

TULANE LAW SCHOOL TULANE ENVIRONMENTAL LAW CLINIC

May 26, 2022

# Via Email to:

Louisiana Department of Environmental Quality Public Participation Group deq.publicnotices@la.gov

Dr. Earthea Nance, Administrator EPA Region 6 Nance.Earthea@epa.gov

### Re: Comments on 2022 Louisiana Annual Monitoring Network Plan, AI #168755

Dear LDEQ Public Participation Group and Dr. Nance,

On behalf of our clients Patricia Charles, Raphael Sias, Ronald Carrier, Larry Allison, Karl Prater, McKeever Edwards, Carolyn Peters, Stafford Frank, and Peggy Anthony ("Mossville community members"), as well as Myrtle Felton, Barbara Washington, Gail LeBeouf, Inclusive Louisiana, and Louisiana Bucket Brigade (collectively, "St. James Community Members"), and the Sierra Club, we respectfully submit these comments on Louisiana Department of Environmental Quality's ("LDEQ's") proposed 2022 Annual Air Monitor Network Plan ("Plan") for the State of Louisiana. We are aware that LDEQ is responsible for proposing the Plan and EPA must approve. Therefore, we submit these comments to both agencies.

Environmental justice mandates and the obligations imposed on LDEQ as public trustee of the environment under Article IX, section 1, of the Louisiana Constitution and the Supreme Court's interpretation of that article in *Save Ourselves, Inc., v. La. Env't Control Comm'n*, 452 So. 2d 1152 (La. 1984), require that LDEQ do more for the communities of Mossville and St. James Parish than what is required under federal regulations. Below, we detail the needs of the environmental justice communities represented by the commenters.

# I. LDEQ must monitor for VOCs in Mossville, including specifically ethylene oxide, and ensure that the data from the new Teledyne PM<sub>2.5</sub> monitor in Westlake is used long-term to determine compliance with the NAAQS.

Mossville community members are black Americans who have been severely overburdened with industrial air pollution. Residents of Mossville fear for their health, wellbeing, loss of community, and property devaluation given the exceptionally high levels of harmful air pollutants emitted from the 14 surrounding industrial facilities. Mossville represents the most heavily industrialized area of Calcasieu Parish, which has **the highest emissions of** 

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**nearly every criteria pollutant of any parish in Louisiana** (with the exception of lead).<sup>1</sup> This disproportionate impact of industrial permitting is reflected in the fact that Mossville is a hotspot of extreme air toxicity, representing the top 0.5% most toxic air in the nation, according to Environmental Protection Agency (EPA) data from 2020.<sup>2</sup> Mossville community members continue to be concerned about the air pollution impacts from the still-recent industrial buildout of Sasol's Lake Charles Chemical Complex, which was recently ranked as the #2 "super polluter" in the nation.<sup>3</sup> These members are also concerned by the track record of serious permit violations at the industrial facilities near this historic black community. According to EPA data, the Phillips 66 facility located adjacent to Mossville has had "high priority violations" of its air permits in every quarter since April 2019, through to the first quarter of 2022.<sup>4</sup>

Mossville residents commented to LDEQ on both its 2020 and 2021 Annual Monitoring Network Plans, detailing the much more robust monitoring required to protect the people of Mossville and to comply with environmental justice mandates. Mossville residents argued that LDEQ should place monitors for PM<sub>2.5</sub>, VOCs, and ozone in Mossville.<sup>5</sup> LDEQ has installed a federal equivalent PM<sub>2.5</sub> monitor in Westlake (at EPA's urging and with its support), which is an improvement. However, Mossville's status as being in the top .5% nationally for toxic emissions underscores the urgent need for a speciated VOC monitor in Mossville. Mossville's status as a community significantly impacted by ethylene oxide emissions mandates that ethylene oxide be one of the toxic emissions that are speciated out by a Mossville VOC monitor.

For the first time in its Annual Monitoring Network Plans, in this 2022 proposed Plan LDEQ has addressed the issue of environmental justice. Notably, though, despite receiving comments from Mossville residents the last two years, LDEQ's environmental justice discussion does not even mention Mossville. As detailed below, multiple data sources indicate that Mossville and neighboring communities remain burdened with hotspots of air pollution that are among the most severe in Louisiana. Yet while LDEQ has permitted massive increases in industrial emissions in the Mossville area, it has not correspondingly increased the protections offered by robust ambient air monitoring. These permitting actions have resulted in disproportionate harm to Mossville – a culturally rich, rural community, with deep roots in

<sup>3</sup> Apr. 8, 2020, "Breath to the People, Sacred Air and Toxic Pollution," Environmental Integrity Project for the United Church of Christ, p. 7, available at: <u>https://www.ucc.org/wp-</u> <u>content/uploads/unitedchurchofchrist/pages/24840/attachments/original/1582721312/FINAL\_BreathToT</u> hePeople 2.26.2020.pdf?1582721312.

<sup>&</sup>lt;sup>1</sup> Based on LDEQ 2021 reported emissions, accessed via ERIC Emissions by Parish Report. <u>https://business.deq.louisiana.gov/Eric/EricReports/ParishReportSelector?</u>. Calcasieu Parish 2021 emissions include: PM<sub>2.5</sub> (2,190 tons), PM<sub>10</sub> (2,827 tons), NOx (15,966 tons), total VOCs (5,535 tons), CO (8,619 tons), and SO<sub>2</sub> (19,145 tons). Calcasieu Parish's 2021 lead emissions are the second highest in the state. *Id*.

<sup>&</sup>lt;sup>2</sup> 2020 EPA RSEI microdata. <u>https://www.epa.gov/rsei/rsei-geographic-microdata-rsei-gm</u>

<sup>&</sup>lt;sup>4</sup> Data accessed from EPA's ECHO database on May 25, 2022. *See <u>https://echo.epa.gov/detailed-facility-report?fid=110000539757#pane3110000539757</u>.* 

<sup>&</sup>lt;sup>5</sup> Appendix A Comments and Responses to the 2021 LA Annual Monitoring Network Plan, LDEQ EDMS Doc. # 12791545 at 12, 228.

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African American history (Fig. 1).<sup>6</sup> The 2022 Plan provides another opportunity to begin to address the disproportionate risk that the remaining Mossville residents experience from air pollution, and LDEQ should revise this plan accordingly.

# A. Environmental justice mandates, public trustee obligations, and the purposes of the federal ambient air monitoring program requires that LDEQ monitor for VOCs – and ethylene oxide in particular – in Mossville.

On behalf of the Mossville community members and the Sierra Club, we respectfully request that the LDEQ amend the air quality monitoring plan to include reliable VOC monitors that will measure toxic air pollutants, specifically ethylene oxide, in Mossville, Louisiana. This information is essential to the health, wellbeing, and economic viability of the Mossville community.

The Environmental Protection Agency (EPA) defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulation, and policies."<sup>7</sup> According to the EPA, fair treatment means that "no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies."<sup>8</sup> Further, EPA noted in guidance on air monitoring that "monitors located in areas that have large low income and/or minority populations may be of particular use for assessing environmental justice issues."<sup>9</sup> Mossville is a historic community with a rich African-American heritage, and many of its residents trace their roots to the freed slaves who first settled this area.<sup>10</sup>

Despite the increased publicity around Mossville and ethylene oxide pollution, the EPA's most recent Risk Screening Environmental Indicators (RSEI) microdata reveals that the air in Mossville remains more toxic than nearly anywhere else in the nation. These high toxicity values are centered on Sasol's Lake Charles Chemical Complex (Fig. 1), which literally dismantled the historic community of Mossville through what amounted to forced displacement of lifelong residents, in order to allow a massive expansion of this facility in 2014.<sup>11</sup>

<sup>9</sup> EPA Ambient Air Monitoring Network Assessment Guidance, 2-3 (Feb. 2007),

<sup>10</sup> David S. Martin, *Toxic Towns: People of Mossville 'are like experiment.'* CNN, (Feb. 26, 2010) ), https://www.cnn.com/2010/HEALTH/02/26/toxic.town.mossville.epa/index.html.

<sup>&</sup>lt;sup>6</sup> Mossville History Project. <u>https://www.lib.lsu.edu/oralhistory/collections/mossville</u>

<sup>&</sup>lt;sup>7</sup> <u>https://www.epa.gov/environmentaljustice</u>

<sup>&</sup>lt;sup>8</sup> EPA, Plan EJ 2014 at 3, available at

https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.PDF. See also Basis for Decision for FG LA Complex, EDMS Doc. No. 11998452 (AI No. 198351), Part IX: Environmental Justice/Civil Rights Title VI Issues, at pdf p. 35 (in which LDEQ endorses this definition).

https://www3.epa.gov/ttnamti1/files/ambient/pm25/datamang/network-assessment-guidance.pdf.

<sup>&</sup>lt;sup>11</sup> University Network for Human Rights. Environmental Racism, Forced Displacement, and the Industrial Buyout of Mossville, Louisiana. Accessed May 26, 2022 at https://www.humanrightsnetwork.org/mossville.



Figure 1. Satellite imagery from Google Earth Pro, illustrating the industrialization and destruction of Mossville from 2013 to 2018. Yellow lines indicate the approximate boundaries of historic Mossville.

The remaining residents of Mossville face extreme pollution-related cancer risk, yet have no information about their neighborhood's air quality, because LDEQ does not operate any air monitors in Mossville. Fine scale air monitoring data is essential for communities like Mossville where massive industrial sources where allowed to construct in extremely close proximity to residences because research has shown that levels of air pollutants can vary by up to 8x within one city block.<sup>12</sup> The census block groups that represent Mossville are in the **99.6<sup>th</sup> percentile** or higher for toxicity concentration, out of more than 200,000 census block groups across the U.S.<sup>13</sup> *See* Figure 2.

<sup>&</sup>lt;sup>12</sup> See Joshua S. Apte et al., *High-Resolution Air Pollution Mapping with Google Street View Cars: Exploiting Big Data*, 51 Environmental Science & Technology 6999 (2017), *available at* <u>https://pubs.acs.org/doi/full/10.1021/acs.est.7b00891</u>.

<sup>&</sup>lt;sup>13</sup> EPA 2020 Aggregated Census Block Group Microdata,<u>http://abt-rsei.s3-website-us-east-</u> 1.amazonaws.com/?prefix=microdata2020/census\_agg/ (last accessed May 25, 2022).



**Figure 2.** Toxicity-weighted concentration of industrial air pollution in 2020 from EPA's Risk-Screening Environmental Indicators database. Toxicity concentrations were grouped using the natural breaks (Jenks) feature in QGIS.

This includes block group 220190027001 (RSEI toxicity concentration = 109,231;  $99.6^{th}$  percentile) and block group 220190027002 (RSEI toxicity concentration = 246,087;  $99.9^{th}$  percentile). Both of these block groups are affected by **109 different toxic air pollutants** from industrial facilities. Yet, there is no information about the ambient concentration of *any* of these 109 pollutants in Mossville. Additionally, LDEQ does not operate a monitor for ethylene oxide, the major driver of Mossville's pollution-related cancer risk, anywhere in the Lake Charles MSA.

In March 2020, the EPA's Office of Inspector General issued a management alert that called out EPA for its failure to provide information to 25 communities facing exceptionally high risk from ethylene oxide, including Mossville. In September 2021, EPA Region 6 held a public meeting to inform residents of Mossville and other nearby communities about the risks of ethylene oxide from Sasol Chemicals, the only significant source of ethylene oxide in the area. Yet, in direct contradiction to these efforts, Sasol has increased its emissions of ethylene oxide every year for the past five years. *See* Fig. 3. Sasol's ethylene oxide emissions have **more than tripled** since 2016, based on the most recent data available (2020).



**Figure 3.** Reported annual ethylene oxide emissions from Sasol Chemical's Lake Charles Complex (AI 3271). Data from EPA's RSEI Database. Accessed May 25, 2022 via <a href="https://edap.epa.gov/public/extensions/EasyRSEI/EasyRSEI.html">https://edap.epa.gov/public/extensions/EasyRSEI.html</a>.

The only two VOC monitors that LDEQ operates in the Lake Charles MSA are located in the opposite direction (relative to Mossville) from Sasol's Lake Charles Chemical Complex, the single largest contributor to Mossville's pollution-related cancer risk.<sup>14</sup> Given these monitors' location, they do not provide representative ambient concentrations for Mossville. The LDEQ must install a continuous monitoring system to accurately quantify ambient concentrations of ethylene oxide and other air toxics that significantly contribute to the elevated cancer risks and respiratory hazards in Mossville. The monitor(s) must be located to reliably detect emissions from Sasol and the other major sources affecting Mossville.

Additionally, the data from any VOC monitor must be made available to the public online. Currently, LDEQ does not make data from its two Calcasieu Parish VOC monitors readily available to the public by posting it online the way that it does for the other pollutants monitored under this program.<sup>15</sup> Further complicating the effectiveness and accessibility of this data to the public is the fact that even when one specifically requests the VOC monitor data and LDEQ provides it, LDEQ provides the data in units that are not directly comparable to the corresponding ambient air standard. Significant investments of time and technical expertise, not readily available to the public, are required to convert the units of measurement from the VOC monitors into units that compare to the ambient air standard units.

<sup>&</sup>lt;sup>14</sup> EPA Air Tox Screen 2017,

https://epa.maps.arcgis.com/apps/dashboards/fb6e6b70c7e2480c8ef88cc8e9c061ac (last accessed May 26, 2022).

<sup>&</sup>lt;sup>15</sup> Obtaining data from the Calcasieu Parish VOC monitors requires submitting a public records request to LDEQ.

The LDEQ must also take active measures to ensure that the monitor(s) remains operational in the aftermath of hurricanes, chemical fires, and other disasters, when residents are most likely to be impacted by elevated emissions. The LDEQ failed to fully restore air monitoring in Calcasieu Parish for months after Hurricane Laura made landfall on August 27, 2020. The LDEQ should include an emergency operations plan as part of its Monitoring Network Plan to ensure that air monitors are restored within a reasonable timeframe after these disasters (i.e., hours or days, not weeks or months).

# B. LDEQ must be transparent about its plans for the new Teledyne PM monitor in Westlake.

In its 2022 Plan, LDEQ reports that it has installed a Teledyne T640x PM monitor in Westlake in place of the TEOM PM monitor at that location, and that the new monitor has been operational since April 1. Plan at 4. LDEQ also reports that the T640x is NAAQS comparable. Plan at 23. This new monitor is an improvement over the prior version that was not NAAQS comparable, though location within Mossville is preferable. To determine just how useful this monitor will be, we request that LDEQ provide answers to the following questions:

- How long does LDEQ plan to keep this monitor operational at the site?
- Will LDEQ use the data from this monitor to determine compliance with the NAAQS? Will it use data from this monitor to determine attainment/nonattainment?
- If LDEQ will use the Westlake data to determine compliance with the PM<sub>2.5</sub> NAAQS, will LDEQ combine the PM<sub>2.5</sub> data from the Westlake monitor with the PM<sub>2.5</sub> data from the Vinton monitor to do that?
- Why did LDEQ designate the new monitor as a SPM?

What evidence does LDEQ have that the data collected at the Westlake monitoring site are representative of air quality in Mossville?

LDEQ must be very transparent about its plans for this monitor, given that 40 C.F.R. § 58.20(f) provides that LDEQ does not need EPA approval to discontinue this new monitor and given that if LDEQ operates the monitor for less than 24 months, EPA will not base a NAAQS violation determination solely on data from that monitor. *See* 40 C.F.R. § 58.20(d).

# **II.** LDEQ must improve St. James Parish monitoring.

Commenters Myrtle Felton, Barbara Washington, Gail LeBeouf,<sup>16</sup> Inclusive Louisiana, and Louisiana Bucket Brigade (collectively, "St. James Community Members") have major concerns about air pollution and the lack of air monitoring in St. James Parish, Louisiana, as well as concerns over LDEQ's failure to address these issues. As detailed below, multiple data sources indicate that St. James Parish is burdened with hotspots of air pollution that are among

<sup>&</sup>lt;sup>16</sup> Ms. Felton, Ms. Washington, and Ms. LeBeouf are residents of St. James Parish, Louisiana and members of the community group Inclusive Louisiana. Ms. Felton and Ms. Washington are residents of Romeville, which is adjacent to the Nucor steel facility.

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the most severe both in Louisiana and in the entire United States. Yet LDEQ has only one federally-mandated ambient air monitor for ozone in St. James Parish, and does not monitor for any other criteria pollutant.<sup>17</sup> Part of the area known as the Cancer Alley corridor, St. James Parish is home to a diverse population of approximately 20,000 residents,<sup>18</sup> and large swaths of the Parish fall within the 95th-100th national percentile for cancer risk.<sup>19</sup> The 2022 Plan provides an opportunity to address the disproportionate risk faced by St. James Parish residents as the result of excessive air pollution, and LDEQ should revise this plan accordingly to include EPA-acceptable air monitors for all criteria pollutants, placed and operated in a manner that will allow them to be relied upon to determine NAAQS compliance, as well as to communicate information about air quality to local residents.

St. James Parish is part of Louisiana's largest industrial corridor and home to some of the most toxic air pollution in the entire country. The area known as Cancer Alley, stretching along the Mississippi River from Baton Rouge to New Orleans, holds the second greatest number of petrochemical-producing facilities in the United States, only behind Texas, where facilities are spread across a much greater area.<sup>20</sup> The United Nations has identified Cancer Alley as an area of particular environmental justice concern for the disproportionate and significant risk of cancer and other negative health impacts affecting the majority Black residents.<sup>21</sup> A recent study published in the peer-reviewed *Environmental Research Letters* shows air pollution to have a strong correlative effect on cancer rates in Louisiana.<sup>22</sup> The authors of the study suggest that the connection between air toxicity and cancer incidence could explain the disproportionate occurrence of cancer in Black Louisianans living in industry-heavy parishes.<sup>23</sup>

Residents of Gramercy (St. James Parish) are additionally impacted by mercury emissions from Atalco (formerly Noranda) Alumina, AI 1388. Located just 1 mile northeast of Gramercy, Atalco is permitted to emit a massive 1,350 lbs of mercury annually, under permit 2453-V13 (EDMS #12804704, page 5). This permitted limit is over 20 times the amount of

<sup>&</sup>lt;sup>17</sup> Air Monitoring Sites, Louisiana DEQ (last accessed Apr. 29, 2022),

https://experience.arcgis.com/experience/1bc3c0ad43be455ab7224f0324aabaf2/. <sup>18</sup> St. James Parish, Louisiana, U.S. Census Bureau,

https://www.census.gov/quickfacts/table/PST045216/22093,22. Based on the 2021 data, Black residents constitute approximately 48.8 percent of the population of St. James Parish. *Id*.

<sup>&</sup>lt;sup>19</sup> Information about cancer risks found on the EPA's EJScreen tool, located at <u>https://ejscreen.epa.gov/mapper/</u>

<sup>&</sup>lt;sup>20</sup>Inside Louisiana's horrifying 'Cancer Alley,' an 85-mile stretch of pollution and environmental racism that's now dealing with some of the highest coronavirus death rates in the country, Business Insider (Apr. 9, 2020), <u>https://www.businessinsider.com/louisiana-cancer-alley-photos-oil-refineries-chemicals-pollution-2019-11#in-total-about-150-facilities-line-the-alley-its-the-second-biggest-producer-of-petrochemicals-in-the-country-after-texas-but-the-key-difference-is-that-texas-industry-is-spread-out-over-hundreds-of-miles-5.</u>

<sup>&</sup>lt;sup>21</sup> USA: Environmental racism in "Cancer Alley" must end – experts, U.N. Human Rights Office of the High Commissioner (Mar. 2, 2021), <u>https://www.ohchr.org/en/press-releases/2021/03/usa-environmental-racism-cancer-alley-must-end-experts</u>.

 <sup>&</sup>lt;sup>22</sup> Kimberly A. Terrell and Gianna St. Julien, *Air pollution linked to higher cancer rates among black or impoverished communities in Louisiana*, 17 Environmental Research Letters 1 (Jan. 13, 2022).
<sup>23</sup> Id.

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mercury emitted by any other facility in Louisiana, based on LDEQ data.<sup>24</sup> Yet, as mercury is not a criteria pollutant or a volatile organic compound that contributes to ozone formation and thus not part of the NAAQS monitoring program, residents have no monitoring data whatsoever for ambient air concentrations of mercury. Mercury is an extremely toxic pollutant and one that is ignored by DEQ's reporting and monitoring requirements.<sup>25</sup> LDEQ should monitor mercury in or near Gramercy, with the monitor located to reliably detect emissions from Atalco.

Likewise, St. James has more facilities that emit large amounts (>10,000 lbs/yr) of sulfuric acid mist (SAM) than any other parish in Louisiana.<sup>26</sup> These facilities include Nucor (AI 157847; 10,382 lbs in 2020), Gramercy Coke Plant (AI 32804; 12,096 lbs in 2020), Shell Convent<sup>27</sup> (AI 2719; 74,495 lbs in 2020), and Mosaic Uncle Sam (AI 2532, 212,719 lbs in 2020). Two of these facilities (Nucor and Mosaic) are located very close (<2 miles) to the historic Black community of Romeville. This too is an extremely toxic pollutant with no monitoring, yet one that burdens the health of St. James Parish residents. LDEQ should monitor SAM in Romeville, with the monitor located to reliably detect emissions from Nucor and Uncle Sam.

St. James Parish is also home to eleven EPA-identified Toxics Release Inventory Facilities ("TRI Facilities").<sup>28</sup> Chemicals subject to the reporting requirements of the TRI program include sulfuric acid mists and nitrate compounds<sup>29</sup> – both of which are heavily emitted by Nucor Steel Louisiana, LLC ("Nucor"), located in the town of Convent.<sup>30</sup> In addition to TRI reported emissions, industrial companies in the area pump a litany of hazardous chemical compounds and particulate matter into the air on a daily basis. In the past few years, St. James

<sup>&</sup>lt;sup>24</sup> Based on the most recent year of data available (2020) from the LDEQ Annual Certified Emissions. Updated 6/23/2021. Accessed 5/25/2022. A direct comparison of actual (i.e. reported) emissions between Atalco and other regulated facilities is not possible, because *Atalco does not report its mercury emissions*. Specifically, these emissions are not reported in LDEQ's Annual Certified Emissions database, or in the facility's ERIC Certification Statements in EDMS.

<sup>&</sup>lt;sup>25</sup> See permit 2452-V13, AI 1388, page 4. EDMS # 12804704.

<sup>&</sup>lt;sup>26</sup> Based on the most recent year of data available (2020) from the LDEQ Annual Certified Emissions. Updated 6/23/2021. Accessed 5/25/2022.

<sup>&</sup>lt;sup>27</sup> This facility has closed since 2020. Even without Shell Convent, St. James is tied with East Baton Rouge for largest # of high SAM emitting facilities. Further, there is no guarantee that Shell Convent will remain closed, since the facility has not been dismantled.

<sup>&</sup>lt;sup>28</sup> 2020 TRI Factsheet: County – St. James Parish, LA, EPA, <u>https://enviro.epa.gov/triexplorer/tri\_factsheet.factsheet?pParent=TRIQ1&pDataset=TRIQ1&pstate=LA</u> <u>&pcounty=St.%20James%20Parish&pFips=22093&pyear=2020</u>.

<sup>&</sup>lt;sup>29</sup> EPA, EPCRA SECTION 313 CHEMICAL LIST FOR REPORTING YEAR 2021 (INCLUDING TOXIC CHEMICAL CATEGORIES), *available at* <u>https://www.epa.gov/system/files/documents/2022-03/ry-2021-tri-chemical-list-03-07-2022\_0.pdf</u>.

<sup>&</sup>lt;sup>30</sup> See Addendum to the July 2020 Title V Air Permit Renewal, Significant Modification and PSD Modification Application, Nucor Steel Louisiana, LLC (Jul. 27, 2021), Doc. No. 12820367, AI No. 157847.

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residents have made national news for their experience living in Cancer Alley under such toxic conditions.<sup>31</sup>

On behalf of the St. James Community Members, we respectfully request that LDEQ amend the 2022 Plan to include reliable monitors for SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>X</sub>., and VOCs in St. James Parish, Louisiana. Increased monitoring is essential to the health, wellbeing, and economic viability of the St. James Parish community.

### A. St. James Parish's History of Industrial Emissions

St. James Parish was one of the original nineteen parishes of Louisiana.<sup>32</sup> The parish covers banks on either side of the Mississippi River.<sup>33</sup> Part of Cancer Alley and home to a litany of industrial companies, St. James Parish has been identified as an area of particular environmental justice concern.

The Environmental Protection Agency ("EPA") defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."<sup>34</sup> According to the EPA, "fair treatment" is "[t]he principle that no group of people, including a racial, ethnic or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies."<sup>35</sup> Based on EPA data, it is clear that St. James Parish residents disproportionately suffer the negative consequences of industrial emissions in excess of permitted limits.

<sup>31</sup> See e.g., Ava Kofman, The EPA Administrator Visited Cancer-Causing Air Pollution Hot Spots Highlighted by ProPublica and Promised Reforms, ProPublica (Nov. 24, 2021), https://www.propublica.org/article/the-epa-administrator-visited-cancer-causing-air-pollution-hot-spotshighlighted-by-propublica-and-promised-reforms; Antonia Juhasz, Louisiana's 'Cancer Alley' Is Getting Even More Toxic–But Residents Are Fighting Back, Rolling Stone (Oct. 30, 2019), https://www.rollingstone.com/politics/politics-features/louisiana-cancer-alley-getting-more-toxic-905534/.

<sup>&</sup>lt;sup>32</sup> Parish History, St. James Parish, Louisiana (last accessed Apr. 29, 2022),

https://stjamesla.com/240/Parish-History.

<sup>&</sup>lt;sup>33</sup> *Id*.

<sup>&</sup>lt;sup>34</sup> Environmental Justice, EPA (last accessed Apr. 29, 2022), https://www.epa.gov/environmentaljustice.

<sup>&</sup>lt;sup>35</sup> EJ 2020 Glossary, EPA (last accessed Apr. 29, 2022), https://www.epa.gov/environmentaljustice/ej-2020-glossary.



EJScreen Report (Version 2.0)



County: St. James Parish, LOUISIANA, EPA Region 6 Approximate Population: 21,308

Input Area (sq. miles): 257.82

| Selected Variables  | Value  | State<br>Avg. | %ile in<br>State | EPA<br>Region<br>Avg. | %ile in<br>EPA<br>Region | USA<br>Avg. | %ile in<br>USA |  |
|---|--------|---------------|------------------|-----------------------|--------------------------|-------------|----------------|--|
| Pollution and Sources   |        |               |                  |                       |                          |             |                |  |
| Particulate Matter 2.5 (µg/m <sup>3</sup> )                       | 9.2    | 9.22          | 52               | 9.32                  | 27                       | 8.74        | 66             |  |
| Ozone (ppb)   | 35.1   | 37.2          | 9                | 41.1                  | 15                       | 42.6        | 12             |  |
| 2017 Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )  | 0.349  | 0.298         | 68               | 0.219                 | 80-90th                  | 0.295       | 70-80th        |  |
| 2017 Air Toxics Cancer Risk* (lifetime risk per million)          | 64     | 41            | 94               | 32                    | 95-100th                 | 29          | 95-100th       |  |
| 2017 Air Toxics Respiratory HI*                                   | 0.45   | 0.45          | 75               | 0.37                  | 90-95th                  | 0.36        | 80-90th        |  |
| Traffic Proximity (daily traffic count/distance to road)          | 12     | 560           | 11               | 470                   | 8                        | 710         | 9              |  |
| Lead Paint (% Pre-1960 Housing)                                   | 0.2    | 0.2           | 67               | 0.16                  | 73                       | 0.28        | 53             |  |
| Superfund Proximity (site count/km distance)                      | 0.02   | 0.086         | 21               | 0.08                  | 27                       | 0.13        | 17             |  |
| RMP Facility Proximity (facility count/km distance)               | 0.38   | 0.91          | 52               | 0.83                  | 49                       | 0.75        | 54             |  |
| Hazardous Waste Proximity (facility count/km distance)            | 0.29   | 1.4           | 38               | 0.8                   | 49                       | 2.2         | 36             |  |
| Underground Storage Tanks (count/km <sup>2</sup> )                | 0.69   | 2             | 46               | 2                     | 41                       | 3.9         | 40             |  |
| Wastewater Discharge (toxicity-weighted concentration/m distance) | 0.0042 | 0.42          | 60               | 0.5                   | 64                       | 12          | 62             |  |

**Figure 4.** EJ Screen Report showing the population percentile for St James Parish for risk factors as compared to the state of Louisiana, the EPA Region 6, and the country. Data for EJ Screen are provided by the United States EPA.

As shown in Figure 4, St. James Parish falls entirely within the 95-100th national percentile for cancer risk due to air toxicity.<sup>36</sup> Industrial companies in Cancer Alley, and notably St. James Parish, have established a pattern of emitting toxic or otherwise hazardous chemicals, resulting in increased air toxicity, which has been identified by EPA as contributing to increased health risks. The presence of toxic or otherwise hazardous chemicals undoubtably has an impact on the ambient air quality, and therefore it is crucial that LDEQ implement greater monitoring throughout the state, namely in St. James Parish.

Currently, there is only one ambient air monitor in St. James Parish. Located in Convent, St. James Parish's sole monitor measures only ozone through U.V. absorption and is part of the federally-mandated State and Local Ambient Monitoring Stations ("SLAMS).<sup>37</sup> The proposed Plan does not propose to change this: a single air monitor, measuring only ozone, for this entire, heavily-industrialized parish. This is insufficient, as industrial facilities located in St. James Parish emit large quantities of toxic chemicals for which monitoring is necessary, including SO<sub>2</sub>,

<sup>&</sup>lt;sup>36</sup> EJ Screen Report generated for St. James Parish using the EJScreen tool available at: https://ejscreen.epa.gov/mapper/ejscreen\_SOE.aspx

<sup>&</sup>lt;sup>37</sup> See Louisiana Annual Monitoring Action Plan, p.17

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 $PM_{10}$ ,  $PM_{2.5}$ , CO, and  $NO_x$ .<sup>38</sup> Because there are no monitors for any of these toxic chemicals, there is no way to determine their current levels and thus there is insufficient data to determine the ambient air quality.

#### Sulfur Dioxide (SO<sub>2</sub>)

Sulfur dioxide (SO<sub>2</sub>) has been identified by the World Health Organization ("WHO") as a key pollutant contributing to the toxification and consequential carcinogenic qualities of outdoor ambient air.<sup>39</sup> Under 40 C.F.R. § 50.17, regarding the national ambient air quality standards for sulfur oxides, SO<sub>2</sub> levels are determined by hourly measurements.<sup>40</sup> The primary ambient air standards for SO<sub>2</sub>, against which current levels are to be compared, are determined using <u>24-hour</u> averages.<sup>41</sup> Thus, without proper ambient air monitoring, it is impossible both to set an appropriate primary standard for SO<sub>2</sub>, and to properly determine whether a facility is within that designated standard.

While LDEQ has recently focused its attention on reducing SO<sub>2</sub> pollution in St. Bernard Parish (with a 70% White population),<sup>42</sup> the agency does not even operate an SO<sub>2</sub> monitor in St. James Parish, where far more SO<sub>2</sub> is emitted, and these emitters are located adjacent to predominantly Black communities.<sup>43</sup> Comparison of emissions and monitoring sites across southeastern Louisiana (i.e. LDEQ's Capitol and Southeast monitoring regions) reveals that St. James is an obvious gap in LDEQ's SO<sub>2</sub> monitoring network (Fig. 5). St. James Parish has two massive SO<sub>2</sub> emitters: the Gramercy Coke Plant (AI 32804; 5,005 tons in 2020) and Mosaic Uncle Sam (AI 2532; 1,916 tons in 2020).<sup>44</sup> Each of these facilities emits an amount of SO<sub>2</sub> that is comparable to or greater than the *total reported SO<sub>2</sub> emissions for St. Bernard Parish*,<sup>45</sup> which LDEQ declared non-attainment for SO<sub>2</sub> in 2022. This disparity leaves residents of St. James wondering how their parish can possibly be in attainment for SO<sub>2</sub> when a single facility (Gramercy Coke Plant) emits more than double the emissions of an entire non-attainment parish. Environmental justice requires that LDEQ operate SO<sub>2</sub> monitors in Gramercy Coke Plant and Mosaic Uncle Sam.

<sup>&</sup>lt;sup>38</sup> See Addendum to the July 2020 Title V Air Permit Renewal, Significant Modification and PSD Modification Application, Nucor Steel Louisiana, LLC (Jul. 27, 2021), EDMS Doc. No. 12820367, AI No. 157847.

<sup>&</sup>lt;sup>39</sup> Ambient (outdoor) air pollution, WHO (Sept. 22, 2021), <u>https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health</u>.

<sup>&</sup>lt;sup>40</sup> 40 C.F.R. § 50.17.

<sup>&</sup>lt;sup>41</sup> 40 C.F.R. § 50.4.

<sup>&</sup>lt;sup>42</sup> U.S. Census Bureau Quickfacts. Accessed 5/25/2022 via <u>https://www.census.gov/quickfacts/stbernardparishlouisiana</u>.

<sup>&</sup>lt;sup>43</sup> Romeville (69% people of color), Gramercy (51% people of color), and Wallace (80% people of color). Data from U.S. Census Bureau's 2015-2019 ACS Surveys, accessed via EJScreen on 5/25/2022.

<sup>&</sup>lt;sup>44</sup> Based on the most recent year of data available (2020) from the LDEQ Annual Certified Emissions. Updated 6/23/2021. Accessed 5/25/2022.

<sup>&</sup>lt;sup>45</sup> St. Bernard Parish emissions were 2,080 tons in 2021, the most recent year of data available from LDEQ's ERIC emissions by parish search tool. Accessed 5/25/2022.



# Reported SO<sub>2</sub> Emissions (2021), with Air Monitoring Gaps Noted

#### $\mathbf{X}$ No LDEQ monitor for SO<sub>2</sub> here or in any adjacent parish.

**Figure 5.** Total reported SO<sub>2</sub> emissions among parishes in southeastern Louisiana (i.e. Capitol and Southeast monitoring regions), based on the most recent year of data available from LDEQ's ERIC parish-level emissions inventory (accessed 5/25/2022). A red "×" denotes a parish where there is no SO<sub>2</sub> monitor present *and* no SO<sub>2</sub> monitor in any adjacent parish, based on LDEQ's proposed 2022 Air Monitoring Network Plan.

# Fine Particulate Matter (PM<sub>2.5</sub>)

Like SO<sub>2</sub>, particulate matter, both  $PM_{10}$  and  $PM_{2.5}$  have been identified by WHO as a critical and cancer-causing ambient air pollutant.<sup>46</sup> Both  $PM_{10}$  and  $PM_{2.5}$  are easily inhaled and can make

<sup>&</sup>lt;sup>46</sup> Ambient (outdoor) air pollution, WHO (Sept. 22, 2021), <u>https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health</u>.

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their way into human lungs, where they contribute to major health problems.<sup>47</sup> One of the primary sources of PM<sub>10</sub> and PM<sub>2.5</sub> are smokestacks from industrial and power plants.<sup>48</sup>

While LDEQ operates a relatively large number of PM<sub>2.5</sub> monitors compared to other pollutants, these monitors are not strategically located and fail to protect the communities that are burdened with the highest PM<sub>2.5</sub> emissions. This is particularly true in St. James Parish, which, along with neighboring St. John Parish, represents the largest and most obvious gap in PM<sub>2.5</sub> monitoring in southeastern Louisiana (Fig. 6). Of all the parishes in LDEQ's Capitol Air Monitoring Region, St. James Parish is the only parish with multiple major emitters of PM<sub>2.5</sub> that does not have a PM2.5 monitor *and* is not located adjacent to another parish with a NAAQS-comparable PM<sub>2.5</sub> monitor.<sup>49</sup> Gramercy and Romeville are two communities in St. James where NAAQS-comparable PM<sub>2.5</sub> monitoring is urgently needed. There are two large industrial facilities within 1 mile of Gramercy that reported emitting over 100 tons of PM<sub>2.5</sub> in 2020: the Gramercy Coke Plant (AI 32804; 238 tons) and Louisiana Sugar Refining (AI 165286; 111 tons). Romeville is a high-priority site for PM<sub>2.5</sub> monitoring, given the large emissions of SO<sub>2</sub> (a major precursor of secondary PM<sub>2.5</sub><sup>50</sup>).

 <sup>&</sup>lt;sup>47</sup> Particulate Matter (PM) Basics, EPA, <u>https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#:~:text=PM%20stands%20for%20particulate%20matter,seen%20with%20the%20naked%20eye</u>.
<sup>48</sup> Id.

<sup>&</sup>lt;sup>49</sup> Aside from St. James, West Feliciana is the only other parish in the Capitol region that lacks a PM<sub>2.5</sub> monitor and is not located adjacent to another parish with such a monitor. Total PM<sub>2.5</sub> emissions for West Feliciana in 2021 were 116 tons, compared to 548 tons for St. James Parish. Based on LDEQ's ERIC data, accessed 5/25/2022 via <u>https://business.deq.louisiana.gov/Eric/EricReports/ParishReportSelector</u>?. <sup>50</sup> See https://www.epa.gov/so2-pollution/sulfur-dioxide-basics and

https://www.epa.gov/sites/default/files/2016-07/documents/fact-sheet-final-pm25-impl-rule.pdf.



# Reported PM<sub>25</sub> Emissions (2021), with Air Monitoring Gaps Noted

# X No LDEQ NAAQS-comparable monitor for PM<sub>2.5</sub> here or in any adjacent parish.

**Figure 6.** Total reported  $PM_{2.5}$  emissions among parishes in southeastern Louisiana (i.e. Capitol and Southeast monitoring regions), based on the most recent year of data available from LDEQ's ERIC parish-level emissions inventory (accessed 5/25/2022). A red "×" denotes a parish where there is no  $PM_{2.5}$  monitor present *and* no NAAQS-comparable  $PM_{2.5}$  monitor in any adjacent parish, based on LDEQ's proposed 2022 Air Monitoring Network Plan.

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### Nitrogen Oxides (NO<sub>x</sub>)

NO<sub>x</sub> is a grouping of nitrogen oxides, including nitrogen dioxide, nitrous acid, and nitric acid.<sup>51</sup> NO<sub>2</sub> is often used as an indicator for other nitrous oxides.<sup>52</sup> NO<sub>2</sub> is particularly harmful for the respiratory system, and can contribute to asthma and respiratory infections.<sup>53</sup> NO<sub>x</sub> is emitted by multiple St. James Parish facilities, most notably Atalco (formerly Noranda) Alumina, but it is not monitored anywhere in the parish.

Crucially, both  $NO_x$  and  $NO_2$  react with other chemicals once emitted to create particulate matter and ozone.<sup>54</sup> Thus, not only is particulate matter emitted directly by industrial plants across Louisiana but is likely being formed by the industrial release of  $NO_x$  as well; a further argument for directly monitoring all NAAQS rather than calculating emissions based on permitted or reported emissions.

### Carbon Monoxide (CO)

Carbon Monoxide (CO) is a harmful chemical that is released in the industrial burning process, and which is deadly in high concentrations.<sup>55</sup> Although high concentrations of this magnitude are typically seen indoors, heightened outdoor concentrations can exacerbate heart disease by reducing the amount of oxygen available to the lungs.<sup>56</sup> Similarly to the other harmful pollutants listed in this comment, CO is a NAAQS criteria pollutant, only to be emitted in minute quantities every year.<sup>57</sup> Because CO is emitted regularly through the process of industrial burning in facilities across St. James Parish and Cancer Alley, it is crucial to the communities in our state that LDEQ implement ambient air monitoring of CO.

# B. The Absence of Monitors Prevents Meaningful Air Permitting in St. James Parish.

Without adequate monitoring of the air in the Parish, it is impossible for the parish, the state and the relevant industries to meaningfully comply with the relevant air quality laws and regulations. The lack of actual data prevents application and enforcement of air quality standards, particularly the NAAQS as detailed below, and forces industry and agency alike to rely on modeling built on assumptions.

<sup>&</sup>lt;sup>51</sup> Basic Information about NO2, EPA, <u>https://www.epa.gov/no2-pollution/basic-information-about-no2</u>. <sup>52</sup> *Id*.

<sup>&</sup>lt;sup>53</sup> *Id*.

<sup>&</sup>lt;sup>54</sup> *Id*.

<sup>&</sup>lt;sup>55</sup> Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution, EPA, <u>https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-</u>

pollution#:~:text=Breathing%20air%20with%20a%20high,%2C%20confusion%2C%20unconsciousness %20and%20death.

<sup>&</sup>lt;sup>56</sup> Id.

<sup>&</sup>lt;sup>57</sup> NAAQS Table, EPA, <u>https://www.epa.gov/criteria-air-pollutants/naaqs-table</u>.

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EPA has promulgated NAAQS for six types of air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone (smog), particulate matter, and sulfur dioxide.<sup>58</sup> EPA works with states to designate areas throughout the country as either meeting the NAAQS for a particular pollutant or not. An area that meets a NAAQS is classified as an "attainment area" for that standard, and an area that does not meet a standard is classified as a "nonattainment area" for that standard.<sup>59</sup> A parish's attainment status will affect how emissions are handled; "state and local governments with nonattainment areas must develop implementation plans outlining how areas will attain and maintain the standards by reducing air pollutant emissions."<sup>60</sup> Alternatively, EPA may designate an area as "unclassifiable," which the Clean Air Act defines as an area that "cannot be classified on the basis of available information as meeting or not meeting" the national standard.<sup>61</sup> For St. James Parish, the EPA's chart of "Louisiana Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants" simply reads "incomplete information."<sup>62</sup> And without information to designate the area as in attainment or not, there are no regulatory triggers to limit further criteria pollutant emissions.

The effect of this lack of monitoring becomes clear in this context: Of the 22 parishes in the greater area (Capitol and Southeast monitoring regions), St. James had the 4th highest reported emissions of SO<sub>2</sub> in 2021, at over 5,000 tons. These emissions were more than *double* the reported SO<sub>2</sub> emissions for St. Bernard Parish, which was declared non-attainment for SO<sub>2</sub> in 2013 and remains declared as non-attainment.<sup>63</sup> Had St. James, like St. Bernard, been monitored, this attainment declaration could reflect real air quality conditions in the parish instead of simply marking an unknown.

# C. LDEQ's Plan Fails to Consider Planned Emissions Increases.

Nucor's pending permit application proposes increases in SO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, in addition to other potentially harmful chemicals like H<sub>2</sub> and VOCs.<sup>64</sup> LDEQ's 2022 Plan, dated April 14, 2022, was released long after receiving Nucor's currently pending application, submitted in July 2021. LDEQ is thus aware of changes proposed by Nucor that will undoubtably affect the ambient air quality of St. James Parish, making it clear just how crucial increased monitoring is to the pursuit of environmental justice. Similarly, should other facilities be constructing or expanding – as was attempted in 2019 by Wanhua Chemicals, which applied

Criteria Pollutants," https://www3.epa.gov/airquality/greenbook/anayo\_la.html.

<sup>&</sup>lt;sup>58</sup> 40 C.F.R. pt. 50.

<sup>&</sup>lt;sup>59</sup> 42 U.S.C. § 7407(d)(1)(A)(i)-(ii).

<sup>&</sup>lt;sup>60</sup> EPA, "NAAQS Designations Process," <u>https://www.epa.gov/criteria-air-pollutants/naaqs-designations-process#:~:text=If%20the%20air%20quality%20in,standard%20are%20called%20nonattainment%20area</u>

<sup>&</sup>lt;u>s.</u> <sup>61</sup> 42 U.S.C. § 7407(d)(1)(A)(iii).

<sup>&</sup>lt;sup>62</sup> <u>https://www3.epa.gov/airquality/greenbook/anayo\_la.html</u>.

<sup>&</sup>lt;sup>63</sup> 78 Fed. Reg. 47191 (Aug. 5, 2013); <u>https://www.govinfo.gov/content/pkg/FR-2013-08-05/pdf/2013-</u>18835.pdf; see also EPA, "Louisiana Nonattainment/Maintenance Status for Each County by Year for All

<sup>&</sup>lt;sup>64</sup> See Addendum to the July 2020 Title V Air Permit Renewal, Significant Modification and PSD Modification Application, Nucor Steel Louisiana, LLC (Jul. 27, 2021), Doc. No. 12820367, AI No. 157847.

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for permits to build a facility but withdrew, and as may yet occur with Formosa Plastics, which has sought for years to construct a massive plant across the river from the Nucor site. DEQ should account for this projected and probable increase in pollutants associated with heavy industry and have monitors in place sufficient to evaluate current conditions before such expansions are permitted..

# D. St. James Parish Should be Considered Independently in the Calculations of its Weighted Emissions.

In its Plan, LDEQ considers St. James Parish as within the New Orleans/Metairie/Kenner area for the purposes of a population weighted index for SO<sub>2</sub>, despite being geographically separate from and having considerably more industry Orleans Parish.<sup>65</sup> In contrast with St. James Parish's population of approximately 20,000,<sup>66</sup> Orleans Parish numbers over 370,000 residents.<sup>67</sup> In 2020, the EPA identified eleven facilities in St. James Parish as Toxics Release Inventory Facilities ("TRI Facilities"), releasing an estimated of 1.1 million pounds of toxic chemical pollutants into the air.<sup>68</sup> In contrast, Orleans Parish has only two TRI Facilities and generates an estimated 4.4 thousand pounds of airborne pollutants.<sup>69</sup> It is therefore unreasonable to not consider St. James Parish as independent and apart from the greater New Orleans area. If St. James Parish SO<sub>2</sub> emissions were weighed against the population of <u>only</u> St. James Parish, it is reasonable to assume that, given the density of industrial facilities and smaller population, the weighted index for SO<sub>2</sub> would be considerably higher than that calculated for the combined emissions and populations of St. James Parish and the Greater New Orleans area.

# *E. EPA* and *DEQ*'s environmental justice goals call for monitoring in St. James's disproportionately impacted communities.

LDEQ has publicly available tools for accessing emissions information; however, because monitors are sparse and missing completely from areas most affected by air emissions, these tools paint an inaccurate picture of the air quality in the State of Louisiana. Due to improperly calculated weighted emissions (as described above) in addition to the insufficient volume and quality of data gathered, the true status of Louisiana's ambient air quality is unknown. Daily changes to air quality based on heavier-than-average emissions, weather and wind conditions, or facility emergencies, are also unknown to residents living throughout St. James Parish. Residents in areas with unmonitored emissions deserve to have access to complete

<sup>69</sup> 2020 TRI Factsheet: County – Orleans Parish, LA, EPA,

<sup>&</sup>lt;sup>65</sup> See Louisiana Annual Monitoring Action Plan, p.25.

<sup>&</sup>lt;sup>66</sup> St. James Parish, Louisiana, U.S. Census Bureau,

https://www.census.gov/quickfacts/table/PST045216/22093,22.

<sup>&</sup>lt;sup>67</sup> Orleans Parish, Louisiana, U.S. Census Bureau, (last accessed Apr. 29, 2022), https://www.census.gov/quickfacts/orleansparishlouisiana.

<sup>&</sup>lt;sup>68</sup> 2020 TRI Factsheet: County – St. James Parish, LA, EPA, <u>https://enviro.epa.gov/triexplorer/tri\_factsheet.factsheet?pParent=TRIQ1&pDataset=TRIQ1&pstate=LA</u> <u>&pcounty=St.%20James%20Parish&pFips=22093&pyear=2020</u>.

 $<sup>\</sup>label{eq:https://enviro.epa.gov/triexplorer/tri_factsheet.factsheet?pParent=TRIQ1&pDataset=TRIQ1&pstate=LA&pcounty=Orleans%20Parish&pFips=22071&pyear=2020.$ 

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and accurate air quality and emissions information, as many of the toxic chemicals released by industrial facilities have severe and negative consequences for human health and the environment. It is not only insufficient, but irresponsible that there is currently no monitoring whatsoever for SO<sub>2</sub>, CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> or any other pollutant of concern to human health that is emitted in St. James Parish.

It is inadequate to rely on air permits to estimate the annual, regional emissions that St. James Parish residents are chronically exposed to. For example, Nucor exceeded – for years – its permitted limits for hydrogen sulfide, sulfur dioxide, and sulfuric acidic mist, and it is currently subject to dual EPA and DEQ enforcement actions for these violations.<sup>70</sup> In November of 2020, DEQ confirmed that Nucor was continuing to emit pollutants in violation of its permit when the facility failed a test of its DRI Unit No. 1 Process Heater Stack.<sup>71</sup> When the test was repeated in January of 2021, Nucor failed the same test for a *second* time.<sup>72</sup> According to that January 2021 stack test, Nucor is violating its emission regulations for fourteen out of the nineteen pollutants included within the stack test's result, including but not limited to:<sup>73</sup>

| Pollutant                        | Amount over permit limit              |  |  |  |
|----------------------------------|---------------------------------------|--|--|--|
| Manganese                        | More than quadruple the permit limit  |  |  |  |
| Sulfuric Acid <sup>74</sup>      | More than triple the permit limit     |  |  |  |
| Carbon Monoxide                  | More than double the permit limit     |  |  |  |
| Cobalt                           | More than double the permit limit     |  |  |  |
| Fine Particulate Matter (PM2.5)  | Approximately double the permit limit |  |  |  |
| Coarse Particulate Matter (PM10) | Approximately double the permit limit |  |  |  |
| Lead                             | 50% over permit limit                 |  |  |  |
| Copper                           | 30% over permit limit                 |  |  |  |
| Arsenic                          | 30% over permit limit                 |  |  |  |
| Selenium                         | 30% over permit limit                 |  |  |  |

When emissions are actually monitored, permit limits are exceeded.

<sup>&</sup>lt;sup>70</sup> DEQ "Compliance Order and Notice of Potential Penalty," AE-CV-19-01088 (EDMS Doc. No. 12080867); AI No. 157847; EPA "CAA Notice of Violation and Opportunity to Confer," FRS ID 110056317677, available for download at <u>https://www.epa.gov/la/enforcement-and-compliance-assurance-documents-louisiana</u>.

<sup>&</sup>lt;sup>71</sup> EDMS #12533423

<sup>&</sup>lt;sup>72</sup> EDMS #12704794; 12746694

<sup>&</sup>lt;sup>73</sup> EDMS #12746337; EDMS #12746694

<sup>&</sup>lt;sup>74</sup> In their recent Settlement, Nucor stated that Sulfuric Acid is currently not permitted, and a permit application will be submitted to account for the emissions exceedance found during the stack test. After going through their current permit application, we could not find a request to add Sulfuric Acid to their permitted emissions. The March 2018 permit application likewise did not mention Sulfuric Acid.

# F. The Plan Fails to Address Monitor Co-Location for Community and Environmental Advocacy Groups.

On September 9, 2020, Tulane Environmental Law Clinic Attorney Liza Calderon and Staff Scientist Dr. Kimberly Terrell met via Zoom with LDEQ and EPA Region 6 staff to formally request co-location of a community monitor with an LDEQ monitor. The meeting included air monitoring experts from Clarity, a manufacturer of low-cost air monitors that has successfully partnered with other state environmental agencies across the U.S. In the meeting, LDEQ staff expressed concern about how community-based air monitoring data would be used, despite being given numerous examples of successful projects. The LDEQ would not provide an answer to the co-location request during the meeting, and LDEQ staff never followed up after the meeting. Air monitoring experts from Clarity repeatedly tried to contact LDEQ regarding this proposal, but LDEQ never responded to their phone calls or emails.

There is no legitimate reason for LDEQ to obstruct community-based monitoring by refusing to co-locate monitors. Rather, co-location *improves* the reliability of low-cost monitoring data – a goal that should be shared by communities, advocates, and LDEQ alike. There is essentially no cost to co-location, since it can be done during a regularly scheduled LDEQ visit to the monitoring site and entails a 5-minute installation of a soda-can sized monitor. These low-cost monitors require no maintenance and can be removed during a regularly scheduled LDEQ visit to the site after co-location is completed. For each criteria pollutant, the LDEQ should make at least one NAAQS-comparable monitor in each air monitoring region available for co-location. The Capitol monitor in Baton Rouge represents an ideal co-location site, because of the large number of pollutants measured there.

In comments to DEQ submitted by St. James Community Members in response to a proposed settlement of multiple violations of the Nucor facility's air permit, the community members requested "non-monetary penalties that benefit the immediate community and environment, which could include: (a) increased and constant air monitoring around the fenceline of Nucor, with publicly-available data."<sup>75</sup> In response, DEQ (incorrectly) stated that it "did not receive any BEP [Beneficial Environmental Project] proposals for consideration . . . [and] determined it was appropriate, considering the circumstances, to accept a cash penalty" instead of requiring monitoring.<sup>76</sup> (DEQ also declined the community members' request for a public hearing regarding the proposed settlement agreement with Nucor.) The ongoing utter lack of information directly impacts the health and safety of the residents around these facilities, yet DEQ has been resistant to efforts to begin community or fenceline monitoring and has disregarded community efforts regarding co-location of monitors.

# III. Conclusion

<sup>&</sup>lt;sup>75</sup> Tulane Environmental Law Clinic, Comment to DEQ re Proposed Settlement Agreement, Settlement Tracking No. SA-MM-20-011 9, July 20, 2021 (available at

https://law.tulane.edu/sites/law.tulane.edu/files/u2404/2021\_07\_20\_Comment\_on\_DEQ\_Nucor\_Settleme nt.pdf)

<sup>&</sup>lt;sup>76</sup> LDEQ, Response to Comments Submitted on Proposed Settlement Agreement; Nucor Steel Louisiana LLC, November 17, 2021, EDMS Doc. No. 12997991, AI No. 157847.

LDEQ's air monitoring obligations extend beyond the provisions of 40 C.F.R. Part 58 and include the obligation to achieve environmental justice and, as public trustee, to avoid environmental harm to the maximum extent possible.<sup>77</sup> LDEQ must address how its monitoring program meets that obligation with respect to Mossville and the environmental justice communities of St. James Parish. LDEQ must also address its federal regulatory obligation to "support air quality characterization for areas with relatively high populations of susceptible individuals (e.g., children with asthma) . . . ." 40 C.F.R. § 58.10(d)." Robust monitoring for environmental justice communities is essential to comply with these duties. The proposed air monitoring Plan fails to achieve that duty by allowing inadequate monitoring coverage throughout Mossville and St. James Parish to remain as the status quo.

Louisiana's air monitoring network plan has three stated goals:

- 1. Provide air pollution data to the general public in a timely manner. Data can be presented to the public in a number of different ways including through air quality maps, newspapers, internet sites, and as a part of weather forecasts and public advisories.
- 2. Support compliance with ambient air quality standards and emissions strategy development. Data from the monitors for National Ambient Air Quality Standards (NAAQS) pollutants will be used for comparing an area's air pollution levels against the NAAQS. Data of various types can be used in the development of attainment and maintenance plans. Data can also be used to track trends to determine the impact of air pollution abatement control measures on improving air quality. In monitoring locations near major air pollution sources, source-oriented monitoring data can provide insight into how well industrial sources are controlling their pollutant emissions.
- 3. Support for air pollution research studies such as health effects assessments.<sup>78</sup>

The plan as proposed will meet <u>none</u> of those goals for Mossville or St. James Parish. First, for Mossville, as noted, the existing VOC monitors are not located so as to accurately reflect the toxic emissions that Mossville residents are exposed to in their ambient air, nor is the data from those monitors provided to the general public at all. For St. James Parish, without any data other than the lone ozone monitor, there is no way to communicate air quality information to St. James residents. Toxic air emissions like sulfur acid mist lands on the homes of Romeville residents daily, yet there is no means to warn these residents about potential heavy emissions,

<sup>&</sup>lt;sup>77</sup> "[N]o group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies. EPA, Plan EJ 2014 at 3, available at <a href="https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.PDF">https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.PDF</a>; see also Basis for Decision for FG LA Complex, EDMS Doc. No. 11998452 (AI No. 198351), Part IX: Environmental Justice/Civil Rights Title VI Issues, at pdf p. 35 (in which LDEQ endorses this definition). See also In re Am. Waste and Pollution Control Co., 633 So. 2d 188, 194 (La. App. 1st Cir. 1993) (describing public trust duty).

<sup>&</sup>lt;sup>78</sup> See Plan at 2.

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dangerous winds, or other important conditions that impact air quality and their health, either daily, seasonally, or chronically. Second, without data, there is no means to develop strategies for dealing with the carcinogenic ethylene oxide emissions from Sasol that the Mossville community members experience nor to ensure compliance with NAAQS in St. James. LDEQ and EPA rely on the classification of "nonattainment" in St. James and avoid meaningfully assessing and limiting the emissions in St. James Parish. And finally, as there is no information about ethylene oxide in Mossville or actual (versus modeled) air quality in St. James Parish, there can be no support for the necessary "air pollution research studies."

For the foregoing reasons, Mossville community members request that LDEQ add a speciated VOC monitor that includes monitoring of ethylene oxide in Mossville and that it make the data from this monitor – and all VOC monitors in Calcasieu Parish – readily available to the public in units that correspond to the ambient air standards. They also request that LDEQ disclose details on how it will use the new PM<sub>2.5</sub> monitor and for how long.

Community members of St. James Parish respectfully request that LDEQ amend its 2022 Annual Monitoring Network Plan to include SLAMS SO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>x</sub>, and CO monitors in multiple spots near heavily polluting facilities in St. James Parish to determine the impact of significant sources of air pollutants on the air quality in St. James Parish. Monitors must be positioned as to fairly and reasonably assess the true quality of air that is breathed in by St. James Parish residents, as well as in compliance with NAAQS regulations for the placement of such monitors, in order to actually fulfill the stated goals of this Plan.

Respectfully submitted by:

#### **Tulane Environmental Law Clinic**

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