moderate odors have been observed at any of the complainants' residences nor in the Irish Channel. Slight to moderate odors were observed intermittently near the facilities. All monitor readings were non-detect.

LDEQ also sent two Mobile Air Monitoring Laboratories (MAMLs) to the area on two separate occasions. None of the monitoring results indicated any exceedance of any air standard. The report for the first mission may be found in EDMS Document ID 12506995. Data from the second MAML mission is pending.

Blackwater Terminals has instituted the following measures:

- Controls have been added to truck loading area.
- Controls are being added to the creosote tanks.
- The facility installed a deodorizing system to neutralize odors.

Going forward:

- LDEQ will continue to respond to complaints.
- LDEQ is working to site an air monitoring station in the Uptown/Irish Channel area of New Orleans.
- LDEQ will continue its due diligence.
- LDEQ will continue to conduct periodic odor patrols

Odor Surveillance Summary for April 5-25, 2021

- From 4/5/2021 to 4/25/2021, LDEQ Emergency Response and Surveillance staffs have responded to 26 complaints. No widespread odors were noted while in the Uptown New Orleans area. During the 26 visits, odors were noted in the Uptown area of New Orleans a total of eight times. Those odors were in different, isolated areas within the Uptown New Orleans neighborhood. Odors LDEQ responders noticed there were described by staff as asphalt, gas exhaust, a sweet odor and light petrochemical odors.
- Staff has noted odors downwind of the various facilities along the West Bank of the River. Facilities include Blackwater, Vertex, Stone Oil, IMTT and Buckeye. Staff also noted odors from a stack of new railroad ties.
- No readings have been detected with the hand-held monitor when odors were noted.
- All residents who provided contact information were called and given results of the responses to their complaints.

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Reports and Findings – Surveillance Summary



Summary for odor complaints 4/5/2021 to 4/25/2021

Date	Time Start	Time End	Surveillance Conducted	Winds	Odors Noted in Uptown New Orleans?	Uptown New Orleans Comments	Westbank odors noted were Downwind of what Facility?	Westbank Facility Comments
4/5/21	7:15am	8:30am	Uptown/Gretna/Harvey/Westwego	Calm	No	No odor detected	NA	No odor detected
4/5/21	9:30pm	9:50pm	Uptown/Harvey/Gretna	SE	Yes	@9:30pm Asphalt odor Tchoupitoulas/Interstate	NA	Surveillance conducted upwind of facilities - no odors detected
4/6/21	8:15 PM	9:00 PM	Uptown (2351 Magazine St)	SSE	No	No odor detected	NA	Surveillance not conducted on the Westbank
4/7/21	8:45am	10:20am	Uptown/Gretna/Harvey/Westwego	SE	No	No odor detected	Blackwater & Vertex	@8:53am Light petrochemical odor downwind of Vertex on River Rd. @9:35am Light odors on the levee downwind of Blackwater – asphalt, creosote, and a smoky odor all detected.
4/8/21	7:08 AM	7:22 AM	Uptown (539 First)	SW	No	No odor detected	NA	Surveillance not conducted on the Westbank
4/9/21	6:30 AM	7:30 AM	Uptown (1015 Pleasant and 818 Phillip)	SSE	No	No odor detected	NA	Surveillance not conducted on the Westbank
4/9/21	8:55am	10:40am	Uptown/Gretna/Harvey/Westwego	S	No	No odor detected	Blackwater & Vertex	@9:05am Light petrochemical odor downwind of Vertex on River Rd. @9:40am Light odors on the levee downwind of Blackwater – asphalt, creosote, and a smoky odor. @10:00am faint natural gas odor on levee behind Stone Oil
4/9/21	6:15 PM	7:30 PM	Uptown/Harvey/Marrero	SSE	No	No odor detected	Blackwater & Vertex	@6:50pm Light petrochemical odor downwind of Vertex on River Rd. @7:25pm Light odors on the levee downwind of Blackwater – asphalt, creosote, and a smoky odor.
4/10/21	9:30 AM	1:00 PM	Uptown/Harvey	SW/S	Yes	@9:40am Light asphalt odor detected at Tchoupitoulas St./ Ninth St.	Blackwater	@10:12am Light odors on the levee downwind of Blackwater – asphalt, creosote, and a smoky odor.
4/11/21	8:00 PM	8:50 PM	Uptown/Irish Channel	S	No	No odor detected	NA	No odor detected
4/11/21	11:05 PM	12:00 AM	Uptown/Irish Channel/Harvey	Calm	No	No odor detected	Blackwater	@11:45pm Faint asphalt odor on the levee behind Blackwater
4/12/21	10:00am	11:15am	Uptown/Gretna/Harvey/Westwego	E/ENE	No	No odor detected	Vertex	@11:05am Light petrochemical odor downwind of Vertex
4/13/21	5:00am	7:05am	Uptown/Gretna/Harvey/Westwego	ESE	Yes	@5:12am Faint asphalt odor detected at Tchoupitoulas St./ Constantinople St.	Stone Oil, Blackwater, Vertex	@5:34am Levee behind Stone Oil- faint fuel oil & faint sulphur petrochemical odor. @5:53am Levee behind Blackwater - strong asphalt, smoky, and pitch odor. @6:30am S Curve on River Rd. (near Vertex) moderate petrochemical odor
4/14/21	9:10am	10:15am	Uptown/Gretna/Harvey/Westwego	E	No	No odor detected	IMTT, Vertex	@9:45am - very light oil odor in front of IMTT @10:09am - light petrochemical odor on River Rd. in front of Vertex
4/14/21	9:15pm	10:26pm	Uptown/Gretna/Harvey/Westwego	Uptown - SSE Westbank - NNW-SE	Yes	@9:21pm faint intermittent gasoline odor at Jefferson Ave/Magazine St. @9:30pm slight intermittent gas exhaust odor on Tchoupitoulas St. between 6th to 8th St.	Stone Oil, Blackwater, Vertex	@9:48 pm – Levee behind Stone Oil by Dock 6 – faint sulfur fuel odor @9:56 pm – On 4th St between Manhattan to Maple – Heavy creosote smell, new rail ties noted next to rail road tracks in front of BWC @9:59 pm – 4th St & Yetta – Slight Sweet & Smoky odor / downwind of BWC @10:02 pm –4th St & Pallet – Heavy creosote smell , new rail ties noted next to rail road tracks / downwind of BWC @10:21 pm On River Rd in front of Vertex to S curve on River Rd - moderate petrochemical odor / downwind of Vertex
4/15/21	11:00PM	1:00AM (4/16/2021)	Uptown/Gretna/Harvey/Westwego	NE	No	NA	NA	No odor detected

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Date	Time Start	Time End	Surveillance Conducted	Winds	Odors Noted in Uptown New Orleans?	Uptown New Orleans Comments	Westbank odors noted were Downwind of what Facility?	Westbank Facility Comments
4/16/21	7:49AM	9:19AM	Uptown/Gretna/Harvey/Westwego	NE	No	NA	Stone Oil, Vertex	@8:16 am . John W. Stone at Government and 1st. Wind N to NW and variable. Raining. Slight mercaptan odor. Air monitoring non-detect @9:19 am Alice Street. Winds N to NE and variable. Heavy rainfall. Slight mercaptan odor. Air monitoring non-detect
4/16/21	8:09 PM	9:46 PM	Uptown/Gretna/Harvey/Westwego	NE/E	Yes	@8:17pm light sweet odor at Tchoup/Ninth	Stone Oil	@8:50pm-Levee behind Stone Oil - light oil odor @9:16pm - 4th/Marion - moderate asphalt odor. Winds E (light & variable)
4/18/21	3:14 PM	5:00 PM	Uptown/Gretna/Harvey/Westwego	N	No	NA	Blackwater, Vertex, Buckeye	@4:00 pm-4th/Greffer (downwind of BWC) mild-moderate asphalt & creosote odors, loose railway ties along road, winds N @4:08 pm-Levee behind Blackwater - mild asphalt odor, vessel at dock, winds N. @4:45-5:00pm-On 4th St (downwind of Vertex & Buckeye) mild petrochemical & oil odors, winds N.
4/19/21	10:39 AM	11:26 AM	Uptown/Gretna/Harvey/Westwego	N	No	NA	Blackwater	@11:04-11:13am-On 4th St, near the OMI entrance & 4th/Paillet (downwind of BWC) - very light creosote/charred wood odor. Stacks of new railway ties located at both locations where odors noted.
4/19/21	10:52 PM	12:03 AM	Uptown/Gretna/Harvey/Westwego	Calm/NW	No	NA	IMTT/Vertex	@11:44pm- Levee gate near IMTT (upwind) - slight petrochemical odor @12:04am-Barataria Blvd (downwind of Vertex & Buckeye) - slight petrochemical odor.
4/20/21	11:48 AM	1:06 PM	Uptown/Gretna/Harvey/Westwego	NNW/N	No	NA	Stone Oil, Blackwater, Vertex	@12:16pm- On 1st St between Stone Oil & Malkem International Corp. (downwind of Stone Oil)- faint intermittent fuel odor. @12:25 pm – On 4th St at Blackwater entrance (downwind of BWC)– faint creosote odor, new rail ties noted next to rail road tracks in front of BWC. @12:28 pm – On 4th St & Paillet St (downwind of BWC)– faint creosote odor, new rail ties noted next to rail road tracks. @12:53 pm – On Barataria Blvd & 5th St (downwind of Vertex) – faint petrochemical odor.
4/20/21	8:48 PM	10:40 PM	Uptown/Gretna/Harvey/Westwego	SSW/S/SSE	Yes	@9:01pm light petrochemical odor at Tchoupitoulas between Foucher & Aline	Stone Oil, Blackwater, Vertex	@9:40-9:48pm – Levee behind Stone Oil by Dock 4 & Dock 2 (downwind of Stone Oil) – faint intermittent fuel odor. @10:05 pm – Levee behind Blackwater (downwind of BWC)– light asphalt, smoky, creosote odors. @ 10:31 pm – On River Rd in front of Vertex (downwind of Vertex) - light petrochemical odor
4/21/21	2:19 AM	3:14 AM	Uptown/Gretna/Harvey	N	No	NA	NA	No odor detected

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4/23/21	6:57 AM	8:28 AM	Uptown/Gretna/Harvey/Westwego	ESE	No	NA	Stone Oil, Blackwater, Vertex	@7:28 am-Levee behind Stone Oil by Dock 3 (downwind of Stone Oil)-mild to moderate mercaptan odor. @7:30 am-Levee behind Stone Oil by Dock 2 (downwind of Stone Oil)-mild acetone/solvent-like odor, a painter was noted on top of tank at Stone Oil. @7:46-7:52 am - Levee behind Blackwater (downwind of BWC)-mild to moderate asphalt, mild smokey & mild creosote odors. @8:11 am-On River Rd in front of Vertex to s-curve (downwind of Vertex) -light petrochemical/burning oil odors
4/25/21	8:52 PM	10:21 PM	Uptown/Gretna/Harvey/Westwego	SSE, SE	Yes	@9:01 pm-Tchoupitoulas & Marengo - faint petrochemical odor for a moment. @9:03 pm-General Taylor & Tchop - a momentary moderately faint oilish smell. @9:11 pm-Foucher & Magazine - faint petrochemical smell momentary.	Stone Oil, Blackwater, Vertex	@9:34 pm – near the Perry Street Wharf while in train yard, next to train - moderate creosote odor. @9:39 pm – Levee behind Stone Oil near Dock 3 (downwind Stone Oil) – moderate/strong fuel/diesel smell. About 100 ft from open bay doors. Odor dissipated before we reached tanks. @9:55 pm – On Harvey Lock levee, 100 ft NW of BWC terminals on levee (downwind of BWC) – mild/moderate creosote odor. @9:58 pm – Levee behind BWC Terminals (downwind of BWC)- moderate asphalt odor directly beneath loading pipe on levee. @9:59-10:01 pm – Levee behind BWC Terminals (downwind of BWC) – moderate rotting burning smoky odor & moderate creosote odor. @10:16 pm – On River Rd in front of Vertex (downwind of Vertex) – moderate/strong petrochemical odor.

Irish Channel Air Monitoring Site

LDEQ will be establishing a temporary air-monitoring site next to the Mississippi River in the Irish Channel area. This site will operate approximately six months. The Leo Benewell Playspot at the corner of Pleasant and St. Thomas has been approved for use and a Letter of Agreement between LDEQ and the City of New Orleans has been signed by both parties. Additionally, a permit from the Southeast Louisiana Flood Protection Authority (SLFPA) has been issued allowing LDEQ to proceed with the installation. Entergy, electricians, the City of New Orleans, fencing, SLFPA, and LDEQ are all carefully coordinating to make this happen as smoothly and quickly as possible. LDEQ anticipates moving the station on site in the Irish Channel within the next two weeks with monitoring beginning within the following two weeks.

LDEQ will have additional information on the ambient air quality once the monitoring equipment is installed in the Irish Channel. LDEQ will be monitoring for the following:

- Hydrogen Sulfide (H_2S) will be monitored continuously. Asphalt (bitumen) and bunker fuel may contain very high concentrations of H_2S . Asphalt is the heaviest of refinery products and typically has the highest concentration of sulfur compounds, often exceeding 1% (10,000 ppm).
- Sulfur Dioxide (SO_2) will be monitored continuously. SO_2 has a pungent smell and is produced by the burning of fossil fuels contaminated with sulfur compounds. When burned, the sulfur in marine fuel produces SO_2 .
- Particulate Matter 2.5 microns or less ($PM_{2.5}$) will be monitored continuously. Short term health impacts include irritation in the eyes, nose and throat, coughing, sneezing and shortness of breath. $PM_{2.5}$ comes primarily from combustion.
- Methane (CH_4), Non-Methane Organic Carbon (NMOC) and Total Hydrocarbons (THC) will be monitored continuously. NMOC data is collected in order to make decisions regarding potential exposure to toxic compounds. Additionally, it is used as the “trigger” to take a canister sample when it remains at the selected concentration for a ten-minute period.
- Wind Speed and Wind Direction will be monitored continuously. These assist in determining the source of the air that is being monitored.
- Volatile Organic Compounds (VOC) will be collected once every sixth day as a 24-hour sample and a 25-minute sample will be collected if monitoring data surpasses the VOC trigger concentration. These samples are sent to the lab and tested for 81 different compounds.
- Polycyclic Aromatic Hydrocarbons (PAHs) will be collected as a 24-hour sample once every third day. These samples are sent to the lab and tested for 24 different PAHs. PAHs are commonly found in asphalt and marine bunker fuel.



***Equipment to be moved from
Jefferson Parish location***

All continuous monitoring data will be available on our website in near real-time. Canister and PAH data will be available in EDMS (AI 229360) after receipt of analysis from the lab.