

Toxic Fumes and Health Complaints in the Uptown-Harvey Corridor

An Analysis of Public Records Related to Operations at BWC/Blackwater Harvey,
a Hazardous Material Storage and Transfer Facility



Prepared by

JOIN for Clean Air

Technical Advisory Group

June 28, 2021

Jefferson, Orleans, & Irish Channel Neighbors

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Because everyone deserves to breathe clean air.

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Note: The information in this report raises concerns about the systems, processes, and practices of the Louisiana Department of Environmental Quality (LDEQ). The concerns are leveraged at LDEQ as a public agency and not at individual staff members. We appreciate the LDEQ staff who are working diligently to address environmental issues in our state.

Report Summary

BWC Harvey (formerly named Blackwater Harvey; 1805 4th St., Harvey, LA) is a 48-acre, bulk petrochemical storage and transfer facility that has been identified by the Louisiana Department of Environmental Quality (LDEQ) as the “primary source” of the toxic fumes frequently reported as strong asphalt/tar/petroleum odors throughout the Irish Channel (New Orleans) and in parts of surrounding neighborhoods. Since August 2018, the LDEQ has identified BWC Harvey as a potential source of at least 850 toxic odor complaints, representing more than 150 distinct households. An ongoing surge in complaints began in November 2019, five months after BWC Harvey secured LDEQ permit approval for a major expansion. Many complaints describe associated health impacts, including headaches, migraines, dizziness, difficulty breathing, and burning of the eyes, nose, throat, or lungs. An estimated 75,000 people live within the geographic area represented by these complaints.

According to its current LDEQ air permit, BWC Harvey transfers 860 million gallons of products annually, equivalent to approximately 1,300 Olympic-sized swimming pools. There is no definitive list of products currently stored in BWC Harvey’s 50+ tanks. At the time of a January 2020 LDEQ site inspection, BWC Harvey was storing asphalt, slurry oil, coal tar creosote, tall oil pitch, caustic soda, and several name-brand chemical products, as well as vacuum gas oil (which was later discontinued). Most of these products emit known carcinogens, including benzo(a)pyrene, which is also known to cause reproductive harm and skin damage. Many of these products are known to cause the same symptoms reported by complainants. According to the U.S. Centers for Disease Control, there is no safe level of exposure to benzo(a)pyrene or other carcinogens.

BWC constructed its Harvey facility through “sham permitting,” wherein LDEQ approved the construction of 22 tanks as a series of “insignificant activities.” BWC Harvey’s records show that over 30 tons of volatile organic compounds (VOCs; i.e. “fumes”) were released from loading these tanks in a year, more six times the limit for an insignificant activity. These tanks have a combined storage capacity of more than 40 million gallons, approximately half the current capacity of BWC Harvey. After completing this Phase I Expansion (2015-2019), BWC Harvey expanded again. The Phase 2 Expansion (2019 – unknown end date) was permitted in June 2019 as an air permit modification to construct 12 additional tanks with a combined storage capacity of about 34 million gallons. In the June 2019 approval, no apparent consideration was given to the numerous complaints that had already been linked to BWC Harvey, and LDEQ did not provide a public comment period to enable public input into its decision. In 2020, BWC Harvey attempted to expand operations a third time, but withdrew its permit application in the face of widespread opposition from greater public awareness of the overall situation.

There are no direct measurements of air pollutants emitted from BWC Harvey. Instead, BWC calculates these amounts mathematically, based on product volumes. The most recent (2018) information available from BWC Harvey indicates that the facility emits at least 57 different toxic air pollutants,

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including many known carcinogens. LDEQ allows BWC Harvey to calculate its emission of toxic air pollutants and volatile organic compounds (VOCs) using software that Environmental Protection Agency (EPA) considers “outdated” and “unreliable.” Aside from the flawed methodology, certain pollution values in BWC Harvey’s air permit do not match the supporting calculations provided in the permit application. On multiple occasions since January 2021, JOIN for Clean Air has asked LDEQ to explain how these pollution values were calculated. To date, LDEQ has provided no explanation. This information should be readily available, since LDEQ has ostensibly reviewed BWC Harvey’s permit on multiple recent occasions.

BWC Harvey has repeatedly provided questionable information about its operations to the public and to state entities. Activity logs that BWC Harvey submitted to LDEQ investigators were obviously created after-the-fact because they included specific times of citizen complaints listed in between BWC’s activities. And at least some of BWC’s activity logs appear to be incomplete. On one occasion in December 2020, a chemical tanker called the *Asphalt Sailor* was docked at BWC Harvey for more than 24 hours, with no corresponding record in the log. Most recently, on May 25, 2021, we documented activity at BWC Harvey’s loading dock, with no corresponding record in the activity log. And BWC Harvey secured a state industrial tax exemption – an incentive meant for manufacturers – even though BWC has stated repeatedly that its Harvey facility “does not produce a product.”

Faced with public pressure about toxic fumes, BWC installed odor control systems in the truck loading area and on eight tanks in late 2020. However, JOIN for Clean Air members documented strong petroleum odors from truck loading during a March 2021 site tour of BWC Harvey, even though the odor control system was in place and operating at the time. The facility has no odor control system for barge, vessel, and rail car loading, which are likely the main source of its toxic emissions. Product loading accounted for about 80% of BWC Harvey’s VOC emissions in 2019. Consistent with the idea that loading, not storage, is the primary source of BWC’s fumes, odor complaints have occurred in surges and not a steady stream. None of BWC Harvey’s current odor control systems prevents exposure to toxic air pollution. And because BWC staff closed all but one vent on each tank attached to an odor control system, hydrogen sulfide gas may be more likely to accumulate inside the tanks – an explosion risk.

The LDEQ improperly permitted BWC Harvey, approving a massive expansion in segments and with no apparent consideration of the ongoing complaints linked to the facility. The result is a major public health problem that violates the Louisiana State Constitution and affects an estimated 75,000 Louisiana residents. Both the Louisiana Governor and the EPA should immediately exercise their oversight authority to cease BWC Harvey’s operations until a time when (and if) the company can obtain a proper air permit and operate safely. Given the overwhelming public interest in BWC’s operations, LDEQ/EPA must allow meaningful public input, including public hearings, into any permitting decisions for this facility in the foreseeable future.



Figure 1. Location of BWC Harvey relative to neighborhoods in Jefferson Parish (Harvey and Gretna) and Orleans Parish (Irish Channel and East Riverside). The LDEQ has identified BWC Harvey as the “primary source” of noxious odors that have occurred regularly in this area since late 2019, coincident with BWC Harvey’s Phase 2 expansion. Predominant winds in this area blow from the south-southeast (155°) based on 2019-2020 LDEQ wind data from the Marrero monitoring site (available at <https://deq.louisiana.gov/page/ambient-air-monitoring-data-reports>).

Facility Background

BWC Harvey (1805 4th St, Harvey, LA) is a 48-acre petrochemical storage and transfer facility with over 50 storage tanks¹ on the Westbank of the Mississippi River in Jefferson Parish (Fig. 1). Formerly Blackwater Harvey, the facility's name was changed in July 2020.² According to its air permit, BWC Harvey transfers about 860 million gallons of petrochemical products annually, equivalent to over 1,300 Olympic-sized swimming pools.³ There is no definitive, publicly-available list of products currently stored at BWC Harvey, but an inspection of this facility in January 2020 by the Louisiana Department of Environmental Quality (LDEQ) documented the storage of asphalt, slurry oil, coal tar creosote, tall oil pitch, caustic soda, and several name-brand chemical products.⁴ Based on BWC Harvey's records and Safety Data Sheets, the facility emits at least 57 different toxic air pollutants, including many carcinogens (Appendix 1). Like other petrochemical facilities along the river in Jefferson Parish, BWC Harvey is located in a densely-populated area. Over 10,000 people live within a mile of BWC Harvey, and approximately 60,000 people living within two miles.⁵ The neighborhoods represented in this area include Harvey and Gretna (Jefferson Parish) and the Irish Channel and East Riverside (Orleans Parish; Fig 1).

Toxic Fumes and Odor Complaints

The LDEQ has identified BWC Harvey as the “primary source” of toxic fumes frequently reported as strong asphalt, tar, and/or petroleum odors in nearby neighborhoods (Figs. 2-4).⁶ These complaints began sporadically in August 2018 and became frequent in November 2019 (Fig. 5). Between August 1, 2018 and April 20, 2021 the LDEQ linked approximately 850 complaints to BWC Harvey.⁷ These complaints represent more than 150 distinct households, the majority of which are located in the Irish Channel, which is the closest neighborhood downwind of BWC Harvey, based on the predominant wind direction. A spatial analysis of complaints relative to U.S. Census Bureau data suggests that approximately 75,000 residents, including 15,000 children, are impacted by the fumes, in an area with dozens of schools and heavy tourism (Figs. 2-4).

¹ BWC Harvey's air permit lists 53 tanks but it is unclear if they have all been constructed (Minor Source Air Permit, Doc ID [11736765](#), pages 7-8 of 22).

² Name change receipt letter from LDEQ. Doc ID [12380219](#).

³ Based on Normal Operating Rates listed in BWC Harvey's Minor Source Air Permit. June 28, 2019. Doc ID [11736765](#). PDF pages 7-8 of 22.

⁴ Morlife 5000, Liqrene D, XTOL 651, and OLOA 19178. See LDEQ Jan 9, 2020 Inspection Report. Doc ID [12096113](#). Page 10 of 48. Vacuum gas oil (VGO) is listed, but BWC has indicated in emails (to LDEQ and JOIN for Clean Air) that the Harvey facility no longer stores VGO.

⁵ EJScreen data downloaded May 6, 2021. Available at <https://join4cleanair.wordpress.com/ejscreen-reports/>

⁶ See May 10, 2020 [letter](#) from State Representative Mandie Landry to LDEQ. The LDEQ also made this identification in a recorded January 22, 2021 Zoom meeting with Rep. Landry, JOIN for Clean Air members, and New Orleans City Council District B Director of Community Engagement, Matthew Schoenberger, as well as in a April 30, 2021 phone conversation with Rep. Landry.

⁷ Spreadsheet of complaints obtained from LDEQ by Public Records Request (0045981) submitted May 1, 2021.



Figure 2. Spatial analysis of ~850 noxious odor complaints, representing 165 households, that LDEQ linked to BWC Harvey from January 1, 2018 to April 20, 2021. Addresses were geocoded and kernel density estimation was used (500 m bandwidth) to visualize the affected areas and to identify those most severely affected. Census data were obtained from the 2019 American Community Survey (U.S. Census Bureau) and are rounded down. Complaints were obtained by public records request to LDEQ (#0045981).

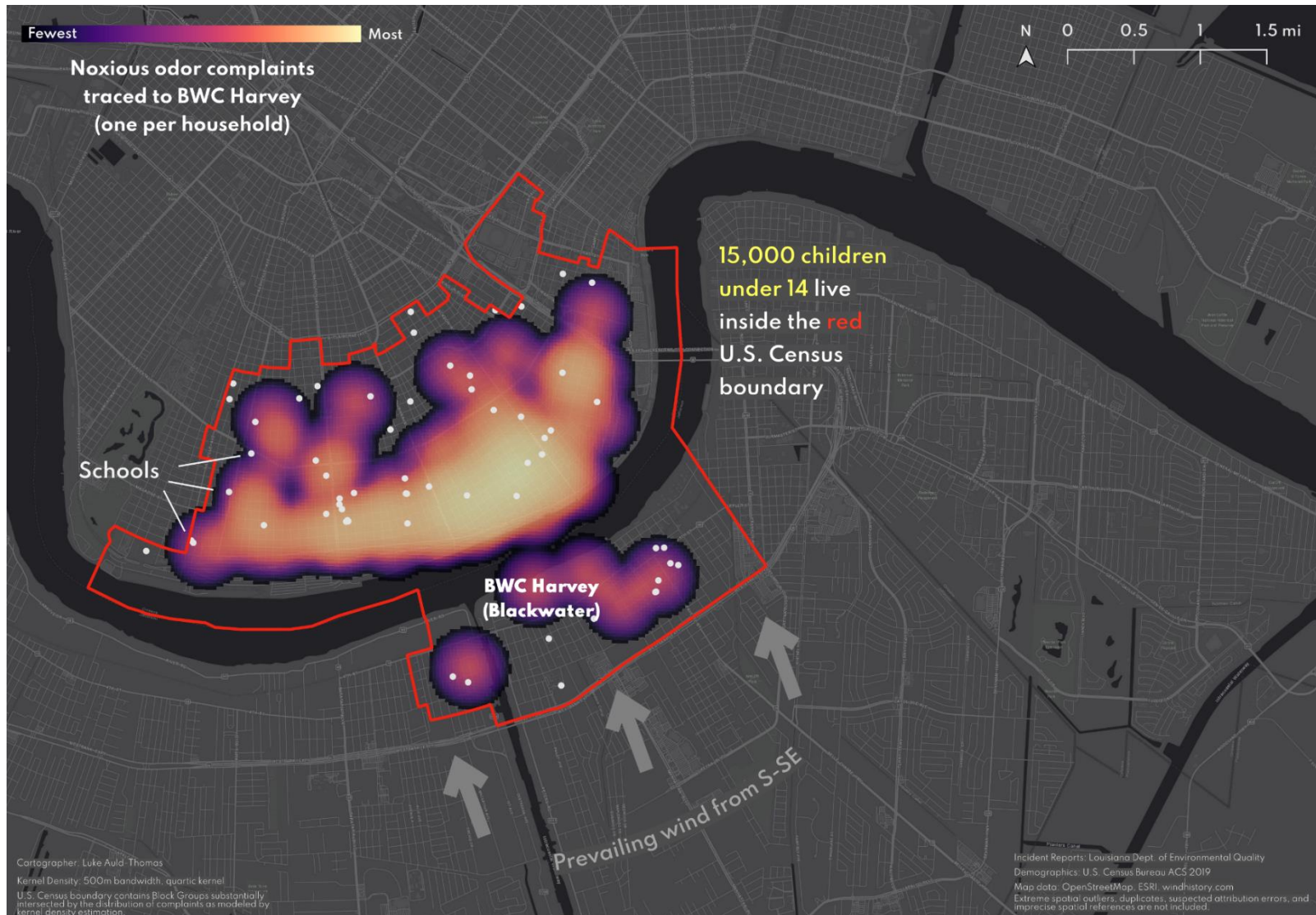


Figure 3. Spatial analysis of ~850 noxious odor complaints, representing 165 households, that LDEQ linked to BWC Harvey from January 1, 2018 to April 20, 2021. See methods in Figure 2. Census data were obtained from the 2019 American Community Survey (U.S. Census Bureau) and are rounded down. Schools were obtained from [OpenStreetMap](https://www.openstreetmap.org/).

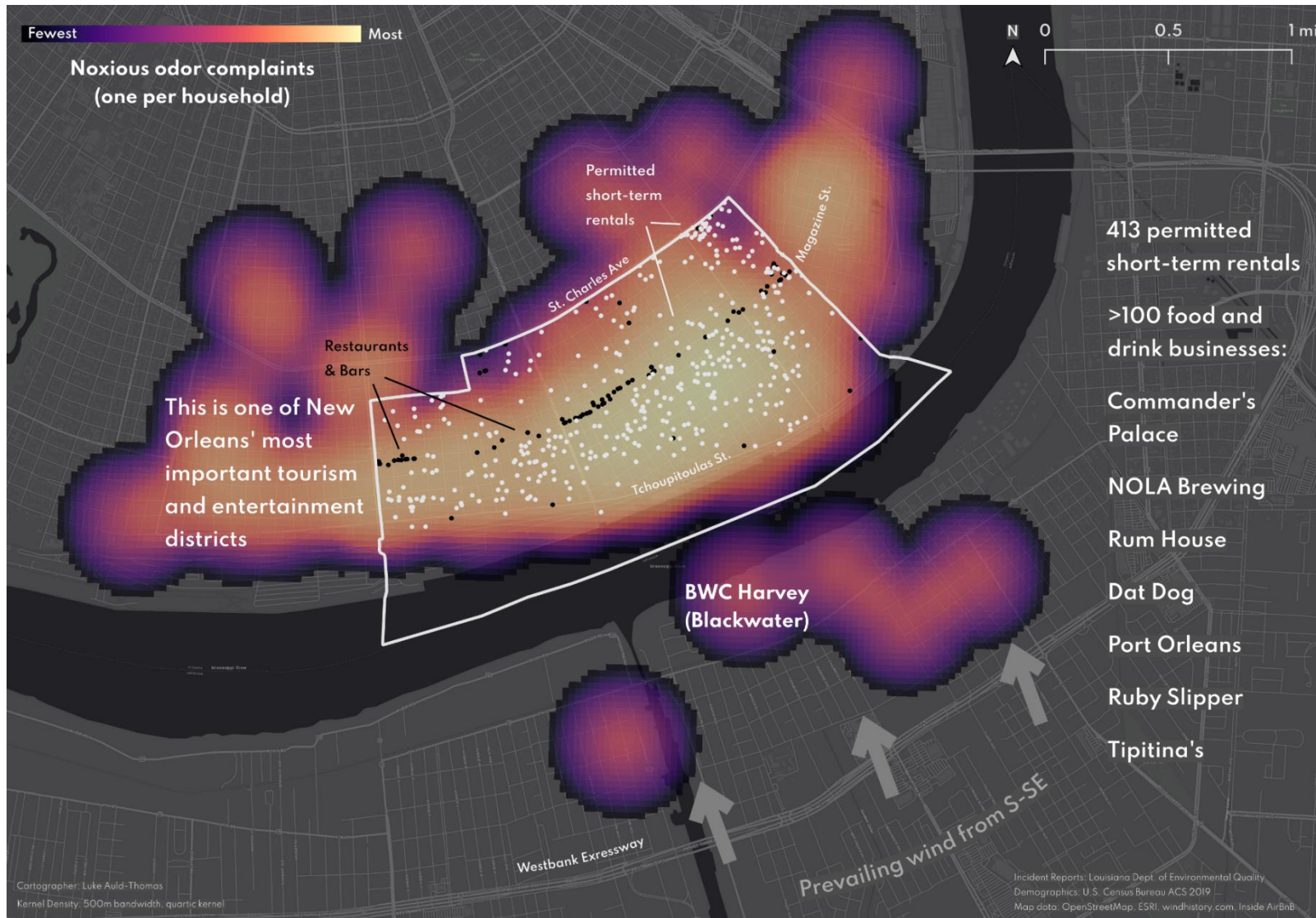


Figure 4. Spatial analysis of ~850 noxious odor complaints, representing 165 households, that LDEQ linked to BWC Harvey from January 1, 2018 to April 20, 2021. The white boundary encompasses the entire Irish Channel neighborhood and indicates the area with the greatest density of complaints (using census tract boundaries). See methods in Figure 2. Short-term rentals were obtained from [Inside AirBnB](#) (April 2021) and are used here as a proxy for overnight tourist density. Businesses were identified from OpenStreetMap (June 2021).

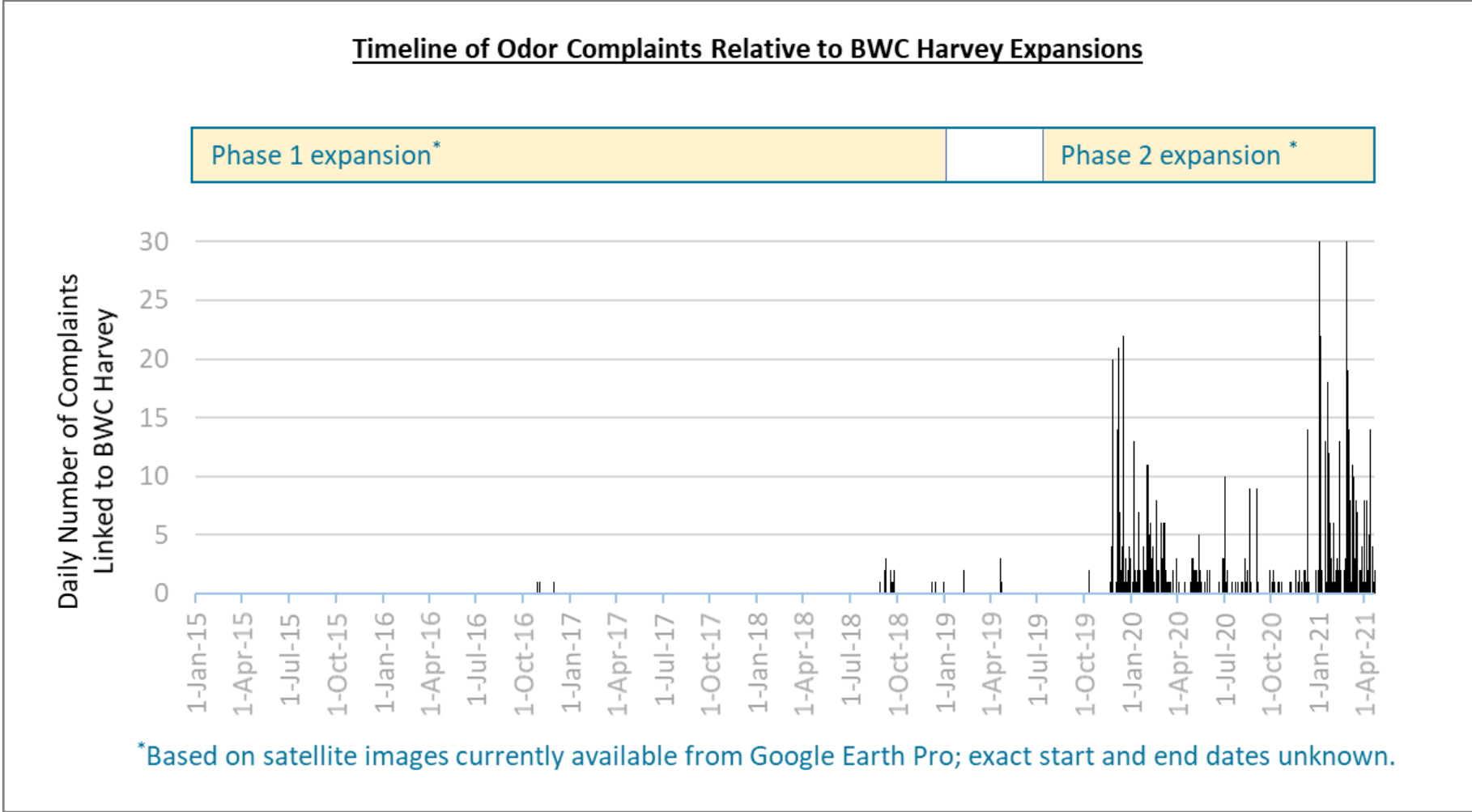


Figure 5. Daily number of noxious odor complaints relative to time windows for major operational changes at BWC Harvey, as visible in Google Earth satellite images (Appendix 1). We obtained complaint numbers from LDEQ by Public Records Request (# 0045981) for BWC Harvey (AI 2119) complaints through April 20, 2021.



Toxic Fumes and Odor Complaints (cont.)

Most products handled by BWC Harvey have a strong asphalt/tar/petroleum odor.⁸ Many complaints from Uptown and Harvey describe health symptoms consistent with exposure to these products: headaches, migraines, dizziness, difficulty breathing, and burning of the eyes and respiratory passages.⁹ The ongoing surge in complaints, which began in November 2019, corresponds with BWC Harvey’s Phase 2 expansion (Figs. 5 & 6).¹⁰ None of the other local petrochemical facilities along the river have significantly increased permitted emissions since 2016.¹¹

Figure 6. Google Earth satellite images of Blackwater Harvey (renamed BWC Harvey in July 2020). *Top left:* Blackwater Harvey shortly after the site was purchased (image taken October 2014). *Middle left:* Blackwater Harvey after the Phase 1 Expansion was completed, which included 22 tanks permitted as insignificant activities (image taken January 2019). *Bottom left:* Most recent available image of Blackwater Harvey, illustrating the partial completion of the Phase 2 Expansion (image taken February 2020).

⁸ Product Safety Data Sheets. Available at <https://join4cleanair.wordpress.com/safety-data-sheets/>.

⁹ [Asphalt Hazard Summary](#). NJ Dept Health & Senior Services. Apr 2007; [Coal Tar Hazard Summary](#). NJ Dept Health & Senior Services. Apr 2007; [Fuel Oil Hazard Summary](#). NJ Dept Health & Senior Services. June 2010.

¹⁰ Minor Source Air Permit. June 28, 2019. Doc ID [11736765](#). PDF pages 7-8 of 22.

¹¹ Most recent significant emissions increases, as of June 5, 2021: Vertex (AI 1106, [Aug 2016](#)), Buckeye (AI 2236, [Jan 2016](#)), Delta (AI 2612, [July 2013](#)), IMTT (AI 8100, [Sep 2012](#)), and John W. Stone (AI 4005, [June 2012](#)). Full permitting histories available under each AI number at <https://edms.deq.louisiana.gov>.

BWC Harvey’s Major Expansion and Piecemealed Permit History

Between 2015 and 2021, BWC Harvey (formerly Blackwater Harvey) underwent a two-phase expansion that increased its storage capacity by more than 8-fold, from 10.5 million gallons to 87.5 million gallons, and its annual product throughput by more than 21-fold, from 40.5 million gallons per year to 860 million gallons per year (Fig. 6).¹² Both phases of this major expansion were permitted improperly. As detailed below, Phase 1 was piecemealed together as a series of “insignificant activities,” and Phase 2 was approved as a permit modification on June 28, 2019, with no apparent consideration of the recurring odor complaints linked to this facility, which began in August 2018.

Phase 1 Expansion (22 tanks, 2015-2019)

In 2014, Blackwater Harvey LLC (now BWC Harvey LLC) obtained an Initial Minor Source Air Permit to operate the existing 16 tanks at its recently purchased Harvey facility.¹³ Over the next five years, the company constructed 22 new tanks that collectively provided an additional 40 million gallons of storage capacity at Blackwater Harvey; this new capacity translated to a 467-million-gallon increase in annual throughput, equivalent to 708 Olympic-sized swimming pools.¹⁴ Although these tanks more than quadrupled BWC Harvey’s operations, LDEQ approved their construction and operation as a series of “insignificant activities” rather than requiring a permit modification, which would entail more oversight and provide more opportunity for public input.¹⁵ To qualify as “insignificant activities,” the tanks and associated activities cannot emit, or have the potential to emit, more than 5 tons per year of VOCs.¹⁶ Yet, according to the company’s own records, BWC Harvey emitted over 30 tons of volatile organic compounds (VOCs) from loading/unloading asphalt into “insignificant” tanks in 2019, the most recent year of data available.¹⁷

Each insignificant activity request submitted by Blackwater Harvey contained the company’s certification that “the activity will not cause a nuisance or danger to public safety.”¹⁸ Yet, according to a site map from a January 2020 LDEQ site inspection, several of these tanks are used to store and transfer asphalt and other heavy petrochemicals with strong, noxious odors (Fig. 7). As they were issuing these one-by-

¹² Initial values: Minor Source Air Permit. March 11, 2014. Document ID [9218836](#). Current values: Minor Source Air Permit. June 28, 2019. Document ID [11736765](#). PDF pages 7-8 of 22.

¹³ Initial Minor Source Air Permit. March 11, 2014. PDF Page 3 of 14. Document ID [9218836](#).

¹⁴ Blackwater Harvey LLC (AI 2119) Minor Source Air Permit Application. April 17, 2019. PDF pages 90-91 of 107. Document ID [11647350](#). (Insignificant activities are listed as “case by case” or with a permit activity number beginning with PERS.” We used capacity and throughput volumes listed in the final permit, issued June 28, 2019. Document ID [11736765](#). PDF pages 7-8 of 22.

¹⁵ Documentation compiled at <https://join4cleanair.wordpress.com/insignificant>.

¹⁶ Table 1.D LAC 33:III 501(b)(5). Available at <https://join4cleanair.wordpress.com/insignificant>.

¹⁷ Tanks 5053, 5055, 5057, 5058, 5068, 5069, 5070. See 2019 [emissions log](#), page 3 of 12. Obtained from LDEQ by Public Records Request (#0045924, submitted Apr 14, 2021). These tanks are part of a group that also included tank 2502 and emitted 33.24 tons of VOCs in 2019. After removing tank 2502, which was not an “insignificant activity tank” and which represented 7.95% of product volume for asphalt, these tanks emitted 30.6 tons per year of VOCs.

¹⁸ Documentation compiled at <https://join4cleanair.wordpress.com/insignificant>.

one approvals, LDEQ should have been aware that BWC intended to construct all 22 tanks, because a site plan was submitted to LDEQ on February 5, 2016 showing all 22 tanks.¹⁹ These approvals were issued by the same LDEQ permit writer, who issued many of them in close succession, in an obvious attempt to circumvent the 5 tons per year threshold. In one instance, this permit writer issued five separate approvals for five separate tanks within the span of 15 minutes.²⁰ According to the Environmental Protection Agency (EPA), piecemealed approvals constitute sham permitting and violate the U.S. Clean Air Act and Federal Regulations.²¹ In at least some cases, satellite images indicate that BWC Harvey began construction on new storage tanks before applying for approval for the construction and operation of these tanks as an insignificant activity (Fig. 8).

Phase 2 Expansion (12 tanks, 2019-2020?)

The Phase 2 expansion, which was permitted in June 2019 as an air permit modification, increased BWC Harvey's storage capacity by 33.6 million gallons and its throughput by 383 million gallons/year.²² Google Earth Satellite data reveal the construction of Phase 2 tanks in 2020,²³ but images are not currently available for 2021, and there is no apparent public information to indicate whether the expansion has been completed.

It is unclear why LDEQ required a permit modification for Blackwater (now BWC) Harvey's Phase 2 expansion, when it allowed the larger Phase 1 expansion to be approved as a series of insignificant activities. Regardless, none of the Phase 2 permitting documents mentioned the 22 odor complaints that had been linked to Blackwater Harvey in the year leading up to the permit approval.²⁴ Five months after this Phase 2 expansion was approved, odor complaints surged in the Irish Channel and nearby neighborhoods (Fig. 5). This surge is ongoing; it has lasted for over 18 months. The LDEQ has identified BWC Harvey as the "primary source" of these complaints.²⁵

¹⁹ Blackwater Harvey LLC Minor Source Air Permit Application. Feb 5, 2016. Page 89 of 89. Document ID [#10077679](#).

²⁰ See November 28, 2016 approvals: Doc ID [10416365](#), [10416366](#), [10416368](#), [10416405](#), [10416406](#). Note the unique permitting activity number in each document, indicating separate and distinct approvals.

²¹ United States Environmental Protection Agency (EPA). Memorandum RE: Guidance on Limiting Potential to Emit in New Source Permitting. Available at https://www3.epa.gov/airtoxics/pte/june13_89.pdf. Accessed Apr 25, 2021.

²² Minor Source Air Permit. June 28, 2019. Doc ID [11736765](#). PDF pages 3 and 8 of 22.

²³ Historical Imagery in Google Earth Pro. Accessed June 9, 2021.

²⁴ Permitting documents: [11736765](#), [11647350](#), and [11647348](#). We identified 22 odor complaints for the period Aug 1, 2018 – June 27, 2019 based on a complaint log provided by LDEQ via Public Records Request (# 0045981). Complaints can also be viewed at edms.deq.louisiana.gov under AI 2119 (refine search by Air Quality, Reports, and Incidents).

²⁵ See May 10, 2020 [letter](#) from State Representative Mandie Landry to LDEQ. The LDEQ also made this identification in a recorded January 22, 2021 Zoom meeting with Rep. Landry, JOIN for Clean Air members, and New Orleans City Council District B Director of Community Engagement, Matthew Schoenberger, as well as in a April 30, 2021 phone conversation with Rep. Landry.

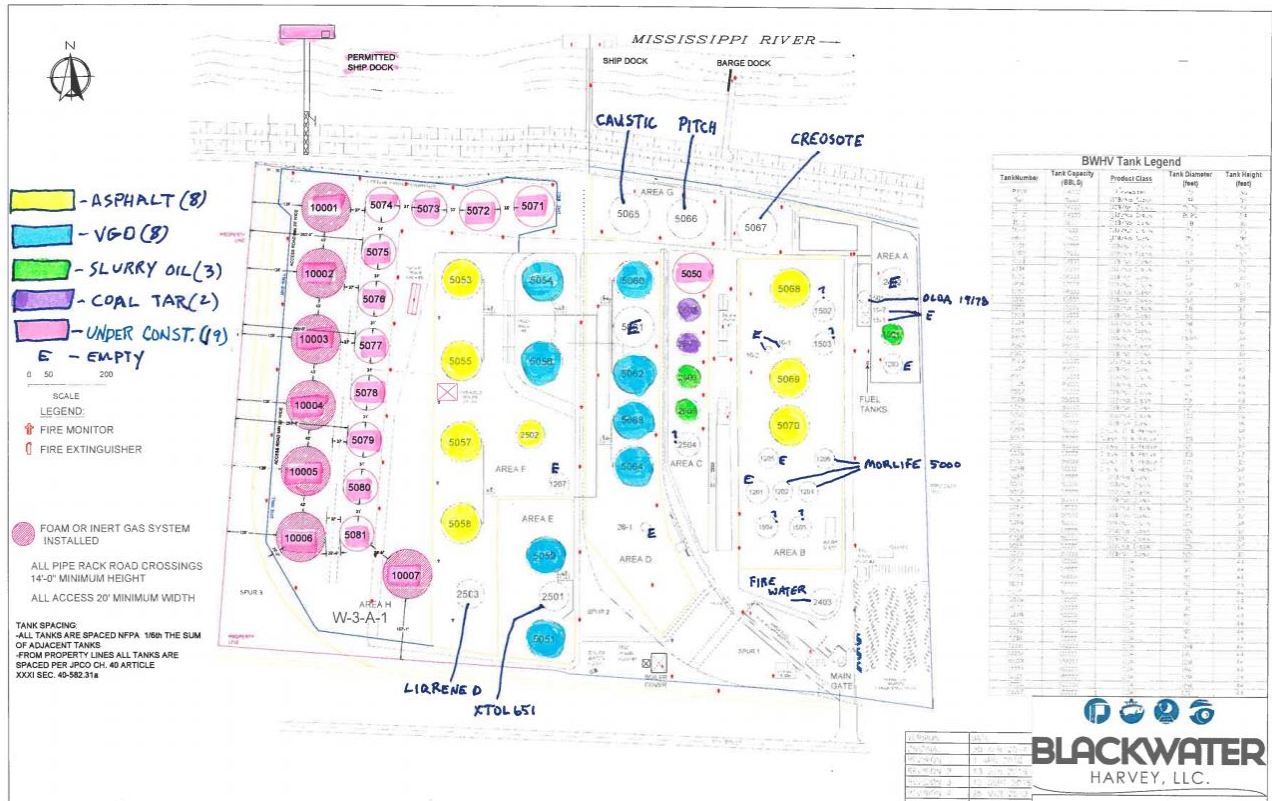


Figure 7. BWC Harvey site map from Jan 9, 2020 LDEQ inspection (obtained by Public Records Request to LDEQ). The mark ups in this map were present in the version we received from LDEQ.

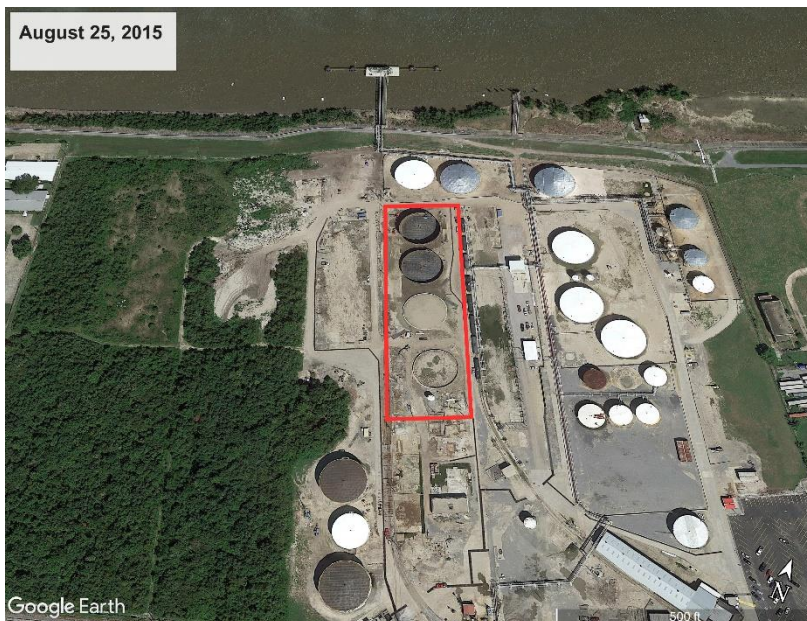


Figure 8. Google Earth satellite image of the northeast quadrant of Blackwater Harvey (now BWC Harvey), taken August 25, 2015. The red box depicts locations of tanks, from north to south: 5060, 5061, 5062 and 5063. (These tanks are shown in Fig 7 with blue highlighting). This image reveals that construction was already underway when Blackwater Harvey requested LDEQ approval to construct these four tanks on September 15, 2015. Doc [9936820](#).

Discrepancies Related to BWC Harvey’s Operating Rates and Air Pollution

Based on information in BWC Harvey’s current and previous air permits, the total “normal operating rate” for storage tanks increased by 21-fold from 2014 (initial permit) to 2019 (current permit).²⁶ Yet, over this same period, there was no change in the normal operating rate for product loading listed in the permit (Fig. 9).²⁷ It is not clear how BWC Harvey can move 21× more product through tanks without loading more product, since the facility “does not manufacture a product.”²⁸ At best, this is a discrepancy on paper only, and stands uncorrected in a permit that should have been the subject of careful scrutiny by LDEQ, especially after LDEQ has linked more than 850 citizen complaints to BWC Harvey. At worst, this discrepancy reflects an error in calculating air pollution, including emissions of VOCs (i.e. fumes) and toxic air pollutants.

Understanding the basis for estimating loading emissions is important because loading emissions are BWC Harvey’s main source of air pollution, based on company documents.²⁹ There is currently no definitive public information about the methods and calculations used to derive BWC Harvey’s permitted emissions. The calculated VOC total in BWC Harvey’s application (57.24 tons per year)³⁰ does not match the value in the final permit (67.38 tons per year).³¹ Similarly, we could not locate any calculations in the permit application to support the permitted hourly VOC limit for product loading (7.42 lbs per hour).³² This limit is relevant because it protects residents from toxic plumes. Aside from the issue of

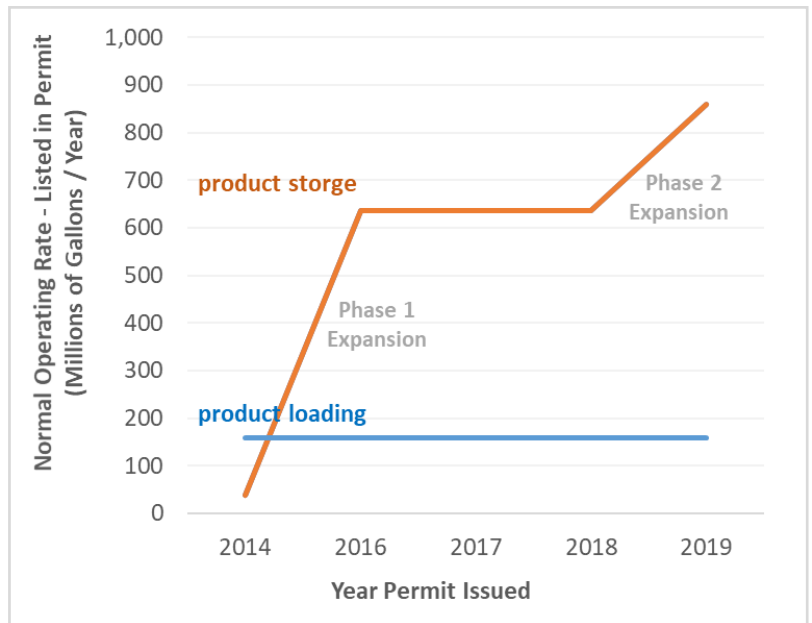


Figure 9. Inconsistency in “normal operating rates” from Blackwater Harvey permitting documents, with product loading remaining constant and product storage increasing dramatically.

²⁶ Initial Minor Source Air Permit. March 11, 2014. PDF Page 8 of 14. Document ID [9218836](#). Current Minor Source Air Permit. June 28, 2019. Document ID [11736765](#). PDF pages 7-8 of 22.

²⁷ *Id.*

²⁸ Minor Source Air Permit Application. April 17, 2019. Doc ID [11647350](#). PDF Page 3 of 107.

²⁹ See 2018 and 2019 BWC Harvey [emissions logs](#), obtained from LDEQ by Public Records Request (#0045924, submitted Apr 14, 2021).

³⁰ See application for Minor Source Air Permit Modification. April 17, 2019. PDF page 92 of 107. Document ID [11647350](#). See also Minor Source Air Permit.

³¹ Minor Source Air Permit. June 28, 2019. Doc ID [11736765](#). PDF page 3 of 22.

³² For product loading (EQT 0028) hourly emission limit, see Minor Source Air Permit 1340-0005-12. June 28, 2019. Doc ID [11736765](#). PDF page 12 of 22. Emissions source EQT 0028 is defined on PDF page 9 of 22.

discrepancies in emission values, there appear to be flaws in the methods BWC used to calculate emissions in its application for the current permit. For example, the software (TANKS 4.09D) that BWC used to estimate emissions from storage tanks was determined by EPA to be “outdated” and “not reliably functional” in October 2006.³³

Until the methods and calculations used to derive the estimated emissions in BWC’s current air permit are made public, there can be no effective independent oversight of this facility. On multiple occasions since January 2021, we have requested that LDEQ explain how BWC calculated its emissions. To date, LDEQ has not disclosed this information.

Irregularities in BWC Harvey’s Activity Logs

BWC Harvey’s air permit requires that activity logs be maintained on site,³⁴ and LDEQ investigators routinely collect such logs in response to odor complaints. However, BWC Harvey’s logs have complaint times listed in between activity times, meaning that the logs were created retroactively, with odor complaints in mind (Fig. 10).³⁵ LDEQ investigators enable this practice by providing specific complaint times when requesting BWC’s activity logs.³⁶

At least some of BWC Harvey’s activity logs appear to be missing key information. For example, marine vessel AIS data³⁷ reveal that the “Asphalt Sailor” was docked at BWC Harvey for more than 24 hours beginning the evening of Dec 28, 2020,³⁸ with no corresponding record of this tanker in BWC Harvey’s activity log.³⁹ The AIS data also indicate that the Asphalt Sailor was heavier when it left BWC Harvey than when it arrived, suggesting that the tanker was loaded with product while docked at BWC Harvey.⁴⁰ Similarly, AIS data indicate that the “Da Tai Shan” tanker was docked at BWC Harvey for nearly two days beginning the afternoon of Feb 10, 2020 and was heavier when it left than when it arrived.⁴¹ Yet the only marine activity listed in BWC Harvey’s log for that period was an inbound barge that completed unloading more than 10 hours before Da Tai Shan arrived.⁴²

³³ U.S. EPA. [TANKS Emissions Estimation Software, Version 4.09D](#).

³⁴ Specific Requirement 26: “Monitor and record the volume and type of material loaded via barge, ship, tank, truck, and railcar each month. Minor Source Air Permit 1340-0005-12. June 28, 2019. Doc ID [11736765](#). PDF page 20 of 22.

³⁵ BWC Activity Log with complaint times. Pages 12-14 of 23. Doc ID [12708023](#).

³⁶ For example, see LDEQ Incident Report. Incident 200242. PDF page 23 of 39. Doc ID [12607741](#). See also LDEQ Incident Report. Incident 201455. PDF page 10 of 23. Doc ID 201445. [12708023](#).

³⁷ Automatic Identification System (AIS) is a transceiver-based tracking system for ships that was developed for collision avoidance. AIS data for BWC Harvey’s docks from Nov 2019 to May 2021, available [here](#).

³⁸ AIS data for BWC Harvey’s docks from Nov 2019 to May 2021 available [here](#).

³⁹ BWC Harvey activity log for Dec 27-30, 2020; PDF page 7 of 9. Doc ID [12580017](#).

⁴⁰ Based on draft distance (i.e. the height of the submerged portion of the ship), which was 5.4m on arrival and 8.2m on departure, indicating that the ship’s weight increased during this period.

⁴¹ AIS Data for Nov 20, 2019 – May 9, 2021. Obtained from Vessel Finder. <https://join4cleanair.wordpress.com/ais-data/>

⁴² BWC Harvey activity log for Feb 7-11. PDF page 20 of 38. Doc ID [12112711](#).

MODE	DATE START	TIME START	DATE FINISHED	TIME FINISHED	INBOUND	OUTBOUND	PRODUCT
RAIL	7-Apr	2030	8-Apr	200		X	ASPHALT
TRUCK	8-Apr	950	8-Apr	1050	X		PITCH
BARGE	8-Apr	1130	9-Apr	750		X	ASPHALT
BARGE	8-Apr	1330	9-Apr	1905		X	SLURRY
TRUCK	8-Apr	1410	8-Apr	1440	X		LIQRENE
TRUCK	8-Apr	1415	8-Apr	1425		X	SLURRY
TRUCK	8-Apr	1435	8-Apr	1445		X	SLURRY
TRUCK	8-Apr	1537	8-Apr	1550		X	CAUSTIC
TRUCK	8-Apr	1600	8-Apr	1752	X		PITCH
TRUCK	8-Apr	1800	8-Apr	1900	X		PITCH
	8-Apr	2230	Complaint				
BARGE	9-Apr	315	9-Apr	820		X	SLURRY
TRUCK	9-Apr	455	9-Apr	505		X	CAUSTIC
ISO	9-Apr	725	9-Apr	815		X	PITCH
TRUCK	9-Apr	850	9-Apr	900		X	CAUSTIC
ISO	9-Apr	1230	9-Apr	1300		X	PITCH
ISO	9-Apr	1315	9-Apr	1350		X	PITCH
TRUCK	9-Apr	1345	9-Apr	1410	X		LIQRENE
ISO	9-Apr	1355	9-Apr	1430		X	PITCH
	9-Apr	1515	Complaint				
ISO	9-Apr	1520	9-Apr	1555		X	PITCH
TRUCK	9-Apr	1600	9-Apr	1655	X		PITCH
RAIL	9-Apr	1625	9-Apr	1855		X	ASPHALT
TRUCK	9-Apr	1705	9-Apr	1740	X		PITCH
	9-Apr	830	Complaint	1400			
SHIP	10-Apr	1425	11-Apr	0055	X		CREOSOTE
	10-Apr	1830	Complaint				
RAIL	10-Apr	2320	11-Apr	115	X		PITCH
SHIP	11-Apr	145	11-Apr	1355	X		COAL TAR
SHIP	11-Apr	1745	11-Apr	1825		X	LSMGO
	11-Apr	1745	Complaint				
SHIP	11-Apr	1800	11-Apr	2015		X	LIQRENE
SHIP	11-Apr	1900	11-Apr	2205		X	FUEL OIL
SHIP	11-Apr	2130	11-Apr	2330		X	XTOL
	11-Apr	2200	Complaint	600			
ISO	12-Apr	600	12-Apr	635		X	PITCH
TRUCK	12-Apr	705	12-Apr	715		X	CBO
TRUCK	12-Apr	735	12-Apr	745		X	SLURRY
ISO	12-Apr	755	12-Apr	825		X	PITCH
TRUCK	12-Apr	755	12-Apr	815		X	CREOSOTE

Figure 10. BWC Harvey activity log for Apr 7-12, 2021, as submitted to LDEQ, with citizen complaints about toxic fumes/odors listed and highlighted in between activities (evidence that the log was created retroactively). Doc ID [12734346](#). Page 22 of 38.

Inadequacy and Possible Risks of BWC Harvey’s Odor Control System

In response to the ongoing surge of odor/health complaints, BWC Harvey installed odor control systems in its truck bay and on eight asphalt storage tanks by mid-November 2020.⁴³ However, JOIN for Clean Air Members experienced strong, noxious odors during a March 2021 site tour of BWC Harvey in the truck loading bay, even though the odor control system was fully operational at the time.⁴⁴ Those members also observed a several-inch gap between the loading pipe and the truck opening, allowing vapor to escape. A different odor control system is attached to the storage tanks, but it is also inadequate.⁴⁵ Manufacturer documentation indicates that this system was designed to prevent odors from being detected; it does not appear to prevent human exposure to harmful pollutants associated with the odor.⁴⁶

There is no public information to indicate whether the odor control systems installed on BWC’s tanks allow adequate venting of hydrogen sulfide (H₂S), which is known to accumulate in asphalt tanks and can cause explosions.⁴⁷ In a December 2020 email to LDEQ, BWC Harvey staff indicated that the asphalt tanks no longer had five individual vents because the odor neutralizing system required a single vent. A single vent poses an apparent problem for these solid-walled, fixed-roof tanks, because the vent could become clogged or damaged (for example, from cooled asphalt or storm debris). An explosion or fire at BWC Harvey presents a major public safety risk, given the potential for toxic smoke and fumes, with nearly 60,000 people living within two miles of the facility.⁴⁸

Questionable Information about BWC Harvey’s Asphalt Operations

On September 27, 2018, an LDEQ inspector visited BWC Harvey to investigate odor complaints. According to the inspector’s notes, Jessica Sisto (BWC Environmental Health & Safety Director) stated:

“Blackwater stores caustic soda, brought in by barge and shipped out by shipping vessel approximately every 45 days... there was a shipment of 40 metric tons of caustic soda on 9/21 – 9/23/2018 with no reported odors or upsets.”⁴⁹

⁴³ Dec 1, 2020 [email](#) from Jessica Sisto (BWC Terminals HSEQ Manager) to LDEQ.

⁴⁴ Email correspondence between JOIN for Clean Air and BWC Terminals Senior Vice President of Operations, Adam Smith. April 5, 2021; May 7, 2021; and May 10, 2021.

⁴⁵ [Manufacturer’s PowerPoint Presentation](#) provided to LDEQ by BWC Harvey via email on Aug 4, 2020.

⁴⁶ See footnote 37.

⁴⁷ ⁴⁷ New Jersey Department of Health. Right to Know Hazardous Substance Fact Sheet. Asphalt, Oxidized. Available at <https://www.nj.gov/health/eoh/rtkweb/documents/fs/3197.pdf>. Accessed June 22, 2021. See also https://www.osha.gov/sites/default/files/publications/hydrogen_sulfide_fact.pdf. Occupational Health and Safety Administration. Hydrogen Sulfide Fact Sheet. Accessed June 22, 2021.

⁴⁸ EJScreen data downloaded May 6, 2021. Available at <https://join4cleanair.wordpress.com/ejscreen-reports/>

⁴⁹ LDEQ Incident Report #186827. Doc ID [11341630](#). Page 4 of 17.

Yet there is no record of caustic soda in BWC Harvey’s log from September 2018⁵⁰ and no mention of caustic soda in the facility’s contemporaneous air permit⁵¹ (or air permit application⁵²). In fact, BWC received LDEQ approval to change the contents of three caustic soda tanks (5068, 5069, 5070) to asphalt storage more than a year earlier.⁵³ According to BWC Harvey’s records, the facility received and shipped out asphalt in September 2018 and in every month that year. Yet asphalt operations apparently were not mentioned by Ms. Sisto.

In a March 9, 2021 phone call with one of our members that lasted nearly 30 minutes, Adam Smith, Senior Vice President of Operations for BWC Terminals, expressed surprise and confusion that residents near his Harvey facility were reporting asphalt odors, since, as he alleged, “we just don’t move that much asphalt.” However, this claim is contradicted by BWC Harvey’s own records; asphalt loading accounted for 79% of the facility’s VOC emissions (i.e. “fumes”) in 2019, the most recent year of data available.⁵⁴ On March 29, 2021, a member of JOIN for Clean Air asked Mr. Smith to discontinue asphalt storage, on the basis that asphalt was a significant cause of toxic fumes, but (allegedly) an insignificant part of the facility’s operations. In response, Mr. Smith changed his position and stated that asphalt was a significant component of the facility’s operations.

Discrepancies Related to BWC Harvey’s Tax Exemption

Blackwater (now BWC) Harvey has secured an exemption from an estimated \$713,797 in Ad Valorem tax through Louisiana’s Industrial Tax Exemption Program (ITEP).⁵⁵ To be eligible for ITEP, “businesses must be classified as a **manufacturer** or related to the manufacturing project at the project site.”⁵⁶ (Emphasis added.) Yet, according to Blackwater/BWC Harvey, “The facility **does not produce** a product. It is a for-hire bulk liquid storage terminal...”⁵⁷ (Emphasis added.) This discrepancy is reflected in the different NAICS codes that Blackwater Harvey provided in its air permit application versus in its tax exemption application. In every air permit application (submission dates spanning 2014 – 2020), Blackwater Harvey listed its primary NAICS code as 493190: “Other warehousing and storage.”⁵⁸ Yet, the NAICS code in

⁵⁰ See 2018 BWC Harvey [emissions log](#), obtained from LDEQ by Public Records Request (#0045924, submitted Apr 14, 2021). Page 9 of 15.

⁵¹ Minor Source Air Permit. May 3, 2018. Doc ID [11118365](#).

⁵² Application for Minor Source Air Permit. Dec 28, 2017. Doc ID [10911114](#).

⁵³ Approved as “insignificant activity” requests on May 30, 2017. Doc ID [10624094](#).

⁵⁴ See 2019 [emissions log](#), obtained from LDEQ by Public Records Request (#0045924, submitted Apr 14, 2021).

⁵⁵ Calculated as \$82,519.88 × 5 years (original exemption) + \$60,239.51 × 5 years (renewal). See Industrial Tax Exemptions Projects Report. Project ID 20150828-ITE. Available at

<https://fastlaneng.louisianaeconomicdevelopment.com/public/reports>. Accessed May 23, 2021.

⁵⁶ Louisiana Economic Development. Industrial Tax Exemption Program Eligibility. Available at opportunitylouisiana.com/business-incentives/industrial-tax-exemption. Accessed May 23, 2021.

⁵⁷ Blackwater Harvey. Minor Source Air Permit Application. Apr 17, 2019. Page 3 of 107. Doc ID [10077679](#).

⁵⁸ Blackwater Harvey. Minor Source Air Permit Applications: submitted Jan 2, 2014 (Doc ID [9140213](#), Page 3 of 27); Feb 5, 2016 (Doc ID [10077679](#), Pages 8-9 of 89); July 24, 2017 (Doc ID [10713023](#), Pages 3-4 of 39); Dec 28, 2017 (Doc ID [10911114](#), Pages 8-9 of 95); Apr 17, 2019 (Doc ID [11647350](#), Pages 3-4 of 107); June 5, 2020 (Doc ID [12209519](#), Page 9 of 117).

Blackwater Harvey’s ITEP application (submitted in 2015) and renewal application (submitted in 2019) is 324191: “Establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.”⁵⁹ It appears that BWC Harvey was never permitted by LDEQ to blend or compound any such hazardous, VOC-emitting materials. Notably, Blackwater Harvey submitted an air permit application to LDEQ on June 5, 2020 to “initiate blending of creosote ingredients to ‘manufacture’ creosote petroleum solution.”⁶⁰ However, on July 24, 2020, Blackwater Harvey withdrew this application in the face of strong public opposition.⁶¹ Notably, the 2019 ITEP documentation indicates that BWC Harvey employs only 24 people.⁶²

Conclusions & Required Actions

The public records presented here clearly demonstrate that BWC Harvey was constructed through a piecemealed process that EPA describes as “sham permitting.” Because of this piecemealing, the public never had a say in whether the facility as a whole should be constructed. Thus, without any opportunity for public input, LDEQ allowed BWC to construct and operate a 48-acre facility with the capacity to store nearly 100 million gallons of hazardous petrochemicals in the middle of a densely-populated residential area. There is clearly strong public interest in BWC Harvey’s operations, as evidenced by more than 850 complaints (representing 150 households) linked to this facility in the past two years. By far, more people have complained about toxic fumes linked to BWC Harvey than are employed by the facility.

There is no evidence that LDEQ has a clear plan to resolve this public health problem, which has been ongoing for approximately two years and is affecting an estimated 75,000 residents. On the contrary, the agency has engaged in practices that are opposed to the public interest. It is clear that the LDEQ permit writer intentionally piecemealed the construction of BWC Harvey’s tanks, given that he granted five separate insignificant activity approvals in the span of 15 minutes. Further, LDEQ has failed to respond to repeated concerns about irregularities in BWC Harvey’s permit, some of which may be a result of the haphazard permitting history. And although LDEQ investigates complaints, the resulting information is questionable because LDEQ provides BWC Harvey with the specific times of complaints and then allows the company to create its activity logs retroactively. For all of the above reasons, EPA intervention is warranted in this situation.

⁵⁹ Industrial Tax Exemptions Projects Report. Project ID 20150828-ITE. Available at <https://fastlaneng.louisianaeconomicdevelopment.com/public/reports>. Accessed May 23, 2021.

⁶⁰ Blackwater Harvey. Minor Source Air Permit Application. June 5, 2020. Page 9 of 117. Doc ID [12209519](#). See letter from LDEQ to Blackwater Harvey. July 28, 2020. Doc ID [12279196](#).

⁶¹ Letter from LDEQ to Blackwater Harvey. July 28, 2020. Doc ID [12279196](#). For corresponding media articles, see <https://join4cleanair.wordpress.com/press/>.

⁶² Industrial Tax Exemptions Projects Report. Project ID 20150828-ITE. Available at <https://fastlaneng.louisianaeconomicdevelopment.com/public/reports>. Accessed May 23, 2021.

To enforce the Clean Air Act, EPA should immediately exercise its oversight authority and ensure that BWC Harvey ceases operations until a time when (and if) BWC Harvey can properly obtain an air permit that fully covers its operations. Given the overwhelming public interest in BWC Harvey's operations, EPA must hold a public hearing and provide a comment period on any permitting activity for this facility in the foreseeable future. The EPA should independently review BWC Harvey's air permit to resolve apparent discrepancies and determine whether the facility has been exceeding its emissions limits, particularly with respect to VOCs and toxic air pollutants.

Beyond the question of permit violations, the amount of toxic air pollution being emitted from BWC Harvey is clearly a public health problem. This pollution has negatively impacted peoples' well-being, causing headaches, migraines, dizziness, difficulty breathing, and other health effects. The LDEQ's authority over BWC Harvey is not limited to ensuring permit compliance. Rather, the agency has broad authority to protect air quality because the Louisiana State Constitution mandates that "The natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people." Given the apparent violations of the Clean Air Act and the Louisiana State Constitution, it is imperative that the EPA and the Louisiana Governor intervene to protect the public's right to breathe clean air.