



December 23, 2019

St. James Parish Council  
5800 Hwy. 44  
Convent, LA 70723

By email to: [linda.hubbell@stjamesparishla.gov](mailto:linda.hubbell@stjamesparishla.gov)

Re: FG LA LLC (Formosa) Land Use Decision

To the St. James Parish Council:

RISE St. James and Louisiana Bucket Brigade ask that the St. James Parish Council seek a reopening of its decision (Resolution 19-07, Jan. 24, 2019) and rescind its approval of the construction of the chemical complex proposed by FG LA LLC (“FG” or “Formosa”). Formosa’s chemical complex would be among the largest petrochemical complexes in the entire United States. Formosa is seeking air permits allowing it to release over 800 tons per year of designated toxic air pollutants, which would double the parish-wide total amount of such emissions.

The Council must reopen and rescind its approval because Formosa appears to have misled the Parish that it altered its site design to minimize the risk of harm to the elementary school and church about a mile away, in District 5. In addition, in the time since Resolution 19-07 was adopted by the Council, the evidence of the risks from Formosa’s toxic air emissions to St. James Parish residents has only grown more alarming. For example, recent analysis conducted by The Advocate and ProPublica shows that the area where Formosa wants to build is already “more toxic with cancer-causing chemicals than 99.6% of industrialized areas in the country.”<sup>1</sup> The study concludes that if Formosa is allowed to operate, the emissions from the complex would expose area residents to “more than triple” the toxic levels of cancer-causing chemicals.<sup>2</sup> The study provides new information on the impact of Formosa’s cumulative toxic emissions in combination with other industrial sources that already saturate the area with cancer-causing chemicals. This was the first assessment of cumulative toxic pollutant impacts of this project. The Parish must consider this new information and rescind its decision to allow Formosa to build what would be one of the nation’s most toxic facilities and increase the cancer risk to area residents and elementary school children who are already exposed to high concentrations of toxic

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<sup>1</sup>L. Younes, ProPublica, “What Could Happen if a \$9.4 Billion Chemical Plant Comes to ‘Cancer Alley’” (Nov. 18, 2019), <https://www.propublica.org/article/what-could-happen-if-a-9.4-billion-chemical-plant-comes-to-cancer-alley>

<sup>2</sup> *Id.*

pollutants.

There is precedent for the Parish to take such action. Indeed, the Jefferson Parish Council rescinded its decision—made 15 months earlier—to allow the construction of a new chemical plant at an existing facility.<sup>3</sup> The decision came after area residents raised concerns about the health and safety impacts of the facility after the parish had already given its approval to construct. At the meeting where the council rescinded its decision, one council member made an impassioned remark, stating: “No matter how much money [the] company is bringing into the parish, it can’t replace life.”<sup>4</sup>

RISE St. James and Louisiana Bucket Brigade provide the following detailed information in support of this request, along with the information presented to the Council today in a separate letter detailing recent revelations confirming that Formosa would build its project on former slave burial grounds.

- I. Formosa’s air permit applications pending before LDEQ show that the company did not revise its plot plan and move units away from the elementary school and church as it claimed to the Parish.

On June 25, 2018, Formosa submitted an application to the St. James Parish Planning Commission for approval to build a massive chemical complex near Welcome (“Land Use Application”) with 14 separate plants (also called units).<sup>5</sup> Formosa’s Land Use Application includes a plot plan that shows the physical layout of the facility and placement of the various plants or units.<sup>6</sup> Formosa had already finalized its plot plan that it submitted to LDEQ in support of its air applications on February 7, 2018, several months before it submitted its Land Use Application to the Parish.<sup>7</sup> Indeed, the layout of the facility and placement of the various units or plants had been established and finalized with the LDEQ by the time Formosa submitted its application to the Planning Commission on June 25, 2018.

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<sup>3</sup> D. Broach, The Times-Picayune, “Cyanide plant permit revoked by Jefferson Parish Council in extraordinary about-face” (April 5, 2019), [https://www.nola.com/news/business/article\\_0213a2a2-149f-5cf4-85fe-df0cee348cc0.html](https://www.nola.com/news/business/article_0213a2a2-149f-5cf4-85fe-df0cee348cc0.html).

<sup>4</sup> WDSU, “JP council votes to rescind permit for cyanide plant expansion” (April 3, 2019), <https://www.wdsu.com/article/jp-council-votes-to-rescind-cyanide-plant-expansion/27032351>.

<sup>5</sup> See FG LA Land Use App (June 25, 2019) (on file with the St. James Parish Planning Commission as item #18-30).

<sup>6</sup> *Id.* at Plot Plan, pdf. p. 14 of 430, Ex. A.

<sup>7</sup> FG LA Area Map, Facility Overview, Feb. 7, 2018, LDEQ EDMS 11668418, pdf. p. 2, Ex. B (showing most current plot plan on file with the LDEQ in support of Formosa’s air applications), <https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=11668418&ob=yes&child=yes>. The decision as to whether or not to issue the permits is still pending before LDEQ.

On October 19, 2018—well after Formosa submitted its application to the parish and finalized its plot plan with LDEQ—Formosa told the Parish that “[a]fter consultation and discussion with the Parish, FG revised its plot plan.”<sup>8</sup> Formosa went on to say that “FG relocated some of its units along the western boundary, farther away from the new church and school.” *Id.* But had Formosa revised its plot plan and relocated any of its units, it would have been necessary for Formosa to have updated its plot plan and potentially the air quality analysis that it submitted to the LDEQ in support of its air permit applications. LDEQ’s database of Formosa’s permit application submissions do not include an updated plot plan or an updated air quality analysis that would reflect Formosa’s changes.<sup>9</sup> In fact, the most current, available information shows that all units are in the same location as they had been when Formosa first submitted its Land Use Application to the Parish.

The fact that there is no evidence that Formosa revised its plot plan and moved units away from the church and school to satisfy the Parish’s concerns as Formosa said it had done calls into question the basis for the Parish’s decision to approve Formosa’s Land Use Application. That is, the Parish Council’s decision approving the application is based on its finding that “[t]he physical and environmental impacts of the proposal are within allowable limits, and are substantially mitigated by the physical layout of the facility, and the location of the site in proximity to existing industrial uses and away from residential uses.”<sup>10</sup> But as explained above, the physical layout of the facility was not changed to satisfy the Parish’s concerns. The Parish must reopen its decision on Formosa’s Land Use Application and rescind its approval after an investigation of this issue. Indeed, the record of the Parish’s decision shows that it approved the Land Use Application with the understanding that “FG revised its plot plan” and “relocated some of its units along the western boundary, farther away from the new church and school.”<sup>11</sup> This understanding appears to be mistaken.

Furthermore, the physical layout of the facility is the worst layout imaginable for health risks to the area residents and the elementary school children nearby. The most hazardous units in terms

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<sup>8</sup> Ltr from Formosa’s consultant Providence Engineering to Blaise Gravois, Director of Operations St. James Parish Government, Oct. 19, 2019, attached as exhibit R to Formosa’s Supp EAS, LDEQ EDMS 11457119, Ex. C, <https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=11457119&ob=yes&child=yes>.

<sup>9</sup> See LDEQ’s EDMS showing permit application materials for Formosa organized by Agency Interest (AI) number 198351 at <https://edms.deq.louisiana.gov/app/doc/queryresults.aspx>.

<sup>10</sup> St. James Parish Council Resolution 19-07, Denying the Appeal of RISE St. James and Approving the Application of FG LA LLC under the St. James Parish Land Use Ordinance, with Conditions, at 5 (Jan. 24, 2019) (emphasis added), attached as exhibit A to Formosa’s Aug. 12, 2019 Comments, LDEQ EDMS 11817939, Ex. D, <https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=11817939&ob=yes&child=yes>.

<sup>11</sup> Ltr from Formosa’s consultant Providence Engineering to Blaise Gravois, Director of Operations St. James Parish Government, Oct. 19, 2019, attached as exhibit R to Formosa’s Supp EAS, LDEQ EDMS 11457119, Ex. C, <https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=11457119&ob=yes&child=yes>.

of cancer-causing air pollutants at the proposed complex are the two ethylene production plants known as “ethylene crackers” and the two ethylene glycol plants. Indeed, the two ethylene crackers would be permitted to emit the majority of the 1,3-butadiene<sup>12</sup> and benzene<sup>13</sup> emissions at the complex, and the two ethylene glycol plants would be responsible for all of the complex’s ethylene oxide<sup>14</sup> emissions.<sup>15</sup> These four plants would be located toward the front of the 2300-acre site closer to the Mississippi River, not in the back of the site away from residential developments.<sup>16</sup> In addition, one of the ethylene crackers and one of the ethylene glycol plants

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<sup>12</sup> The Department of Health and Human Services, IARC, and EPA have determined that 1,3-butadiene is a human carcinogen. Studies have shown that workers exposed to 1,3-butadiene may have an increased risk of cancers of the stomach, blood, and lymphatic system. Exposure to 1,3-butadiene occurs mainly from breathing contaminated air. Effects on the nervous system and irritations of the eyes, nose and throat have been seen in people who breathed air contaminated with 1,3 butadiene. <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=458&tid=81>

<sup>13</sup> Benzene is a known carcinogen that has been linked to blood disorders such as leukemia, immune system damage and chromosomal mutations. Short-term exposure causes headaches, drowsiness, dizziness, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Long-term exposure can lead to harmful health impacts ranging from anemia to leukemia. Studies have shown that communities living near benzene-emitting industrial facilities experience higher incidences of non-Hodgkin lymphoma. See Centers for Disease Control and Prevention, Emergency Preparedness and Response, Facts About Benzene, <https://emergency.cdc.gov/agent/benzene/basics/facts.asp>; Xing, Caihong et al., Benzene Exposure Near the U.S. Permissible Limit Is Associated with Sperm Aneuploidy, 118 *Environ Health Perspectives* 833 (2010), doi:10.1289/ehp.0901531; U.S. Environmental Protection Agency, Benzene, <https://www.epa.gov/sites/production/files/2016-09/documents/benzene.pdf>; American Cancer Society, Benzene and Cancer Risk, <https://www.cancer.org/cancer/cancer-causes/benzene.html>; EurekaAlert!, Higher cancer incidences found in regions near refineries and plants that release benzene, July 29, 2013, [https://www.eurekaalert.org/pub\\_releases/2013-07/w-hci072413.php](https://www.eurekaalert.org/pub_releases/2013-07/w-hci072413.php).

<sup>14</sup> According to EPA, Ethylene Oxide is linked to breast cancer, non-Hodgkin lymphoma, and lymphocytic leukemia. Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide, EPA 3-66 (Dec. 2016), [https://cfpub.epa.gov/ncea/iris/iris\\_documents/documents/toxreviews/1025tr.pdf](https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/1025tr.pdf).

In addition to significant cancer risks, the Agency for Toxic Substances and Disease Registry (“ATSDR”) warns that acute respiratory exposure to Ethylene Oxide may cause narrowing of the bronchi and partial lung collapse. Inhalation of Ethylene Oxide can also produce central nervous system (“CNS”) depression, and in extreme cases, respiratory distress and coma. The ATSDR also notes that children may be more vulnerable to Ethylene Oxide exposure, especially chronic exposure. Ethylene Oxide ([CH<sub>2</sub>]<sub>2</sub>O), ASTDR, <https://www.atsdr.cdc.gov/MHMI/mmg137.pdf>. EPA and the ATSDR have also warned that inhalation exposure to Ethylene Oxide can lead to spontaneous abortions. Ethylene Oxide: Hazard Summary, <https://www.epa.gov/sites/production/files/2016-09/documents/ethylene-oxide.pdf>; Toxicological Profile for Ethylene Oxide, <https://www.atsdr.cdc.gov/toxprofiles/tp137.pdf>.

<sup>15</sup> See LDEQ Statement of Basis, LDEQ EDMS 11687336, pdf. pp. 124-205, <https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=11687336&ob=yes&child=yes>.

<sup>16</sup> See Formosa Area Map, Feb. 7, 2018, LDEQ EDMS 11668418, pdf. p. 2 (showing Ethylene Glycol plants as EG1 and EG2 and associated flares as EG1-FLR and EG2-FLR, and showing Ethylene Crackers

will be located on the eastern side of the site towards the elementary school, not along the western boundary.<sup>17</sup>

While Formosa promises it will install fenceline monitoring, that monitoring will not collect data on many significant toxics, like benzene emissions. Further, the monitors will only be located on the eastern boundary of its facility, which does nothing for the residents across the river in the Fourth District who live closer to the site than anyone. As shown below, Formosa's own modeling concluded that ethylene oxide concentrations in amounts greater than what EPA considers to be the upper limit of an acceptable risk (i.e., 0.02  $\mu\text{g}/\text{m}^3$  or 1-in-10,000 cancer risk) extend to the community to the north, which is known as Union.<sup>18</sup> Ethylene oxide is a principal culprit for the approximately 100 census tracts in the nation—including one in St. James Parish and many in the River Parishes—whose cancer risks exceed the level EPA considers acceptable.<sup>19</sup> Ethylene Oxide's alarming risk potential has led to the recent closure of plants that emitted the chemical in Georgia and Illinois.<sup>20</sup>

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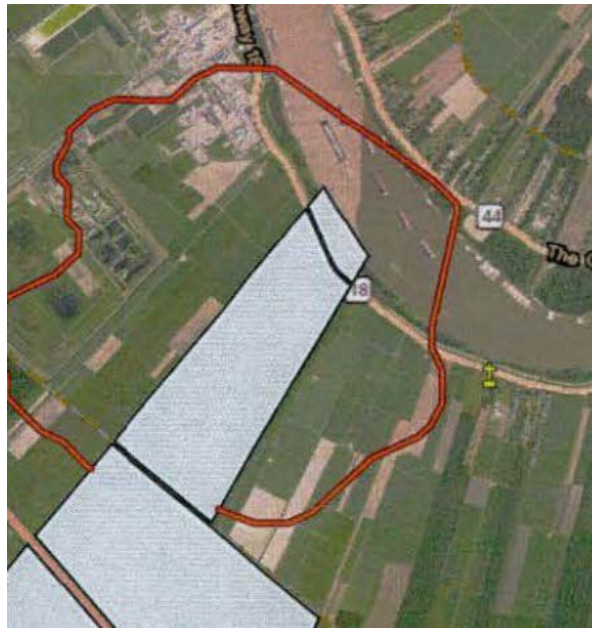
as ET1 and ET2 and associated flares as ET1-FLR and ET2-FLR), Ex. B,  
<https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=11668418&ob=yes&child=yes>.

<sup>17</sup> See Formosa's Map "Distance to Fifth Ward Elementary School," Ex. E.

<sup>18</sup> See Formosa Supp. EAS (Jan. 7, 2019) at P-1, LDEQ EDMS 11457119 (FG LA Ethylene Oxide Contour Map, Dec. 2018 (i.e., cancer risk plot) with red line representing extent of its modeled ethylene oxide concentrations greater than 0.02  $\mu\text{g}/\text{m}^3$  (i.e., 1-in-10,000 risk),  
<https://edms.deq.louisiana.gov/app/doc/queryresults.aspx>.

<sup>19</sup> See S. Lerner, The Intercept, "A Tale of Two Toxic Cities: The EPA's Bungled Response to an Air Pollution Crisis Exposes a Toxic Racial Divide" (Feb. 24, 2019),  
<https://theintercept.com/2019/02/24/epa-response-air-pollution-crisis-toxic-racial-divide/> ("Ninety-one percent of the risk in these communities is caused by three major pollutants: chloroprene, ethylene oxide, and formaldehyde.")

<sup>20</sup> See S. Lerner, The Intercept, "New Orleans Chemical Complex Would Displace Suspected Slave Burial Ground in Louisiana's "Cancer Alley" (Dec. 18, 2019), <https://theintercept.com/2019/12/18/formosa-plastics-louisiana-slave-burial-ground/> (referencing articles available here: <https://www.claimsjournal.com/news/southeast/2019/10/30/293865.htm>; <https://abc7chicago.com/health/sterigenics-will-permanently-close-willowbrook-facility-company-announces/5579321/>).



Moreover, the fence-line monitoring Formosa agreed to conduct will not measure the cumulative effect of these toxic pollutants when added together and with other sources of air pollution—which is something the Parish must consider as discussed in section II below.

II. Recent analysis shows that Formosa would double and triple toxic exposures for area residents.

After The Advocate reported on July 8, 2019 that Formosa’s “planned operation could emit enough new toxic chemicals to nearly double” the toxic emissions emitted parish-wide,<sup>21</sup> the Advocate and ProPublica launched a series about the increase in industrial pollution in Louisiana titled “Polluter’s Paradise.”<sup>22</sup> The series focuses in part on the toxic impact of Formosa’s planned chemical complex, where an air quality modeling expert analyzed Formosa’s expected toxic emissions in combination with toxic emissions from existing emission sources in the area.<sup>23</sup> The Advocate and ProPublica reported that the expert used the same modeled toxic pollutant

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<sup>21</sup> See D. Mitchell, The Advocate, “For massive new plants, Formosa wants OK to double amount of chemical released into St. James Parish air” (July 8, 2019), [https://www.theadvocate.com/baton\\_rouge/news/article\\_c30d4620-a1be-11e9-837c-13f09466bb79.html](https://www.theadvocate.com/baton_rouge/news/article_c30d4620-a1be-11e9-837c-13f09466bb79.html)

<sup>22</sup> See ProPublica, “Polluter’s Paradise, Environmental Impact in Louisiana,” <https://www.propublica.org/series/polluters-paradise>

<sup>23</sup> See L. Younes, ProPublica, “In a Notoriously Polluted Area of the Country, Massive New Chemical Plants Are Still Moving in, ProPublica” (Oct. 30, 2019), <https://projects.propublica.org/louisiana-toxic-air/>; Lylla Younes, What Could Happen if a \$9.4 Billion Chemical Plant Comes to ‘Cancer Alley’, ProPublica, Nov. 18, 2019, <https://www.propublica.org/article/what-could-happen-if-a-9.4-billion-chemical-plant-comes-to-cancer-alley>



concentrations that LDEQ relied on when it issued Formosa's draft permits, along with data from EPA's Risk-Screening Environmental Indicators (RSEI) model.<sup>24</sup> EPA and multiple state agencies use the RSEI model as the best available tool for understanding which high-pollution areas warrant further scrutiny. The RSEI model can be used by decision-makers like the Parish to assess and scrutinize proposed sources in areas that are already inundated with toxic emissions and assess whether new sources should be allowed to build. Specifically, the RSEI model "incorporates information from the [EPA's] Toxics Release Inventory (TRI) on the amount of toxic chemicals released, together with factors such as the chemical's fate and transport through the environment, each chemical's relative toxicity, and potential human exposure."<sup>25</sup> The model calculates the estimated chemical concentrations from toxic industrial plant emissions across the country down to 810-by-810-meter blocks, providing focused information that highlights the risk to fenceline and other communities located near toxic facilities.

Using the RSEI model and Formosa's toxic pollutant dispersion modeling,<sup>26</sup> The Advocate and ProPublica reported that if LDEQ allows Formosa to build and operate the complex, the residents across the Mississippi River "will face double the toxic levels of cancer-causing chemicals than they currently do," and that "[o]ne mile east in the St. James community, those levels could more than triple."<sup>27</sup> The Advocate and ProPublica also reported that the "analysis estimates that the air around Formosa's site is more toxic with cancer-causing chemicals than 99.6% of industrialized areas of the country" already, and that "[i]f the complex emits all the chemicals it proposes in its permit application, it would rank in the top 1% nationwide of major plants in America in terms of the concentrations of cancer-causing chemicals in its vicinity."<sup>28</sup> The Advocate and ProPublica illustrated Formosa's impact with the following graphic showing the current toxicity level around the Formosa site as compared to the expected toxicity level if Formosa is allowed to operate using the color scale shown.

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<sup>24</sup> See L. Younes and A. Shaw, ProPublica, "How We Found New Chemical Plants Are Being Built in South Louisiana's Most Polluted Areas" (Oct. 30, 2019) (detailing ProPublica's methodology used in its analysis), <https://www.propublica.org/article/how-we-found-new-chemical-plants-are-being-built-in-south-louisianas-most-polluted-areas>

<sup>25</sup> <https://www.epa.gov/rsei>

<sup>26</sup> See Formosa's Air Quality Analysis Report, July 2018, EDMS # 11246153, and all associated modeling files.

<sup>27</sup> L. Younes, ProPublica, "What Could Happen if a \$9.4 Billion Chemical Plant Comes to 'Cancer Alley'" (Nov. 18, 2019, <https://www.propublica.org/article/what-could-happen-if-a-9.4-billion-chemical-plant-comes-to-cancer-alley>)

<sup>28</sup> *Id.*



This is new information that the Parish must now consider. Though Formosa could have done a similar assessment using the RSEI model, it chose not to do one, leaving this important information out of the application that it submitted to the Parish. The Parish cannot ignore the data that the RSEI model can generate, particularly because it appears that Formosa failed to relocate its emissions sources in response to precisely the same sort of concerns about toxic pollution from the Parish and residents. The Council must re-open its land use decision and rescind its approval while it considers the information provided by ProPublica or conducts its own assessment using the RSEI model in combination with Formosa's dispersion data to best understand the risk that Formosa's emissions (in combination with existing sources) would pose to area residents and the children who attend the elementary school just down the road.

For the foregoing reasons, the Council must reopen and rescind its approval of Formosa's Land Use Application. Thank you for your consideration.

Sincerely,

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Corinne Van Dalen, Staff Attorney, La. Bar No. 21175  
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RISE St. James and Louisiana Bucket Brigade Ltr to SJP Council  
Re: Formosa Land Use Decision  
Dec. 23, 2019  
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*On behalf of RISE St. James and Louisiana Bucket Brigade*

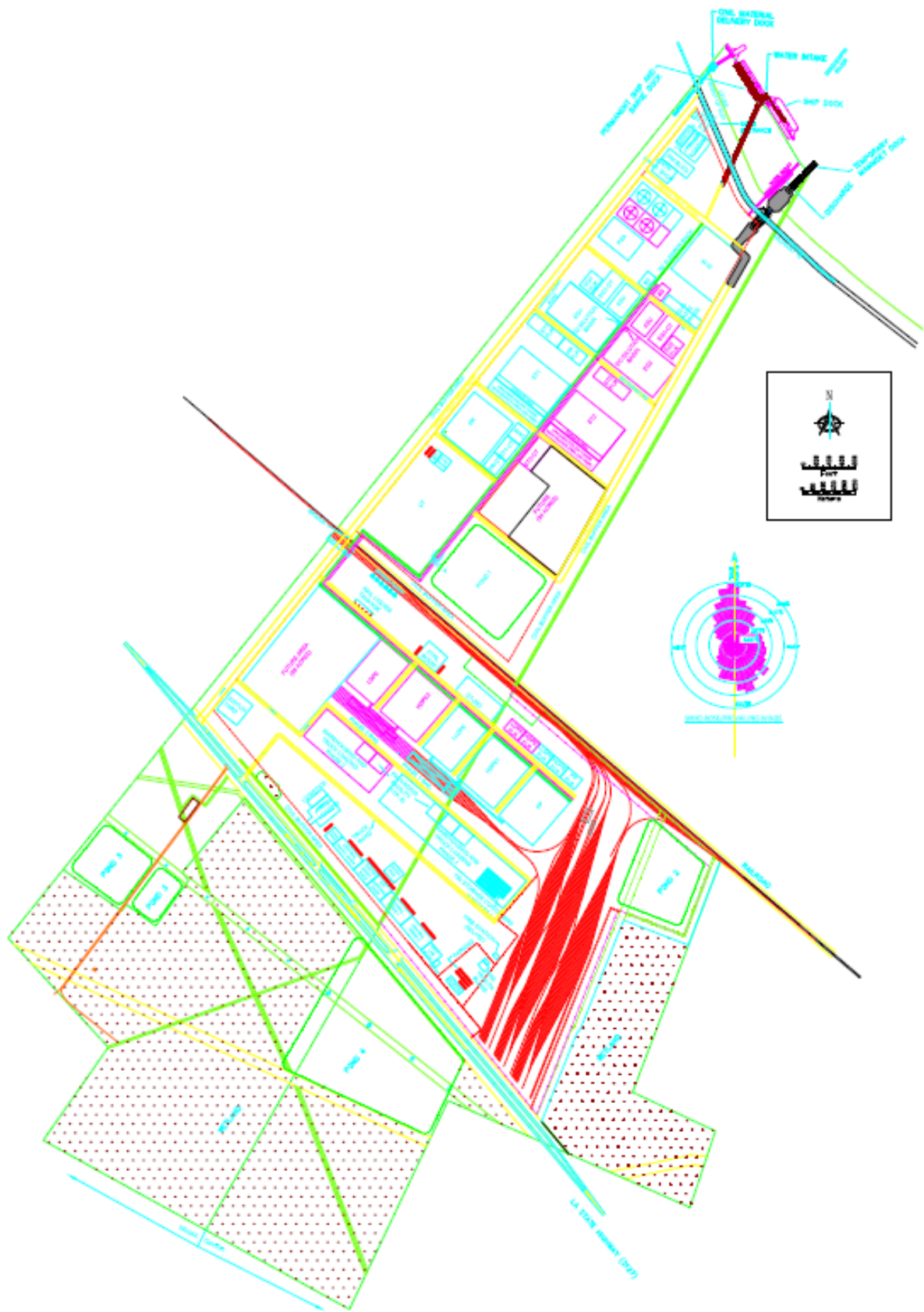


EXHIBIT A



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Feet

Sources: ESRI- World Imagery Basemap; Datum: NAD83 Harn State Plane LA South FIPS 1702 Feet



**EXHIBIT B**

<b>AREA MAP</b>			
<b>Facility Overview</b>			
<b>FG LA LLC</b>			
<b>St. James Parish, Louisiana</b>			
<small>H:\FPCC\17229 Mosaic Gavlon Air Permit Applications\0 Graphics\GIS\Area Map by Plant\AreaMap_Overview.mxd</small>			
<small>Drafted By:</small> K. Garcia	<small>Reviewed By:</small> K. Olson	<small>Project ID:</small> 150057	<small>Date:</small> 27/2018





October 19, 2018

**VIA ELECTRONIC MAIL**

Mr. Blaise Gravois  
Director of Operations  
St. James Parish Government  
5800 Highway 44  
Convent, Louisiana 70723

Re: FG LA LLC  
Application for St. James Parish Industrial Land Use  
Information Regarding Buffer Zone

Dear Mr. Gravois:

On behalf of FG LA LLC (FG), this letter will supplement the Application for St. James Parish Industrial Land Use, which was submitted on or about June 30, 2018 (the Application).

**EXECUTIVE SUMMARY**

- FG plans to construct a world-class industrial facility in St. James Parish (the Facility) on the west bank in an industrial conformity area.
  - ✓ FG has established that the Facility provides minimal risk to the surrounding community.
  - ✓ FG modeled various scenarios using conservative assumptions.
  - ✓ No ambient air standard is exceeded at any off-site location.
  - ✓ The community is well beyond the maximum extent of off-site consequences.
- FG continues to demonstrate its commitment to health, safety, and the environment.
  - ✓ The Facility is being engineered and designed and will also be constructed with multiple layers of safety to meet and/or exceed applicable industry standards.
  - ✓ The Facility will be operated in compliance with all state and federal industrial regulations and standards, including the Risk Management Program (RMP) and the Process Safety Management (PSM) Program.
  - ✓ FG created and will follow an Emergency Response Plan (ERP), which has been reviewed by the parish.
  - ✓ FG complies with Ordinance Section 30-64, Defensive Emergency Protective Measures.
  - ✓ FG will comply with applicable requirements for safe storage of materials.





- FG is listening to community concerns and has incorporated measures into the design of the Facility to enhance the health and safety of the community.
  - ✓ The Facility will be sited well away from the nearest community and will be located in an industrial conformity area.
  - ✓ All units within the Facility will be approximately one mile from the new church planned to be built on Big Boy Street and the St. Louis Elementary School.

## **BACKGROUND**

As you know, FG plans to construct a world-class industrial facility in St. James Parish (the Facility) called the Sunshine Project. While FG must receive state and/or federal permits to do so, approval of the Commission under Ordinance 86-37 is also required. As part of the process, the Commission must "affirmatively consider the public need for buffer zones." Ordinance Section 86-37 (i)(2).<sup>1</sup>

The Facility is located within an area designated by the Ordinance for Industrial Use. The uses of the Facility are consistent with the Allowable Uses set forth in the Ordinance. The Ordinance in place at the time FG purchased the property included certain two-mile areas designated on the map, dated April 2, 2014, and entitled "Plantations Schools and Churches 2Mi Buffer." Notably, the map did not contain a two-mile radius that included FG's property. It was only after FG purchased the property that the Ordinance was amended to its current language.

Based on the information provided in the Application and below, there is no need for a buffer zone. FG has reviewed normal operations and potential failure scenarios to affirmatively establish that the construction and operation of the Facility poses little or no risk to the health and safety of the community. Additionally, FG's commitment to health and safety is established by its compliance with applicable standards and laws, the proper siting of the Facility away from the nearest community, and the measures it has already taken to enhance the health and safety of the community.

## **NORMAL OPERATIONS AND POTENTIAL FAILURE SCENARIOS**

The Ordinance requires that the Commission "consider not only normal operations of the use but potential failure scenarios impacting public safety." Section 86-37(j). FG has considered normal operations and reasonable potential failure scenarios to establish that there is no impact to the nearest community.

### **1. Normal Operations**

FG considered normal operations. Modeled emissions of toxic air pollutants show that no ambient air standard is exceeded at any off-site location. See Electronic Communication, dated July 27, 2018, with attachment, incorporated herein by reference.

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<sup>1</sup> It should be noted that, under Ordinance 86-37, there is no two mile area around churches and schools that is designated as a 'no-build' zone. Based on the quantity of certain substances on-site, there may be a two-mile area defined as an Impact Zone. However, this designation relates to the required contents of the application and does not define the extent of a possible buffer zone.



## 2. Reasonable Potential Failure Scenarios

FG also considered reasonable potential failure scenarios. A review of such scenarios establishes that the new church to be constructed on Big Boy Street and the St. Louis Elementary School are well beyond any potential impacts from reasonably potential failure scenarios. It is important to note, though, that potential failure scenarios are extremely unlikely to occur. The Facility will be designed and constructed using multiple layers of safety, such as level alarms, interlocking valves, shut-offs, emergency pipe routing, and other such safety mechanisms to prevent a failure scenario from occurring.

To assess reasonably potential failure scenarios, FG reviewed the list of materials it may have on-site (see ERP, App. F, attached to the Land Use Application) and determined the ones that could be present above RMP thresholds levels.<sup>2</sup> FG then evaluated reasonably potential failure scenarios for each such regulated substance. As facility design specifications have not been finalized, the scenarios are modeled as possible releases using information from other RMP facilities and U.S. Environmental Protection Agency (EPA) guidance documents and may be further refined during the RMP evaluation process required by the EPA.

FG used the RMP\*Comp software program, which is an EPA-approved program that is highly conservative. This means that the program tends to substantially exaggerate the extent of potential consequences and measures the maximum extent of potential off-site consequences from the source location.<sup>3</sup> See e.g., 40 CFR §68.22. The impact endpoint, in broad terms, is the distance a toxic vapor cloud, heat from a fire, or blast waves from an explosion will travel before dissipating to the point that serious injuries from short term exposures will no longer occur.

The results are summarized and contained in the attached report. See **Exhibits A and B** and **Figures 1 and 2**. As can be seen, the new church and school are well beyond the maximum extent of potential off-site consequences. Again, please note these consequences are unlikely to occur. The modeling, even though highly conservative, establishes that materials on-site will not cause or create a health or safety issue for even the nearest community.

## **FG'S COMMITMENT TO HEALTH, SAFETY, AND THE ENVIRONMENT**

Additionally, FG is committed to protecting the health and safety of its employees, the community, and the environment.

### 1. Compliance With Applicable Standards And Laws

The Sunshine Project will be designed and constructed to meet and/or exceed applicable industry standards. These standards include, but are not limited to, those established by the American Society of Mechanical Engineers (ASME) and the National Fire Protection Association (NFPA). The

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<sup>2</sup> Although some chlorine (in the form of sodium hypochlorite, or bleach) and bromine (in the form of bromine biocide) will be present on-site, they will be in liquid form and so were not reviewed for releases to the atmosphere.

<sup>3</sup> The source location is the on-site location within the Facility where the materials are stored, used, or located.



standards require numerous quality assurance requirements, such as specifications on the material (carbon steel, alloys, or others) used to construct the tanks, hydrostatic testing, radiological or other nondestructive testing for welds, cathodic protection, corrosion allowances incorporated into the shell and roof thickness design, and evaluation of foundation, wind, and seismic loading to support tank design.

The Sunshine Project will operate in compliance with all state and federal standards, which were established in order to protect the community and the environment. FG has a robust Health, Safety, and Environmental Policy. It will be subject to multiple permits and must prepare and follow several plans related to health and safety, such as the Spill Prevention, Countermeasures, and Control Plan, the Facility Security Plan, and others.

Additionally, FG and the Facility will be subject to, and must comply with, the provisions of the Chemical Accident Prevention (CAP) Program (40 CFR Part 68, also known as the RMP and the PSM Program (29 CFR 1910.119). PSM/RMP are tools focused on preventing releases and reducing the frequency and severity of incidents resulting from releases of chemicals. The PSM/RMP requires, among many other things, a process hazard analysis, written operating procedures for each and every covered process, ongoing training, management of change procedures, compliance audits, and emergency planning. The RMP requires that a detailed Risk Management Plan be prepared and submitted to EPA.<sup>4</sup>

There are also very strict requirements for assuring the mechanical integrity of pressure vessels and storage tanks, piping systems, relief and vent systems and devices, emergency shutdown systems and controls including monitoring devices, sensors, alarms, and interlocks. There must be written procedures to maintain the integrity of this equipment, training, routine inspections, and testing. By way of example, tanks storing regulated substances are subject to ongoing evaluations to ensure the integrity of the tank during operation, such as routine radiograph and/or ultrasonic testing, internal inspections, leak testing, and daily visual inspections of tank and containment areas.

## **2. Distance To Community**

FG has designated about 300 feet within the property boundary of its Facility as an internal buffer zone. As a result, all units within the Facility will be approximately one mile from the new church being built on Big Boy Street and the St. Louis Elementary School.

## **3. Steps Taken To Enhance The Health And Safety Of The Community**

In addition to the distance to the closest community, FG has taken numerous measures to enhance the Facility's safety and environmental protection. Some of these measures are detailed below.

After consultation and discussion with the Parish, FG revised its plot plan. FG relocated some of its units along the western boundary, farther away from the new church and school.

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<sup>4</sup> In additional to the modeling discussed herein, a process hazard analysis will be conducted, as required by the PSM/RMP programs. Design, operational, and other changes may be made to address any concerns raised in that analysis.



The Application contains a comprehensive ERP. It has been reviewed by the Parish and revised to **address the Parish's comments**. See Letter, dated July 23, 2018, incorporated herein by reference. The objective of the ERP is to minimize risk to personnel and the surrounding community and its first guiding principle is that human health and welfare are more important than equipment and operations. To meet these objectives and principles, the ERP includes provisions regarding coordination with local officials, such parish emergency response personnel, the creation of an emergency command structure, programs for prevention and detection of emergencies, emergency training, and response procedures and equipment.

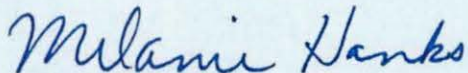
The Parish confirmed compliance with Section 30-64, Defensive Emergency Protective Measures, as required by Section 86-37(g)(3)(c). See Electronic Communication, dated July 18, 2018, incorporated herein by reference.

FG will comply with applicable requirements for safe storage of materials, such as distance requirements between storage vessels.

#### **CONCLUSION**

Based on the facts as provided, FG respectfully submits that there is no evidence supporting the establishment of a buffer zone and, as a result, FG respectfully requests that the Commission find that a buffer zone is not required.

Sincerely,



Melanie Hanks  
Site Evaluation and Remediation Services Director  
Providence Engineering and Environmental Group LLC  
on behalf of FG LA LLC

**EXHIBITS**



EXHIBIT A  
 REASONABLE POTENTIAL RELEASE SCENARIOS  
 FG LA LLC - THE SUNSHINE PROJECT  
 ST. JAMES PARISH, LOUISIANA

Emission Point ID (as referenced in Air Permit)	Substance	Longitude	Latitude	Release Amount (lbs)	Release Duration	Reasonable Potential Release Scenario <sup>1</sup>	Standard Industry Practice for Active Mitigation	Distance from Potential Release Source to Impact Area Endpoint (miles)	Distance from Potential Release Source to Big Boy Street (miles)
LLD-PRTK-BUTE1 Butene Pressure Tank 2	Butene	90° 55' 15.66" W	30° 2' 39.12" N	4,000	3 minutes (1,333 lbs/min)	Broken pipe causing release of 4,000 pounds over three minutes, with a release rate of 1,333 lbs/min	Fire water system and combustible gas detectors	0.06	1.95
PR-PRTK-PRO2 Propylene Pressure Sphere 1 <sup>2</sup>	Propylene	90° 55' 8.93" W	30° 3' 21.83" N	4,000	6 minutes (667 lbs/min)	Release from line at tank.	Fire water system and combustible gas detectors	0.08	1.61
PR-PRTK-PRO2 Propylene Pressure Sphere 1	Propylene	90° 55' 8.93" W	30° 3' 21.83" N	100,000	10 minutes (10,000 lbs/min)	Pipeline leak. Release over 10-minute duration, with a release rate of 10,000 lbs/min.	Fire water system and combustible gas detectors	0.2	1.61
ET2-PRTK-AMM Aqueous Ammonia Tank	Aqueous Ammonia 20%	90° 54' 46.00" W	30° 3' 28.82" N	52,900	30 minutes (1,763 lbs/min)	Release over 30 minutes of approximately 20% of tank.	Fire water system, level alarms, and shut-off valves	0.2	1.21
UT Ammonia Tank 1 <sup>3</sup>	Aqueous Ammonia 20%	90° 55' 20.05" W	30° 3' 20.19" N	132,000	30 minutes (4,410 lbs/min)	Release over 30 minutes of approximately 20% of tank.	Fire water system, level alarms, and shut-off valves	0.3	1.77
Pipeline into propylene plant	Propane	90° 55' 6.73" W	30° 3' 28.17" N	150,000	10 minutes (15,000 lbs/min)	Release of approximately 150,000 pounds.	Fire water system and combustible gas detectors	0.3	1.57
ET2-PRTK-ET3 Ethylene Pressure Sphere	Ethylene	90° 54' 49.80" W	30° 3' 32.29" N	1,050	10 minutes (105 lbs/min)	A valve is damaged: ethylene pressure relief vents. Less than 1,050 pounds of ethylene released at a rate of 105 lbs/minute.	Fire water system and combustible gas detectors	0.06	1.29
ET2-PRTK-C2 Ethane Pressure Tank	Ethane	90° 54' 47.95" W	30° 3' 30.99" N	65,000	10 minutes (6,500 lbs/min)	Pipeline leak	Fire water system and combustible gas detectors	0.2	1.37
EG2 Catalyst Inhibitor Tank <sup>4</sup>	Ethylene/Ethyl Chloride	90° 54' 46.93" W	30° 3' 37.55" N	1,000	3 minutes (333 lbs/min)	Catalyst vessel rupture.	Fire water system and combustible gas detectors	0.02	1.26

**Notes:**

<sup>1</sup>All potential release scenarios are modeled from other RMP facilities as possible releases/actual incidents. These scenarios may be further refined during the Risk Management Program evaluation process required by the EPA

<sup>2</sup>This scenario is not included on Figure 1. The distance to the impact endpoint is smaller than the other modeled propylene scenario.

<sup>3</sup>This scenario is not included on Figure 1 as the other aqueous ammonia potential source location is closer to Big Boy Street.

<sup>4</sup>Ethyl Chloride will be present on-site an ethylene/ethyl chloride mixture. Total quantity of ethyl chloride on-site will be less than 14 lbs.

lbs/min - pounds per minute  
 psi - pounds per square inch  
 NA - Not applicable



EXHIBIT B  
BLEVE VESSEL REASONABLE POTENTIAL RELEASE SCENARIOS<sup>1</sup>  
FG LA LLC - THE SUNSHINE PROJECT  
ST. JAMES PARISH, LOUISIANA

Emission Point ID (as referenced in Air Permit)	Substance	Longitude	Latitude	Release Amount (lbs)	Release Duration	Reasonable Potential Release Scenario <sup>1</sup>	Standard Industry Practice for Active Mitigation	Distance from Potential Release Source to Impact Area Endpoint (miles)	Distance from Potential Release Source to Big Boy Street (miles)
LLD-PRTK-BUTE1 Butene Pressure Tank 2	Butene	90° 55' 15.66" W	30° 2' 39.12" N	85.21	25-foot, 4 inch diameter unloading hose	Pull-away explosion due to transfer hose rupture.	Fire water system and combustible gas detectors	0.2	1.95
LLD-PRTK-BUTE1 Butene Pressure Tank 2	Butene	90° 55' 15.66" W	30° 2' 39.12" N	620,323	10 minute release 6 inch pipe	Process piping break	Fire water system and combustible gas detectors	0.8	1.95
LLD-PRTK-BUTE1 Butene Pressure Tank 2	Butene	90° 55' 15.66" W	30° 2' 39.12" N	8,427	5 minute release	Safety relief valve lift	Fire water system and combustible gas detectors	0.1	1.95
PR-PRTK-PROPAN PR Propane Pressure Sphere	Propane	90° 55' 10.46" W	30° 3' 22.86" N	67.89	25-foot, 4 inch diameter unloading hose	Pull-away explosion due to transfer hose rupture.	Fire water system and combustible gas detectors	0.01	1.6
PR-PRTK-PROPAN PR Propane Pressure Sphere	Propane	90° 55' 10.46" W	30° 3' 22.86" N	212,083	10 minute release 6 inch pipe	Process piping break	Fire water system and combustible gas detectors	0.5	1.6
PR-PRTK-PROPAN PR Propane Pressure Sphere	Propane	90° 55' 10.46" W	30° 3' 22.86" N	5,419	5 minute release	Safety relief valve lift	Fire water system and combustible gas detectors	0.1	1.6
ET2-PRTK-ET3 Ethylene Pressure Sphere	Ethylene	90° 54' 49.80" W	30° 3' 32.29" N	77.01	25-foot, 4 inch diameter unloading hose	Pull-away explosion due to transfer hose rupture.	Fire water system and combustible gas detectors	0.02	1.29
ET2-PRTK-ET3 Ethylene Pressure Sphere	Ethylene	90° 54' 49.80" W	30° 3' 32.29" N	175,603	10 minute release 6 inch pipe	Process piping break	Fire water system and combustible gas detectors	0.5	1.29
ET2-PRTK-ET3 Ethylene Pressure Sphere	Ethylene	90° 54' 49.80" W	30° 3' 32.29" N	3,365	5 minute release	Safety relief valve lift	Fire water system and combustible gas detectors	0.09	1.29

BLEVE - Boiling Liquid Expansion Vapor Explosion

**Notes:**

<sup>1</sup>BLEVE Scenarios are modeled from EPA's Risk Management Program Guidance for Propane Storage Facilities document.

**FIGURES**



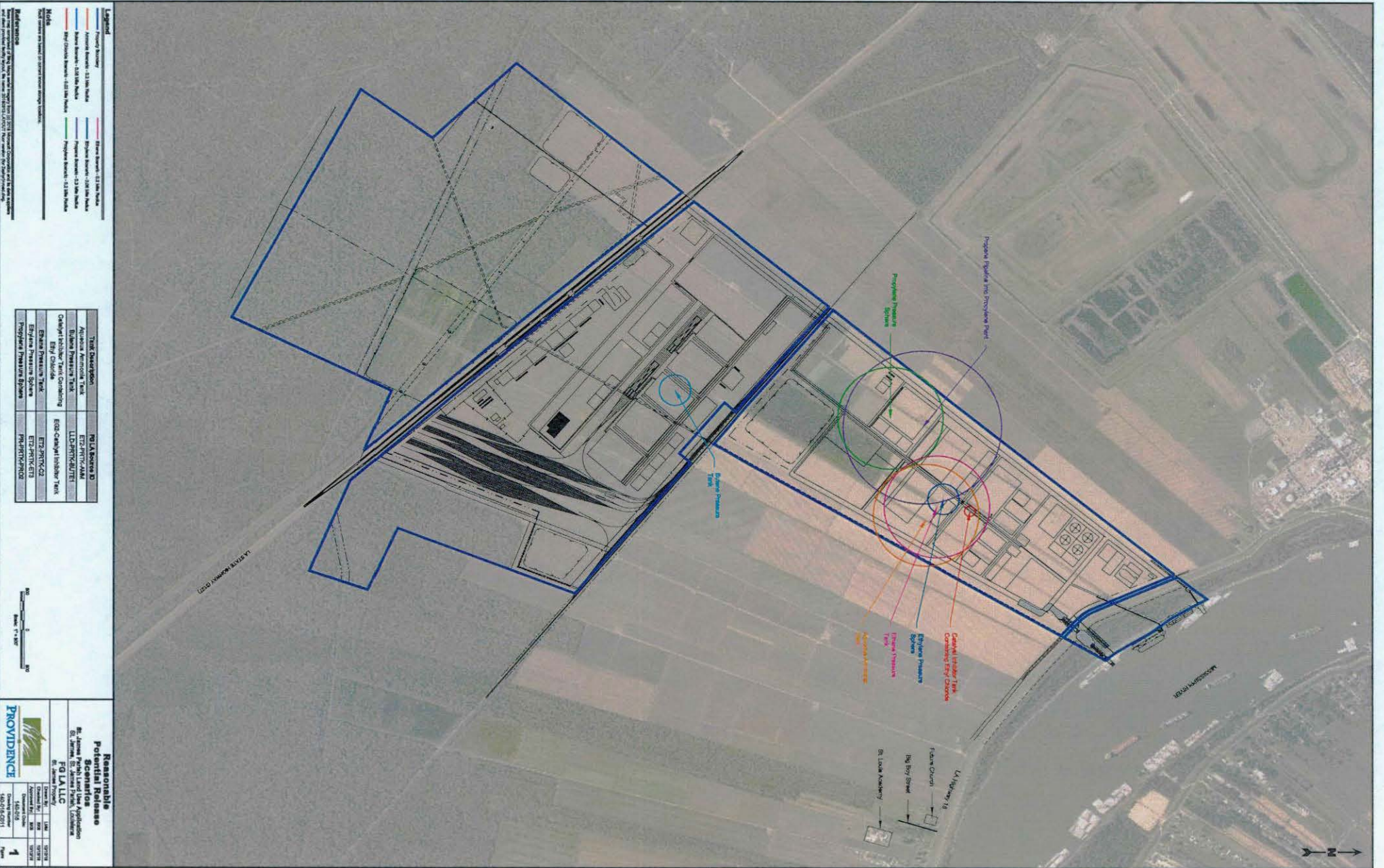
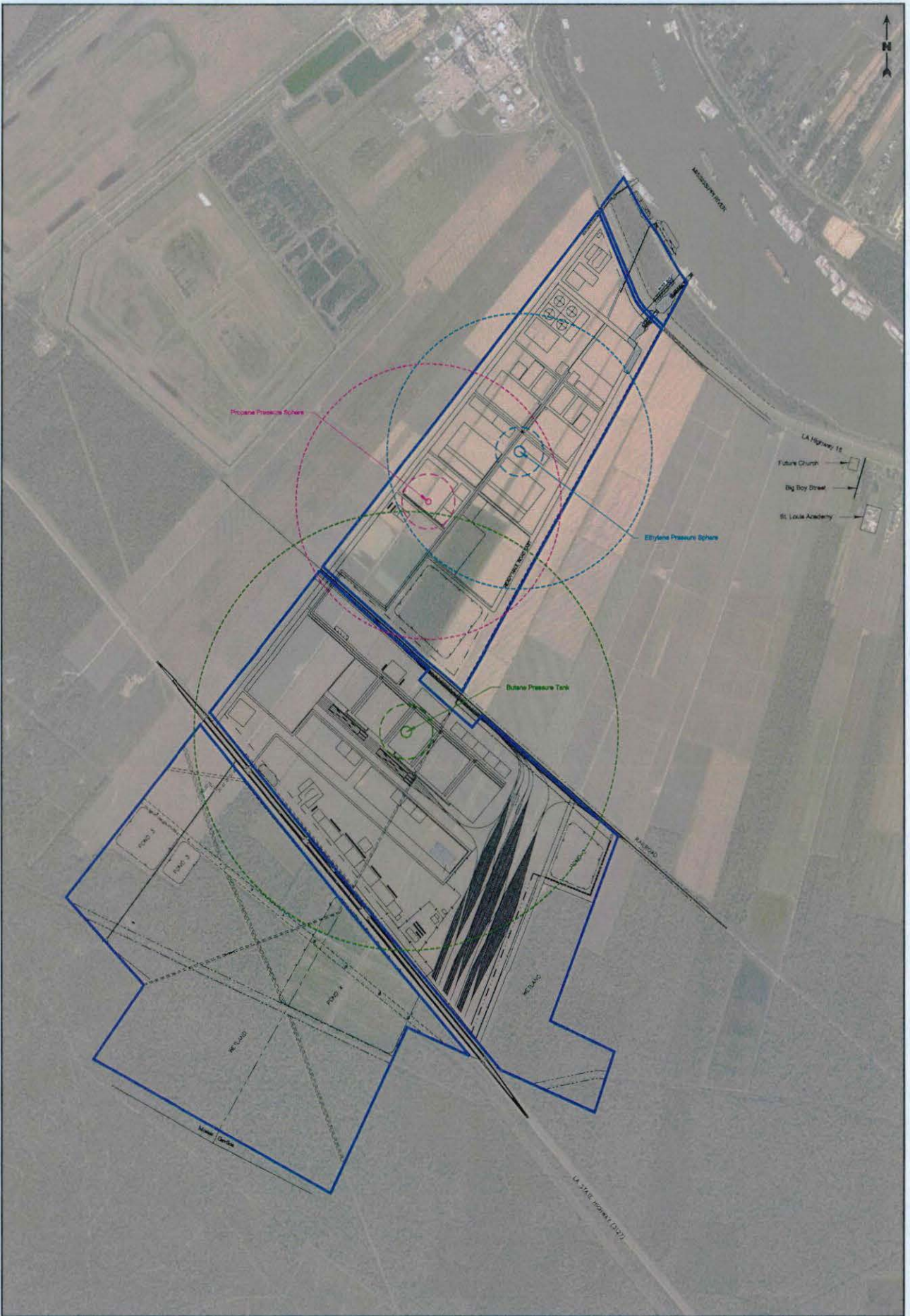


EXHIBIT C





**Legend**

- Property Boundary
- BLEVE Scenario Ethylene - 0.03 Mile Radius
- BLEVE Scenario Propane - 0.01 Mile Radius
- BLEVE Scenario Ethylene - 0.06 Mile Radius
- BLEVE Scenario Propane - 0.1 Mile Radius
- BLEVE Scenario Ethylene - 0.1 Mile Radius
- BLEVE Scenario Propane - 0.2 Mile Radius
- BLEVE Scenario Ethylene - 0.2 Mile Radius
- BLEVE Scenario Propane - 0.3 Mile Radius
- BLEVE Scenario Ethylene - 0.3 Mile Radius
- BLEVE Scenario Propane - 0.4 Mile Radius
- BLEVE Scenario Ethylene - 0.4 Mile Radius
- BLEVE Scenario Propane - 0.5 Mile Radius
- BLEVE Scenario Ethylene - 0.5 Mile Radius

**Note**  
 Tank locations are based on current storage locations.

**References**  
 This map was prepared by King Maps under Property Order 12, 2014. Historical Copyright and its data suppliers and other pertinent building systems. No warranty is made for this map. Please contact King Maps for more information.

Tank Description	FGIA Source ID
Butane Pressure Tank	LLD-PRTK-BUTE1
Ethylene Pressure Tank	ET2-PRTK-ETS
Propane Pressure Sphere	PR-PRTK-PROPAN



**BLEVE Vessel Reasonable Potential Release Scenarios**  
 St. James Parish Land Use Application  
 St. James, St. James Parish, Louisiana

**FG LA LLC**  
 St. James Property

Drawn By:	LMH	12/15/16
Checked By:	SKB	12/15/16
Approved By:	SKB	12/15/16
Revised Date:	12/15/16	
Drawing Number:	145-015	
Client Number:	145-015-0210	

**PROVIDENCE**

**2**  
Page

**EXHIBIT C**



# PASSED

Councilman Amato moved, seconded by Councilman St. Pierre for adoption of the following resolution regarding the appeal by RISE St. James of the St. James Parish Planning Commission's October 30, 2018 approval of the land use application by FG LA LLC to build a chemical manufacturing complex:

## RESOLUTION 19-07 ST. JAMES PARISH COUNCIL

### A RESOLUTION DENYING THE APPEAL OF RISE ST. JAMES AND APPROVING THE APPLICATION OF FG LA LLC UNDER THE ST. JAMES PARISH LAND USE ORDINANCE, WITH CONDITIONS

WHEREAS, FG LA LLC ("FG") requested approval of a proposed chemical manufacturing complex in an application dated June 25, 2018, as supplemented (the original application and supplemental information collectively referred to in this resolution as the "Application," and identified in the records of the St. James Parish Planning Commission as Item #18-30); and

WHEREAS, representatives of FG presented an overview of the application at the planning commission's July 27, 2018 meeting, at which the commission heard public comments on the proposal;

WHEREAS, public hearings were held on FG's proposal on September 5, 2018 in Convent and on September 19, 2018 in Vacherie after public notice; and

WHEREAS, based on concerns expressed at the public hearings and on an evaluation of the requirements of the St. James Parish land use ordinance, the parish administration requested FG to evaluate potential failure scenarios, with particular attention paid to the locations of concern nearest the operating units of the proposed complex, those locations being St. Louis Academy and the new Mount Calvary Baptist Church near Big Boy Road on Louisiana Highway 18; and

WHEREAS, the planning commission approved the Application on October 30, 2018 under Section 86-37(f) of the St. James Parish Code of Ordinances after considering the information presented in the Application, presentations made to the Planning Commission, comments presented at public hearings, and the analyses of the parish administration and consultants, along with the provisions of Section 86-37 of the Code of Ordinances and the St. James Parish Comprehensive Plan; and

WHEREAS, RISE St. James timely appealed the foregoing approval in a letter dated November 28, 2018, as supplemented by an addendum to that letter dated November 29, 2018; and

WHEREAS, FG responded to RISE St. James' appeal in a letter dated December 17, 2018; and

WHEREAS, at its December 19, 2018 meeting, the council heard arguments on the appeal from representatives of both RISE St. James and FG, along with public comments on the appeal, as provided for in the Louisiana Open Meetings Law; and

WHEREAS, in its Application, in various presentations to the planning commission and the parish council, as confirmed and augmented in its presentation to the parish council on December 19, 2018, FG voluntarily committed to implement training and hiring practices to enhance employment opportunities for residents of St. James Parish; to support developing an alternative access route between River Road/Highway 18 and Highway 3127; to support free health screenings for residents; and to support beautification efforts in District 5; and environmental monitoring; and

WHEREAS, FG has entered into a Cooperative Endeavor Agreement (CEA) with the State of Louisiana (Louisiana) and the Louisiana Department of Economic Development (LED), in which, among other things, Louisiana and LED agreed to provide customized workforce support through the LED FastStart Program, including assistance with employee recruitment, screening, and training development and delivery; and

WHEREAS, FG has adopted a "Think Local Policy" in which FG committed to strive to give preference to qualified persons and firms in St. James Parish and the State of Louisiana (commensurate with applicable federal, state, and local laws); and

WHEREAS, FG's Think Local Policy solidifies its commitment to hire qualified, local residents and use local businesses as much as possible throughout the construction and operation phases. In the CEA, the State of Louisiana and LED agreed to provide customized workforce support through the LED FastStart Program, including assistance with employee recruitment, screening, and training development and delivery. It is expected that through the LED FastStart Program and other programs, mechanisms, or processes, FG will be able to identify and hire "qualified persons," that is, persons who are qualified to perform the task(s) of the position(s) for which they are hired; and

WHEREAS, In the CEA, FG agreed to LED tracking, through a Contract Monitor, FG's obligations in the CEA, including the establishment of the facility, capital expenditures for the facility, jobs and payroll, the use of Louisiana manufacturers, suppliers, contractors and subcontractors; and

EXHIBIT D

EXHIBIT

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A



WHEREAS, at its December 19, 2018 meeting, the parish council determined that RISE St. James appeal should be denied, subject to conditions on the approval of the application in addition to those adopted by the planning commission;

NOW, THEREFORE, BE IT RESOLVED that under Section 86-37(f) of the St. James Parish Code of Ordinances, the parish council hereby denies the RISE ST. James appeal and upholds the planning commission's approval of FG's Application, subject to the conditions stated below, which include the conditions originally adopted by the planning commission, along with additional conditions deemed necessary by the parish council to achieve the anticipated benefits of FG's facility in a way that would be commensurate with its physical and environmental impacts.

A. **Extent of Approval and Future Changes within the Facility Footprint:** This approval is limited to the facility as presented in the Application, including both Phase I and Phase II described therein, along with reasonable modifications and expansions, subject to the following limitations on any modification or expansion:

- (1) Process or production facilities shall not extend beyond the footprint within the 300 foot civil buffer depicted in the plot plan submitted with the Application;
- (2) Any modification or expansion must be designed so that it does not materially increase risks to the community towards the east;
- (3) Changes must comply with all requirements of the Louisiana Department of Environmental Quality and all other public entities having regulatory jurisdiction;
- (4) The materials produced and the processes utilized must be substantially similar to the materials and processes described in the Application; and
- (5) Changes must comply with Section 30-64 of the St. James Parish Code of Ordinances ("Defensive Emergency Protective Measures").

B. **Start Date Limitation.** Construction must commence within 24 months after the last public entity regulatory approval is issued, or within 24 months after the termination of any administrative or judicial appeal process that may follow from the issuance of any required permit, whichever is later. For the purposes of this limitation, construction is defined as: permanent on-site fabrication, erection, or installation of the proposed facility (such as preloading, pile driving, installing structural supports and foundations, laying underground pipework, or constructing permanent storage structures) that is continuously pursued with reasonable diligence to complete the permitted facility within a reasonable time. Construction delays caused by natural disaster or labor disputes, and periods between operational phases of construction shall not be construed as interrupting construction that is otherwise continuously pursued.

C. **Emergency Measures:** The facility must comply with Section 30-64 of the St. James Parish Code of Ordinances ("Defensive Emergency Protective Measures").

D. **Training, Hiring, and Contracting**

(1) FG will establish, fund, and implement the FG Workforce Academy to help train and prepare residents for full-time employment at its facility. The academy will include the following features:

- a. The FG Workforce Academy will be designed to:
  - Bridge the semi-skilled or underemployed worker with job opportunities at FG;
  - Provide preparatory training for the semi-skilled or underemployed worker who demonstrates high technical and/or mechanical aptitude, or has a desire to secure an opportunity in industry; and
  - Provide educational and employment opportunities for the citizens of St. James Parish who are at least 18 years old.
- b. FG will work with entities, such as River Parishes Community College, Baton Rouge Community College, Louisiana Workforce Commission, LED, , and local workforce development officials, to develop a curriculum that will provide the necessary training and/or skills required to work at the facility. The ADDIE Framework (Assess, Design, Develop, Implement, Evaluate) will be utilized to create the curriculum for the FG Workforce Academy.
- c. FG will provide St. James Parish residents top priority for entrance to the academy.
- d. In the first year of the FG Workforce Academy, FG will allow those residents living in Districts 5, 6, and 7 who meet objective employment-related admission criteria established by FG for the academy (such as a clean drug test and passing criminal record



checks, etc.) to enroll at the academy. Admission of all residents who are qualified may be spread over multiple sessions and/or classes, with scheduling of the sessions and/or classes based on FG's hiring needs.

- e. In addition to those who apply directly, FG will consider referrals of applicants to the academy from an office designated for this purpose by the parish, subject to the admission criteria described above.
- f. FG will give all St. James Parish residents who successfully complete the academy's training program an opportunity to interview for open job positions at its facility.

- (2) To the extent allowed by law, FG will give preference to those qualified residents and qualified firms based within St. James Parish for construction and other contracts at the facility, during both construction and operation of the facility, and will require, through contractual provisions which it will enforce in good faith, that its contractors impose this requirement downward through the subcontracting chain.
- (3) To the extent allowed by law, FG will give preference to qualified vendors based within St. James Parish for FG's purchase of non-specialized equipment, services, or supplies that are based within St. James Parish, and will require, through contractual provisions which it will enforce in good faith, that its contractors impose this requirement downward through the subcontracting chain.
- (4) FG will conduct outreach efforts on its website and other local venues on an ongoing basis to acquaint businesses in Louisiana and St. James Parish with contracting, service, and supplier business opportunities with FG, and to provide those businesses with information on how to compete for such opportunities directly from FG as well as its contractors and subcontractors.
- (5) FG shall publish information on its website for persons and businesses to inquire about and receive information about working for or doing business with FG, its contractors, and subcontractors and will provide similar information to an office or person designated by St. James Parish who will be responsible for disseminating that information within the parish.
- (6) FG will apply the Think Local Policy in good faith and to the best of its ability.

**E. Alternative Access Route:** FG will participate in a cooperative effort with the parish, the state, and other industries in the area to develop an alternative access route between River Road/Highway 18 and Highway 3127. Such participation shall include the contribution of financial (or comparable substitute) resources on an equitable basis commensurate with contributions of the industries in the affected area.

**F. Health Screening:** FG will participate in a cooperative effort with the St. James Parish Hospital to provide free health screenings for residents of District 5. Such participation shall include the contribution of financial (or comparable substitute) resources.

**G. Beautification**

- (1) To screen the facility from residential areas to the east, FG shall provide a forested buffer along its eastern boundary. The forested buffer will include a sufficient amount and placement of trees and vegetation which, at tree or vegetation maturation, will provide an aesthetic buffer between the community to the east and the facility to mitigate the visual impacts on residential areas.
- (2) In cooperation with St. James Parish, FG will seek out and support projects in District 5 that are designed to enhance the aesthetic value and nature of the community. Such support shall include the contribution of financial (or comparable substitute) resources. One such project shall be the beautification of the public park in District 5.

**H. Environmental Monitoring:** FG shall provide air quality monitoring along its eastern property boundary, with a sufficient number and type of monitors on the eastern property boundary to provide data on air emissions potentially impacting the surrounding community and which will be in accordance with the standards set forth in 40 CFR 63.658, modified as follows:

- (1) 40 CFR 63.658(a) shall be revised to read as follows:



The owner or operator shall conduct sampling along the facility's eastern property boundary and analyze the samples in accordance with Methods 325A and 325B of appendix A of this part and paragraphs (b) through (e) of this section.

- (2) In 40 CFR 63.658(b), the target analytes shall be 1,3-butadiene, vinyl acetate, and ethylene oxide instead of benzene.
- (3) 40 CFR 63.658(c) shall be revised to read as follows:

The owner or operator shall determine passive monitor locations along the eastern property boundary in accordance with Section 8.2 of Method 325A of appendix A of this part.
- (4) 40 CFR 63.658(c)(1) shall be revised to read as follows:

As it pertains to this subpart, known sources of VOCs, as used in Section 8.2.1.3 in Method 325A of appendix A of this part for siting passive monitors, means a wastewater treatment unit, process unit, or any emission source with the potential to emit any of the target analytes, including marine vessel loading operations. For marine vessel loading operations, one passive monitor should be sited on the shoreline adjacent to the dock.
- (5) 40 CFR 63.658(c)(1)(i) through (iv) shall be deleted.
- (6) 40 CFR 63.658(c)(2) shall be deleted.
- (7) 40 CFR 63.658(c)(4) shall be revised to read as follows:

The owner or operator shall follow the procedure in Section 9.6 of Method 325B of appendix A of this part to determine the detection limit of the target analytes for each sampler used to collect samples, co-located samples, and blanks.
- (8) 40 CFR 63.658(e)(2) and (e)(3) shall be deleted.
- (9) The initial sampling collection frequency shall be once each continuous 14-day sampling period, such that the beginning of the next 14-day sampling period begins immediately upon the completion of the previous 14-day sampling period. After 52 consecutive samples, if none exceeds the ambient air standard for the applicable analyte, the sampling frequency may be reduced to once per month. After an additional 24 consecutive samples, if none exceeds the ambient air standard for the applicable analyte, the sampling frequency may be reduced to one sampling period every three months.
- (10) In determining annual average concentrations for comparison to ambient air standards, FG shall calculate the average based on all samples from the most recent 12-month period.
- (11) 40 CFR 63.658(f) through (k) shall be deleted.

The data produced by the monitoring shall be made available to the parish in response to the parish's reasonable request. Semi-annual summary reports shall be provided to the parish. The summary reports shall include a comparison of the monitoring results against the ambient air standards for each target analyte.

If the Environmental Protection Agency promulgates regulations with fence-line hazardous air pollutant monitoring requirements for the specific plants that FG proposes to construct, and those requirements are of reasonably comparable rigor to those contained in this Section H, those requirements shall be applied by FG in lieu of the requirements contained in this Section H, with the understanding that the target analytes, as well as the reporting described in the preceding paragraph, shall remain the same.

#### **I. Reporting**

- (1) In addition to the environmental monitoring reports required under condition (H), FG shall provide annual reports to St. James Parish on FG's performance related to conditions (D), (F), and (G). Such reports shall include the number of residents and businesses provided with employment and business opportunities.
- (2) St. James Parish may audit the reports provided to the parish and the information presented to the parish council, provided that the parish shall not reveal any personal identification, matters protected by the Health Insurance Portability and Accountability Act, or any FG trade secrets.



**BE IT FURTHER RESOLVED** that the parish council concurs with planning commission's finding that this approval is justified under the factors stated in Section 86-37(h) of the St. James Parish Code of Ordinances. The impacts of the proposed facility would not be different from the impacts of allowable uses in the Industrial use area in which it will be located. The public benefits of the proposal are significant, as set out in the Application. The physical and environmental impacts of the proposal are within allowable limits, and are substantially mitigated by the physical layout of the facility, and the location of the site in proximity to existing industrial uses and away from residential uses. The public benefits outweigh the impacts, and the proposal will not impair the ability of the parish to attract other beneficial development. The vested rights/constitutional protection factor in Section 86-37(h)(4) is not implicated by this approval.

**BE IT FURTHER RESOLVED** that the parish council concurs with planning commission's consideration of the need for a buffer zone under Sections 86-37(i)(2) and 86-37(j) of the St. James Parish Code of Ordinances. The parish council concurs with planning commission's finding that the overall location of the site, placement of the production and process components on the site, and the proposed 300 foot civil buffer within the footprint of the site provide adequate buffer zones. The adequacy of these provisions is demonstrated by the potential failure scenario evaluation provided by FG as part of the Application and reviewed by the parish's consultants. The approval conditions described in this resolution would preserve the benefits of the buffer zones described in the Application regarding any future modifications or expansions.

This resolution having been submitted to a vote, the vote thereon was as follows:

YEAS: St. Pierre, Amato, Patin, Cooper, and Louque  
NAYS: None  
ABSTAIN: None  
ABSENT: Etienne-Steib and Kraemer

And the resolution was declared adopted on this, the 23rd day of January 2019.

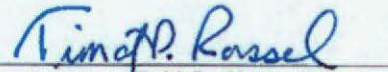
  
\_\_\_\_\_  
Council Chairman

  
\_\_\_\_\_  
Secretary

Delivered to Parish President: 01-24-19

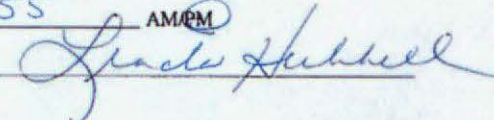
Approved: 01/24/2019

Disapproved: \_\_\_\_\_

  
\_\_\_\_\_  
Parish President

Returned to Secretary on: 1-24-19

At 5:55 AM/PM

Received by 

\* \* \* \* \*

**CERTIFICATE**

I, Linda Hubbell, Secretary of the Council of the Parish of St. James, State of Louisiana, hereby certify that the foregoing is a true and correct copy of a resolution adopted by the St. James Parish Council in regular meeting held on the 23rd day of January 2019.

Signed at Vacherie, Louisiana, this 24th day of January 2019.

  
\_\_\_\_\_  
Linda Hubbell  
Secretary

( S E A L )



# Distance to Fifth Ward Elementary School

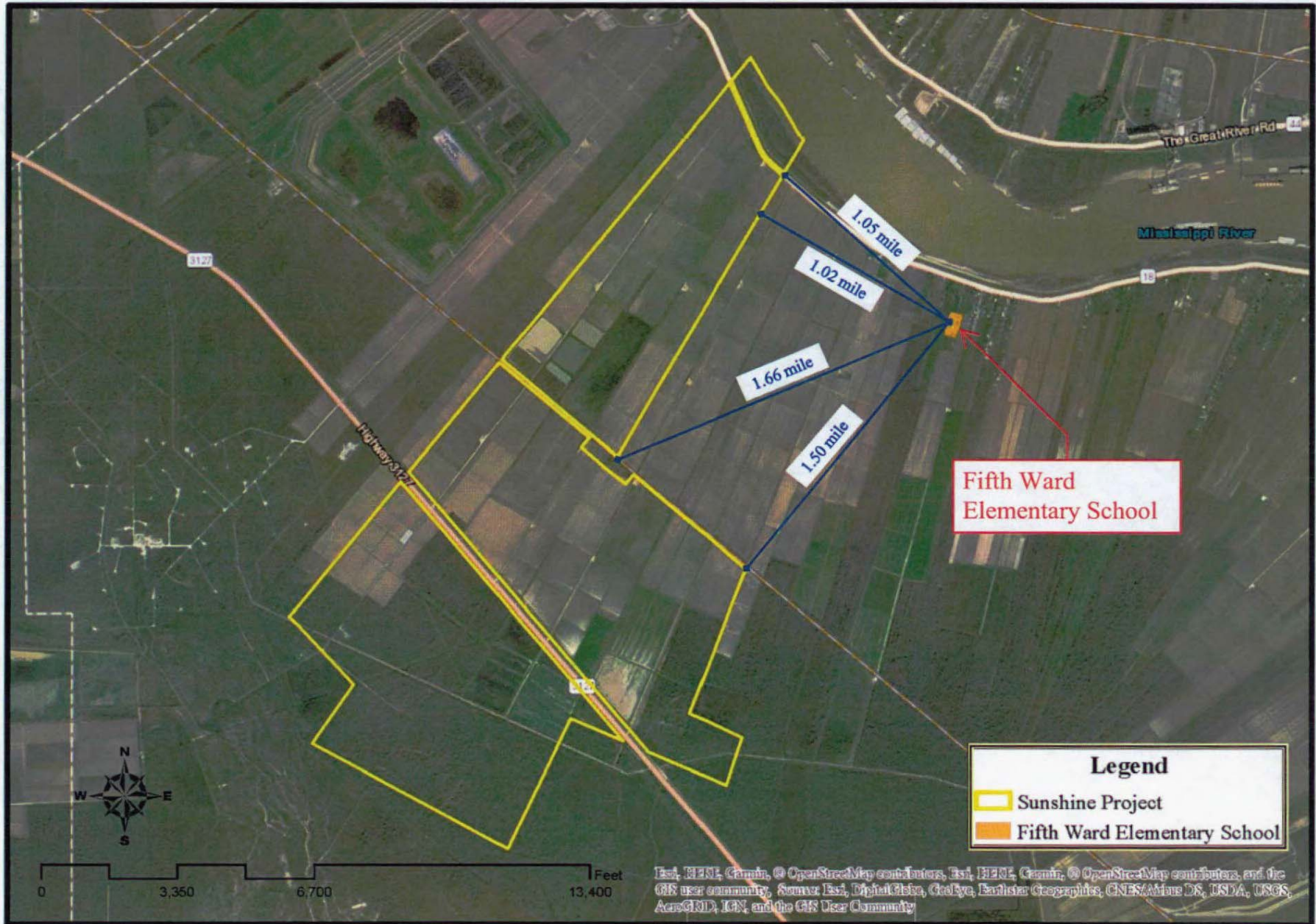


EXHIBIT E