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VIA EMAIL TO

DEQ.PUBLICNOTICES@LA.GOV

Louisiana Department of Environmental Quality Attn: Lori Pittman Air Permits Division P.O. Box 4313, Baton Rouge, LA 70802

Re: Magnolia Power Generating Station Unit 1 Proposed Initial Part 70 Air Operating Permit, AI Number 222431, Permit Number 1280-00292-V0, 1280-00292-IV0 and PSD-LA-839, and Activity Numbers PER20200003, PER20200001, and PER20200002.

November 17, 2021

Dear LDEQ, Office of Environmental Services,

On behalf of the Sierra Club¹ we respectfully submit these comments on Louisiana Department of Environmental Quality's ("LDEQ") Magnolia Power Generating Station Unit 1 Proposed Initial Part 70 Air Operating Permit, AI Number 222431, Permit Number 1280-00292-V0, 1280-00292-IV0 and PSD-LA-839, and Activity Numbers PER20200003, PER20200001, and PER20200002.

We also attach, adopt, and incorporate by reference the Comments of Dr. Ranajit (Ron) Sahu, PhD, QEP, CEM, "Comments of Dr. Dr. Ranajit (Ron) Sahu, "Comments on the Magnolia Power LLC's Magnolia Power Generating Station Unit

¹ Sierra Club is one of the oldest and largest national nonprofit environmental organizations in the country, with approximately 830,000 members nationwide, including over 3,300 members in Louisiana, dedicated to exploring, enjoying, and protecting the wild places and resources of the earth; practicing and promoting the responsible use of the Earth's ecosystems and resources; educating and enlisting humanity to protect and restore the quality of the natural and human environment; and using all lawful means to carry out these objectives. One of Sierra Club's priority national goals is promoting and improving air quality. Sierra Club has members and supporters who live, work, and recreate in communities near the proposed Cameron LNG terminal, and Sierra Club seeks to prevent or reduce unnecessary and harmful air pollution from the proposed facility.

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1 Proposed Initial Part 70 Air Operating Permit 1280-00292-v0 and Initial Prevention of Significant Deterioration (PSD) Permit, PSD-LA-839 (attached as Exhibit A). We also reserve the right to rely on all public comments submitted to LDEQ relating to the renewal and PSD permit, request a written response to comments, and request written notification when any action is taken on the proposed construction.

For the reasons discussed below, Sierra Club objects to LDEQ's proposal to grant Magnolia Power LLC's permit and urge LDEQ to reject it.

Magnolia's requests authorization to build yet another polluting facility in an area already inundated with large industry facilities. Construction has not yet begun. Approval of this facility without proper consideration of the detrimental affects on the area's attainment status and safety and welfare of the Parish's citizens is unlawful under the Clean Air Act and the Louisiana Constitution. Therefore, due to the reasons listed below LDEQ should deny Magnolia's current application and issue a revised draft because:

- a) Magnolia's PSD application and the proposed permit fail to adequately support the conclusion that the facility's emissions will not cause or contribute to air pollution in violation of the NAAQS.
- b) The application and proposed permit are flawed in multiple respects, including underestimation of criteria pollutant emissions and a flawed BACT analysis among other things.
- c) The proposed permit record fails to include documentation necessary to fully and independently review the availability of cost-effective controls.
- d) The Environmental Assessment Statement fails to fully identify the potential and real adverse effects from the proposed plant on the surrounding community and on communities of color in particular.
- e) The EAS also fails to discuss mitigation efforts on vulnerable populations in the neighboring community or to prevent damage to the potentially high volume of historical and cultural artifacts and sites found within the proposed property.
- f) LDEQ must fully consider and articulate the real and potential environmental costs of the proposed plant and balance such costs against the alleged economic and social benefits
- g) The permit does not adequately address the selection of proposed sites or no action alternative

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HEARING REQUEST

Sierra Club respectfully requests an opportunity for members of the public to attend a hearing on this draft permit and submit further comment. Sierra Club is a national nonprofit organization with 67 chapters and approximately 830,000 members nationwide, including 3,310 members in Louisiana, dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. Sierra Club has long participated in LDEQ Clean Air Act permitting processes and litigation to advocate for public health and protection of our nation's air quality.

As discussed, the protection of air quality in Iberville Parish and the significant emissions from the proposed Magnolia power plant is of urgent interest to the public at large and to the many Sierra Club members who live and recreate in the impacted areas. In particular, Iberville Parish and the nearby East Baton Rouge area have long been adversely impacted by harmful ozone pollution caused primarily by the combustion of fossil fuel. Indeed, the Magnolia power plant is required to offset its NOx and VOC emissions precisely because pollution from and in Iberville Parish has caused or contributed to the East Baton Rouge area's persistent nonattainment with the ozone National Ambient Air Quality standard.

Unfortunately, the draft permit fails to ensure compliance with Louisiana's requirements for pollution offsets, the Clean Air Act's mandate that new sources install and operate best available control technology that is practically enforceable, or the Clean Air Act's prohibition against emissions from new sources that may cause or contribute to violations of the Clean Air Act's requirements. Given the size of the proposed Magnolia power plant and its significant potential for emissions, we respectfully request that LDEQ issue a revised draft permit that addresses the issues discussed below, provide a hearing for the public to better understand the proposed permit and the potential emissions from the Magnolia power plant, and allow additional public comment.

FACTUAL BACKGROUND

Magnolia Power LLC ("Magnolia Power") submitted its initial permit application to develop a 730-megawatt (MW) combined cycle gas turbine ("CCGT") facility in Iberville Parish, Louisiana on May 27, 2020. The proposed site location is 26620 River Road, Plaquemine, Louisiana, 70764 in Iberville Parish. The facility is expected to replace around 2,700 MW peak load of older coal-fired generation used by electric cooperatives in Louisiana. It will be an exclusively natural gas-fired unit Comments of Sierra Club on Magnolia Power Generating Station November 17, 2021 Page 4 of 33

with a heat recovery steam generator ("HRSG") equipped with duct burners and a steam turbine. Other equipment will include a cooling tower, emergency generator, emergency diesel firewater pump, an auxiliary boiler, and atmospheric storage tanks. The proposed facility will be considered a major source of hazardous air pollutants ("HAPs") since plant-wide HAP emission will "increase above the major source threshold of 10 tpy for a single HAP or 25 tpy for a combination of HAPs."²

The proposed location is an approximately 150-acre plot of land near the West Bank of the Mississippi River southeast of the town of Plaquemine, and across the River from St. Gabriel. The nearest residential property is "about 2000 ft. from the property boundary, to the southeast". ³ The combined effects of natural disasters and overwhelming exposure to significant air and water pollution from nearby facilities have left an already vulnerable population exposed to significant health and environmental risks.

LEGAL FRAMEWORK

A. National Ambient Air Quality Standards

The Clean Air Act establishes a rigorous program for regulating new and existing sources of air pollution through a state and federal partnership. See 42 U.S.C. § 7410; Virginia v. Browner, 80 F.3d 869, 883 (4th Cir. 1996) ("The [Clean Air Act] 'establishes a program of cooperative federalism that allows the [s]tates, within limits established by federal minimum standards, to enact and administer their own regulatory programs, structured to meet their own particular needs.") (quoting Hodel v. Va. Surface Mining & Reclamation Ass'n, Inc., 452 U.S. 264, 269 (1981)). At the heart of this program are the National Ambient Air Quality Standards ("NAAQS") that EPA establishes for certain ubiquitous pollutants that are harmful to human health, referred to as "criteria pollutants." 42 U.S.C. § 7409. The NAAQS are health-based standards that limit the concentration of each such pollutant allowable in the "ambient air," which is the air people breathe. Id. § 7409(b). The Clean Air Act directs EPA to set the national standards for various pollutants at a level "requisite to protect the public health," by "an adequate margin of safety." Id. § 7409(b)(1); Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 475-76 (2001) (acknowledging that these national standards are to be set at levels "not lower or higher than is necessary—to protect the public health with an adequate margin of safety").

EPA has promulgated NAAQS for six types of air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone (smog), particulate matter (PM10 / PM2.5), and sulfur dioxide. *See* 40 C.F.R. pt. 50. EPA works with states to designate areas

² Application, appendix F, 238

 $^{^{3}}$ Id.

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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. 42 U.S.C. § 7407(d)(1)(A)(i)-(ii). 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. 42 U.S.C. § 7407(d)(1)(A)(iii). The EPA treats an "unclassifiable" area as if it were in attainment. See 42 U.S.C. § 7471. EPA has classified Iberville Parish as "in attainment" for all standards, including PM2.5 and Ozone. The nearest monitor to the site is the Bayou Plaquemine site located around 10.4 miles away.⁴

The key difference between an attainment area and non-attainment area is that facilities applying for permits in non-attainment areas must comply with more stringent pollution control technology standards, which may limit production, and the facility must "offset" its emissions by procuring reductions at other area facilities. *See* 42 U.S.C. §§ 7475(a)(4), 7479(3), 7503 (2006).

B. PSD Requirements

Areas designated as in attainment (or unclassifiable) for the NAAQS (like Iberville Parish) are subject to the Clean Air Act's PSD program. See 42 U.S.C. §§ 7470-7479 (the "PSD provisions"). As the name implies, the PSD program is aimed at preventing areas that meet the NAAQS from developing unhealthy air by managing industrial growth. The PSD program does this by not only establishing national standards (i.e., the NAAQS limits the concentration of the pollutant in the ambient air), but also by requiring EPA to limit how much this concentration can increase in any given area so that industrial development does not result in an area being polluted right up to the limit. That is, EPA sets what is known as a "PSD increment," which is the "maximum allowable increase" for a particular pollutant over a baseline concentration established for that area. 42 U.S.C. § 7473(b)(2); see also 40 C.F.R. § 52.21(c) (setting PSD increments).⁵ Increments act as localized ceilings that cannot be exceeded. They are necessarily lower than the national standard for a given pollutant, and they act like an early warning system of approaching NAAQS violations. As new emissions sources are added to an area, they steadily "consume" the increment.

 $^{^4}$ See LDEQ, Bayou Plaquemine, available at https://www.deq.louisiana.gov/page/bayou-plaquemine

⁵ The PSD increment is a single number that the EPA fixes for each pollutant, and it applies to all regions that have been designated as "attainment" or "unclassifiable" with respect to that pollutant. See 40 C.F.R. § 52.21©. As new emissions sources are added to an area, they steadily "consume" the increment. *Clean Water Action Council of Ne. Wisc., Inc. v. EPA*, 765 F.3d 749, 750 (7th Cir. 2014).

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To maintain compliance with the national standards and ensure that a project will not cause or contribute to exceedances in air pollution standards that harm human health and the environment, the Clean Air Act's PSD program establishes a mandatory review and permitting process before any construction may begin. *See* 42 U.S.C. § 7475; *Alaska Dep't of Env't Conservation v. EPA*, 540 U.S. 461, 470 (2004); *Ala. Power Co. v. Costle*, 636 F.2d 323, 362 (D.C. Cir. 1979) (identifying the PSD permitting process as the principal mechanism for monitoring consumption of allowable increments).

Congress designed the Clean Air Act so that states can administer their own PSD programs through a "state implementation plan" or "SIP," which EPA must approve. 42 U.S.C. § 7410(a)(1)-(2). Louisiana has an EPA-approved SIP PSD program. 40 C.F.R. § 52.970(c) (identifying EPA approved regulations in the Louisiana SIP). Once "EPA approves a SIP, it becomes federal law." *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 968 F.3d 357, 373 (5th Cir. 2020). The regulations that comprise Louisiana's SIP are codified under LAC 33:III.509 (PSD regulations); *see also* 40 C.F.R. § 52.970(c) (listing Louisiana's SIP regulations). Louisiana's PSD requirements, therefore, are enforceable as state and federal law.

Louisiana PSD regulations require an applicant for a new "major stationary source" (such as the Magnolia facility)⁶ to obtain a "PSD permit" before it can begin construction. See LAC 33.III.509.A.1. To obtain a PSD permit, the applicant must "demonstrate" that its emissions "would not cause or contribute to air pollution in violation of: a. any national ambient air quality standard in any air quality control region; or b. any applicable maximum allowable increase over the baseline concentration [i.e., the increment] in any area." LAC 33:III.509.K.1; 42 U.S.C. § 7475(a)(3). In other words, in order to obtain a PSD permit, large new sources of pollution must affirmatively show that when they are up and running, their pollution would not cause or contribute to a violation of any NAAQS or exceedance of any increment. The way an applicant "demonstrate[s]" compliance with the NAAQS and increments is with standardized computer modeling called the "Air Quality Analysis." LAC 33:III.509.L, M. The Air Quality analysis follows federal regulations on air modeling. LAC 33:III.509.L.1. ("All estimates of ambient concentrations required [under PSD review] shall be based on applicable air quality models, databases, and other requirements specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models)."). The Air Quality Analysis must account for both the proposed source's potential new emissions, as well as emissions from other relevant pollution sources in the same area that also could degrade air quality, such

⁶ A major stationary source is a facility with the potential to emit at least 100 tons per year of any PSD-regulated air pollutant in certain source categories such as a chemical processing plant. LAC 33:III.509.B; 42 U.S.C. § 7479(1). The Cameron LNG already is permitted to emit nearly 3,000 tons per year of nitrogen oxides, and over 2,800 tons per year of carbon monoxide, and is therefore a major source. Briefing Sheet at 2.

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as petrochemical plants nearby. *See* 40 C.F.R. Part 51, App. W §§ 8.1, 8.3, 9.2. If an applicant fails to demonstrate that it will not cause or contribute to a NAAQS or increment violation, the permitting authority must not issue a PSD permit. Without a PSD permit a facility cannot construct.

C. Title V Permits

Major sources of air pollution like the Magnolia facility must obtain a permit that meets Clean Air Act Title V requirements (i.e., a "Title V permit"), in addition to a PSD permit. See 42 U.S.C §§ 7661a, 7661c. While a PSD permit focuses on meeting the Clean Air Act requirements to start construction of a major emissions source, a Title V permit governs all of the specifics of how the source is allowed to operate once it is built and operating. The purpose of the Title V permit is to facilitate compliance and enforcement by "enabl[ing] the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." EPA Operating Permit Program, Final Rule, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992). In preparing a Title V permit, LDEQ must put into place conditions such as testing, monitoring, reporting, and recordkeeping that are sufficient to "assure compliance" with all applicable Clean Air Act requirements, including emission limits set in PSD permits. 42 U.S.C. § 7661c(a), (c); 40 C.F.R. §§ 70.6(a)(1), (c)(1); LAC 33:III.507.H; *see also* 40 C.F.R. § 70.2 (defining "applicable requirements").

Similar to the Clean Air Act's PSD provisions, the Act also requires each state to develop and submit to EPA a program for operating permits intended to meet the requirements of Title V of the Act. 42 U.S C. § 7661a(d)(l). Louisiana's approved program is codified in LAC 33:III.507. *See* 60 Fed. Reg. 47,296 (Sept. 12, 1995) (approving Louisiana's Title V permits program).

D. Louisiana's Toxic Pollutant Regulations

Major sources like the Magnolia facility are also subject to Louisiana's air toxics program. LAC 33:III.5101.A. Major sources must comply with Louisiana's "ambient air standards," that set maximum air concentrations of toxic air pollutants that apply "over publicly accessible property" beyond the plant's fence-line. LAC 33:III.5105.A.2, 5109.B. New sources are required to submit "a dispersion modeling report demonstrating compliance with the ambient air standard." LAC 33:III.5111.B.4; *see also* LDEQ, Air Quality Modeling Procedures, Section 3 (Aug. 2006).

Louisiana regulations require LDEQ to "at least every 36 months, review and update the ambient air standards listed for each toxic air pollutant in LAC 33:III.5112, Table 51.2." LAC 33:III.5109.B.6. LDEQ established ambient air Comments of Sierra Club on Magnolia Power Generating Station November 17, 2021 Page 8 of 33

quality standards for the bulk of the toxic air pollutants it regulates over 12 years ago. *See* LR 33:2624 (Dec. 2007); LAC 33:III.5712, Table 51.2 (historical note). Since then, LDEQ has not updated the standards for any of the toxic air pollutants at issue in this permit, which include cancer-causing and carcinogenic chemicals such as Benzene, Formaldehyde, Toluene, and Ammonia. *Id.*

COMMENTS

A. The Proposed Permit is Flawed and Contrary to the Requirements of the Clean Air Act.

The attached report by Dr. Ranajit Sahu, identifies numerous deficiencies in the Magnolia Application and Draft Permit. Dr. Sahu received his Ph.D. in Mechanical Engineering from the California Institute of Technology, and has over thirty years of experience in the fields of environmental, mechanical, and chemical engineering, including: design and specification of pollution control equipment for a wide range of emissions sources including stationary and mobile sources; combustion engineering evaluations; energy studies; multimedia environmental regulatory compliance (involving statutes and regulations such as the Federal CAA and its Amendments, Clean Water Act, TSCA, RCRA, CERCLA, SARA, OSHA, NEPA as well as various related state statutes); multimedia permitting (including air quality NSR/PSD permitting, Title V permitting, NPDES permitting for industrial and storm water discharges, RCRA permitting, etc.); and air dispersion modeling. Deficiencies in the Application and Draft Permit identified by Dr. Sahu are summarized below.

- 1. Magnolia's PSD application and the proposed permit fail to adequately support the conclusion that the facility's emissions will not cause or contribute to air pollution in violation of the NAAQS.
 - a. <u>The Magnolia modeling analysis relies on an impermissible interpretation</u> <u>of the Clean Air Act's requirements.</u>

Magnolia's modeling analysis submitted in support of the proposed PSD permit improperly (i) relies on LDEQ's illegal and outdated modeling guidance and (ii) misuses EPA's guidance documents to evade the full impact analysis for the PSD-regulated pollutants that the Clean Air Act, Louisiana air regulations, and the Louisiana constitutionally mandated public trustee duty require.

The proposed Magnolia power plant will be a major source emitting significant quantities of criteria pollutants PM2.5, PM10, SO2, NOx, VOC, carbon monoxide

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(CO), and H₂SO₂ Mist.⁷ Moreover, the plant will emit more than 2.5 million tons per year of greenhouse gas emissions. As a major source, the Clean Air Act requires Magnolia to undertake an air quality analysis for these pollutants in order to show

that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, including secondary emissions, would not cause or contribute to air pollution in violation of:

- a. any national ambient air quality standard in any air quality control region; or
- b. any applicable maximum allowable increase over the baseline concentration in any area.⁸

Although the Clean Air Act unambiguously prohibits the use of Significant Impact Levels ("SILs") to make permit determinations, the application and proposed permit conclude that no further analysis of air quality impacts is required because the potential to emit for the proposed power plant does not exceed the SILs for each criteria pollutant.⁹ But the Clean Air Act and Louisiana's PSD provisions require Magnolia to demonstrate that the emissions from its proposed power plant:

will not cause, or contribute to, air pollution in excess of *any* (A) maximum allowable increase or maximum allowable concentration for *any* pollutant in *any* area to which this part applies more than one time per year, [or] (B) national ambient air quality standard in *any* air quality control region.¹⁰

Where a source impact does cause or contribute to a modeled violation of the NAAQS, a permit cannot be issued without some action taken to mitigate the source's impact. *See, e.g.*, 40 C.F.R. § 51.165(b)(2) (requiring a major stationary source that contributes to the violation of the NAAQS to "reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions to, at a minimum, compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation").

⁷ See LDEQ, Magnolia Air Permit Briefing Sheet at 4 (AI 222431; EDMS Doc. 12927054 at pdf page 9) [hereinafter, "Briefing Sheet"].

⁸ See 42 U.S.C. § 7475(a)(3); LAC 33:III.509.K.1.

⁹ Magnolia Power, LLC, Updated Air Dispersion Modeling Report at 18 (EDMS Doc. No. 12927054 at pdf page 249).

 $^{^{10}}$ See id.

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Congress used mandatory and expansive language throughout Section 7475(a) to make its directive clear for EPA or LDEQ: "no" covered source may be constructed, "unless" that source "demonstrates" that it "will not" "cause, or contribute to," "any" violation of the NAAQS or "any" increment.¹¹ Congress specifically used the terms "cause" and "contribute" together to ensure the PSD program would prevent increments and the NAAQS from being exceeded by considering all possible violations or contributions to violations.¹² A contribute," "has no inherent connotation as to the magnitude or importance of the relevant 'share' in the effect; certainly it does not incorporate any 'significance' requirement."¹³ In short, the Clean Air Act does not allow LDEQ to sidestep demonstrating air quality would meet the NAAQS and increments, simply because an agency believes a facility's emissions would not make a significant enough contribution to any violations.

Applying those principles, the Clean Air Act and Louisiana law unambiguously prohibit the kind of *de minimus* exemption that LDEQ's use of the SILs creates. The PSD provisions of the Act prohibits the issuance of a permit unless the applicant demonstrates that it "will not cause or contribute" to "any" exceedance of the applicable air quality standard. 42 U.S.C. § 7475(a)(3)(A)-(B). It is clear—"no" means no, see United States v. Clintwood Elkhorn Mining Co., 553 U.S. 1, 7 (2008)—and, as shown by the repeated use of "any," the statutory mandate must be given broad, sweeping effect. See Consumer Electronics Ass'n v. FCC, 347 F.3d 291, 298 (D.C. Cir. 2003) ("the Supreme Court has consistently instructed that statutes written in broad, sweeping language should be given broad, sweeping application."); see also Clintwood Elkhorn Mining, 553 U.S. at 7 ("Five 'any's' in one sentence and it begins to seem that Congress meant the statute to have expansive reach."); Massachusetts v. EPA, 549 U.S. 497, 528-29 (2007) ("repeated use of the word 'any" demonstrated that statutory language was "sweeping" in its protective reach). This is the very sort of "rigid" statutory language that forecloses de minimis exemptions. See Public Citizen v. Young, 831 F.2d at 1111-13 (quoting statutory language whose "natural-almost inescapable-reading" requires certain action and finding that language is rigid).

In keeping with that statutory text, in 2013, the D.C. Circuit vacated EPA's PM2.5 SILs regulation, recognizing EPA's "lack of authority to exempt sources from the requirements of the Act."¹⁴ The court specifically rejected the part of the

¹¹ See Alabama Power Co., 636 F.2d at 362; H.R. Rep. No. 95-294, at 9; S. Rep. No. 95-127, at 11, 32 (1977); see also 42 U.S.C. § 7475(a)(3).

¹² Alabama Power Co., 636 F.2d at 362

¹³ Bluewater Network v. EPA, 370 F.3d 1, 13 (D.C. Cir. 2004) (interpreting nearly identical language in another section of the Clean Air Act).

¹⁴ Sierra Club v. EPA, 705 F.3d 458, 465–66 (D.C. Cir. 2013).

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regulation that "simply states that the demonstration required under § 165(a)(3) is deemed to have been made if a proposed source or modification's air quality impact is below the SIL."¹⁵ Despite the vacatur of EPA's PM2.5 regulation, and EPA's failure to revisit the rule, LDEQ continues to rely on the unlawful SIL to avoid comprehensive analyses of air quality impacts in Louisiana.

Here, contrary to the statute's plain language and applicable caselaw, Magnolia purports that it does not need to review all primary criteria pollutant emissions because its modeling shows that neither CO, NO₂, PM_{10} , nor $PM_{2.5}$ emissions concentrations would exceed the SIL at the location of any modeled, ground-level "receptor" for any pollutant.¹⁶ So, it did not consider the cumulative impacts for $PM_{2.5}$, PM_{10} , VOC, and CO and whether they "would cause or contribute" to violations, as the Clean Air Act requires.

Magnolia's use of the $PM_{2.5}$ and NOx SILs in its air quality analysis, in particular, and LDEQ's willingness to approve of that use, violates the Clean Air Act, because it excuses Magnolia from making the mandatory NAAQS and increments compliance demonstration. Before any LDEQ approval or further consideration, Magnolia must perform a cumulative air quality analysis to assess whether it causes or contributes to any violation of the NAAQS or increment overconsumption in the area.

b. <u>LDEQ does not have discretion to use SILs to exempt Magnolia from</u> <u>further PSD evaluation in light of Magnolia's PM2.5 impacts.</u>

As detailed in the attached technical report of Dr. Ron Sahu, the results of Magnolia's air quality modeling for PM2.5, in particular, are particularly problematic. As reflected in the table below, Magnolia's own modeling shows that $PM_{2.5}$ results are not substantially below LDEQ's significant level.¹⁷ Indeed, Magnolia's modeling indicates that $PM_{2.5}$ impacts from the proposed plant would be 71% of the SIL, leaving little room for error.¹⁸

 $^{^{15}}$ Id.

¹⁶ Magnolia Power, LLC, Updated Air Dispersion Modeling Report at 18 (EDMS Doc. No. 12927054 at pdf page 249) [hereinafter, "Magnolia Air Dispersion Modeling"].

¹⁷ Briefing Sheet at 6.

¹⁸ Magnolia Air Dispersion Modeling at 18.

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| Pollutant | Averaging Period | Preliminary Screening Concentration (µg/m ³) | Secondary PM2.5 (µg/m³) | Total Screening Concentration (µg/m³) | Levelof Significant Impact (µg/m ³) | NAAQS (µg/m³) |
|------------------|---------------------|---|----------------------------|--|--|------------------|
| PM ₁₀ | 24-hour | 1.59 | - | 1.59 | 5 | 150 |
| | Annual | 0.13 | | 0.13 | 1 | |
| PM25 | 24-hour | 0.82 | 0.041 | 0.861 | 1.2 | 35 |
| | Annual | 0.07 | 0.001 | 0.071 | 0.2 | 12 |
| NO ₂ | I-hour | 2.98 | | 2.98 | 7.5 | 188 |
| | Annual | 0.12 | | 0.12 | 1 | 100 |
| со | I-hour | 335.44 | | 335.44 | 2000 | 40,000 |
| | 8-hour | 120.80 | - | 120.80 | 500 | 10,000 |

Moreover, as discussed in the attached Sahu Report, Magnolia's primary and secondary $PM_{2.5}$ estimates of 0.861 and 0.041 ug/m³ were both improperly developed using EPA's Modeled Emission Rates for Precursors ("MERP") approach, and likely substantially underestimate the total PM impacts of the facility. Specifically, Magnolia's reference sources for NOx and VOC emissions are *not* representative of the proposed Magnolia plant, including, importantly, their size and also stack heights and locations.¹⁹ Without using representative sources as the basis for scaling, Magnolia's estimated $PM_{2.5}$ impacts are fundamentally unreliable. Moreover, as detailed in the Sahu Report and below, the proposed verification and testing requirements for Magnolia's PM, NOx, and VOC emissions are unenforceable, and therefore inadequate. Since Magnolia's own modeling shows that $PM_{2.5}$ impacts are not substantially below the SIL, the permit should be amended to require rigorous verification (i.e., continuous monitoring and/or frequent stack testing) for $PM_{2.5}$ emissions for all of the significant contributors (i.e., the turbine, the boiler, the emergency generator, etc.).

c. <u>LDEQ does not have discretion to use SILs to exempt Magnolia from</u> <u>further PSD evaluation.</u>

Magnolia's use of SILs in determining whether the source contributes to the NAAQS is impermissible because Magnolia's own modeling indicates that there is already a risk that the plant will exceed the SIL for PM2.5 and NO_X .²⁰ The D.C. Circuit in *Sierra Club* held (and EPA ultimately conceded) use of the SILs is particularly unlawful when it "does not give permitting

¹⁹ See Sahu Report at 4.

²⁰ Magnolia Air Dispersion Modeling at 18.

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authorities that implement the SILs discretion to require a cumulative air quality analysis for sources that are below the SIL, but could nevertheless cause a violation of the NAAQS or increment."²¹ In that case, the unlawful agency policy precluded the mandatory Clean Air Act analysis where "the modeled concentration is less than the significance level," because it deemed "the project's impact is insignificant (i.e., the project increases will not cause or significantly contribute to an exceedance of the NAAQS or PSD Increment standards)" and concluded "therefore, no further analysis is required."²²

Notably, EPA's newest SILs policy document does not even go this far, as it presupposes that "[i]f a permitting authority chooses to use these SIL values to support a case-by-case permitting decision, it must justify the values and their use in the administrative record for the permitting action."²³ And "[a] determination that a proposed source does not cause or contribute to a violation can only be made by a permitting authority on a permit-specific basis after consideration of the permit record."²⁴

LDEQ's policy regarding SILs does not contemplate justifying their use on a case-by-case basis and bears the exact same flaw highlighted by the court in *Sierra Club*, inflexibly deeming:

If the modeled concentration is less than the significance level, the project's impact is insignificant (i.e., the project increases will not cause or significantly contribute to an exceedance of the NAAQS or PSD Increment standards); therefore, no further analysis is required.").²⁵

Where, as here, a facility would likely exceed the SIL with appropriate emissions inputs, LDEQ's policy does not leave the agency discretion to exempt the source from a cumulative modeling analysis. Moreover, by focusing on the SIL alone, LDEQ impermissibly commits itself to issue permits to source after source that contributes less than the SILs, in an area that will in fact violate the standards or increments.²⁶ Indeed, under Magnolia's air quality modeling, this appears to be

²¹ Sierra Club, 705 F.3d at 465.

²² See LDEQ, Air Quality Modeling Procedures, Ex, E, at p. 2-3.

²³ EPA, Guidance on SILs for Ozone and Fine PM in the PSD Program, p. 3 (2018), available at <u>https://www.epa.gov/sites/production/files/2018-</u>

<u>04/documents/sils_policy_guidance_document_final_signed_4-17-18.pdf</u> (attached here as Exhibit B).

 $^{^{24}}$ Id.

²⁵ See LDEQ, Air Quality Modeling Procedures at 2-3.

²⁶ See Sierra Club, 705 F.3d at 463 ("The Sierra Club further notes that because the EPA's regulation automatically exempts a source with a proposed impact below the SIL from

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exactly what is happening in the Iberville Parish area, flipping the purpose and broader structure of the PSD program on its head. The "emphatic goal of PSD is to prevent [increments] from being exceeded," as well as to prevent exceedances of NAAQS.²⁷ By allowing Magnolia to use SILs to avoid assessing whether it would in fact contribute to potential NAAQS and/or increment exceedances, LDEQ appears to be authorizing rather than preventing significant deterioration of air quality. Even if LDEQ had discretion to promulgate and apply a SILs policy under the Clean Air Act in general, it could not lawfully invoke the policy here to claim that Magnolia's additional emissions of a pollutant would not cause or contribute to NAAQS exceedances or increment consumption in an area where modeling shows clear violations for that pollutant.

Finally, LDEQ's policy foregoing a 42 U.S.C. § 7475(a)(3) analysis where proposed pollutant emissions are below SILs runs opposite to and violates the agency's public trustee duty, discussed in more detail below. The NAAQS are to be met with precision, because the standards are to be set "not lower or higher than is necessary—to protect public health with an adequate margin of safety."²⁸ Magnolia's additional emissions that create or worsen violations of those standards interfere with the adequate margin of safety and so add measurable risk of harm to human health – interference with and risks to public health that LDEQ failed to examine.²⁹

By proposing to allow Magnolia to continue operations and to construct additional elements without even assessing whether or how much its emissions would cause or contribute to violations of air quality health thresholds, LDEQ is falling short of its duty to avoid environmental harm to the maximum extent possible.³⁰

demonstrating it will not cause or contribute to a violation of the NAAQS, unlimited numbers of sources whose impacts are less than the SILs could cumulatively cause a violation of the NAAQS or increments.").

²⁷ Alabama Power, 636 F.2d at 362 ("On their face, these provisions establish the thresholds as limitations that are not to be exceeded"); *Sierra Club*, 705 F.3d at 465 (permitting authorities must "prevent violations by requiring demonstration that a proposed source or modification will not cause [or contribute to] a violation."); see also 42 U.S.C. § 7473(b)(4) (defining "maximum allowable concentration" for pollutant as being no greater than NAAQS for that pollutant); *see also* H.R. Rep. No. 95-294, at 9 (1977), reprinted at 1977 U.S.C.C.A.N. 1077, 1087 ("The purpose of the permit is to assure that the allowable increments and [NAAQS] will not be exceeded as a result of emissions from any new or modified major stationary source.").

²⁸ Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 475-76 (2001).

²⁹ See United States v. Ameren Mo., 421 F. Supp. 3d 729, 817 (E.D. Mo. 2019) ("[T]he SILs do not establish a level below which there is no risk of harm from a facility's pollution.").
³⁰ See In re Am. Waste and Pollution Control Co., 633 So. 2d 188, 194 (La. App. 1st Cir. 1993).

d. Even if LDEQ had discretion to use the SILs as a *de minimus* exemption from the Clean Air Act's PSD requirements, LDEQ has failed to demonstrate that pollution impacts up to the SIL are truly trivial.

Even if it were permissible to use the SILs to exempt Magnolia from more comprehensive, cumulative modeling and monitoring requirements, LDEQ has not met its burden of showing that pollution increases at or below the levels of its significant impact levels are truly "trivial," nor can it. Indeed, in establishing discretionary SILs for the states to use, EPA has conceded that when ambient air levels of pollution are near the NAAQS, "the use of a SIL may not be appropriate." 75 Fed. Reg. 64,864, 64,894 (Oct. 10, 2020). Indeed, EPA's guidance makes clear that the SILs are "interim" and that "[a]dditional discretion may need to be exercised in such cases to ensure that public health is protected."³¹

Even if the use of SIL's were lawful (and they are not), LDEQ has abused its discretion in automatically exempting Magnolia from mitigating the impact of its NOx emissions simply because the facility does not exceed the 7.5 μ g/m³ SIL. As discussed, the record indicates that the Magnolia power plant's PM and NOx contributions very nearly exceed the SILs.³² Moreover, as discussed in the technical report of Dr. Ron Sahu, Magnolia has almost certainly underestimated its projected emissions, and therefore Magnolia's air quality modeling almost certainly underestimates the impact of those emissions.³³ As detailed in the Sahu Report, Magnolia's PSD analysis repeatedly and systematically relied on generic, unsupported, and unlawful emission factors that operate to minimize Magnolia's projected total emissions, including its projections of PM and NOx emissions.³⁴ As a result of those generic emission factors, it is difficult to quantify precisely the extent to which the facility's emissions will exceed the assumptions Magnolia used in its modeling-but as Dr. Sahu explains, those actual emission will certainly will be higher than Magnolia suggests.³⁵ And given that Magnolia's own modeling demonstrates that Magnolia's NO₂ impacts are just narrowly below the PM_{2.5} and NOx SILs, LDEQ's blind adherence to the SIL likely overlooks emissions that cause or contribute to exceedances of the SIL. In sum, given the magnitude of Magnolia's

³¹ See, eg., NO₂ Modeling Guidance at 1, 10; see also EPA, Guidance Concerning the Implementation of the I-hour NO NAAQS for the Prevention of Significant Deterioration Program at 5 (June 29, 2010) (Where "the applicant can show that the NOx emissions increase from the proposed source will not have a significant impact at the point and time of any modeled violation, the permitting authority *has discretion* to conclude that the source's emissions do not cause or contribute" to an exceedance of the NAAQS). ³² Magnelia Air Modeling Penert at 14

³² Magnolia Air Modeling Report at 14.

³³ See generally Sahu Report.

³⁴ See generally id.

 $^{^{35}}$ Id.

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emissions, which are very narrowly below the SILs, coupled with Magnolia's likely underestimation of actual emissions and the unenforceability of the proposed permit (as discussed below), LDEQ must reconsider its use of the SILs to exempt the Magnolia facility from further PSD analysis. Specifically, LDEQ must require measures to ensure that Magnolia's emissions are monitored, verifiable, and practically enforceable. *See, e.g.*, 40 C.F.R. § 51.165(b)(2).

2. Magnolia's application and the proposed permit are flawed in multiple respects.

a. <u>The Application underestimates criteria pollutant emissions.</u>

As explained in the Sahu Report,³⁶ the Application and LDEQ's proposed permit likely underestimate emissions significantly. Magnolia improperly relies on unrepresentative and incorrect AP-42 emission factors that EPA has recognized are unrepresentative of emission for numerous pollutants. EPA's AP-42 guidance makes clear that "[i]n most cases, these [AP-42] factors are simply *averages* of all available data of acceptable quality^{"37} Because these emission factors do not say anything about maximum pollution impacts, it is simply wrong to rely on them to estimate a source's *potential* to emit, which must be based on the maximum impacts of a proposes source. Moreover, neither the Applicant's emission calculations nor LDEQ's review mention or discuss the reliability (i.e., accuracy) of AP-42 emission factors. AP-42 uses a rating system to provide the user with a sense of how accurate a particular emission factor may be. As detailed in the Sahu Report, virtually every one of the AP-42 emission factors relied upon by Magnolia are rated as poor or very poor reliability. A recent EPA Enforcement Alert stressed that "*Remember, AP-42 emission factors should only be used as a last resort*."^{"38}

Further, as discussed in the attached Sahu Report, LDEQ's reliance on "vendor" estimated emissions is arbitrary because the record does not include any information about the Magnolia turbine vendor or the make or model of the turbine.³⁹ Although the application fails to identify the vendor or the make and model of the turbine, LDEQ proposes to approve the "vendor" emissions calculations that Magnolia relies upon. This is fundamentally flawed and unreliable. At a minimum, LDEQ must require the applicant to identify the turbine vendor and then to ensure

³⁶ Sahu Report at 10-13.

³⁷AP-42 Introduction at 1 (emphasis in original), <u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors</u>

³⁸ Sahu Report p. 31.

³⁹ *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.,* 463 U.S. 29, 43 (1983) ("The agency "must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made").

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that the specific emissions used in the permit analysis will, in fact, be achievable, by that specific vendor and specific turbine make and model from that vendor.

Finally, as explained in the Sahu Report, the emissions factors for potent greenhouse gases like methane ("CH₄") and nitrous oxide ("N₂O") are likewise unsupported. The Application assumes those emissions to be 0.001 kg/MMBtu for hot start, warm start, cold start, and shutdown, citing to an EPA reporting rule at 40 C.F.R. Part 98.⁴⁰ That EPA regulation, however, has nothing to do with permitting. The emissions estimates for these critical GHG gases, which are many more times more powerful than CO2, should be based on vendor test data. Further evidence of the flawed and deficient emissions estimates in Magnolia's Application is detailed in the Sahu Report.

b. The BACT Analyses are Flawed.

In New Source Review permitting, new or modified sources are required to install Best Available Control Technology ("BACT").⁴¹ BACT is defined as:

an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant \dots .⁴²

Thus, BACT is based on the application of pollution control technologies reflecting the *maximum degree of reduction* for each regulated pollutant, but it does not require the installation of any particular technology. Rather, it requires that the source achieve the same or better emission limits as other similar, recently-permitted sources. BACT is a technology-forcing standard that ensures progress towards pollution reduction over time. One common source of information about emissions limits for recently-permitted sources is the RACT/BACT/LAER Clearinghouse ("RBLC") database.

As detailed in the attached Sahu Report, Magnolia's Application fails to conduct an appropriate BACT analysis for emissions of nitrogen oxides, carbon

⁴⁰ Sahu Report at 11; Application, App'x C, page 13 of 46.

⁴¹ 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j)(2).

 $^{^{42}}$ 40 C.F.R. § 52.21(b)(12); see also 42 U.S.C. § 7479(3).

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monoxide, and volatile organic compounds from the proposed turbine. Specifically, the Application itself identifies similar, recently-permitted sources with lower emissions limits, yet arbitrarily fails to provide any justification for why those lower limits should not apply to the proposed project.

i. The BACT Analysis for Nitrogen Oxides ("NOx") Is Deficient.

Magnolia's proposed BACT emission limit for NOx indicates that the "combination of an SCR and dry low-NOx, combustor design is the top control option, reducing NOx, emissions to 2 ppm. As the *highest-ranked technology* shall be as BACT, additional technical or economic evaluation is not required."⁴³ While SCR is the highest ranked technology for NOx control, neither the Application nor LDEQ explain why a lower emission limit is not achievable, especially in light of similar sources in the RBLC database that have achieved limits as low as 1.6 ppm, 1.4 pm. or 1 ppm NOx. A proper BACT analysis would plot the cost of achieving these lower levels of NOx using SCR and selecting that level which is cost-effective, rejecting even lower values that are not cost-effective.

ii. The BACT Analysis for Carbon Monoxide ("CO") Is Deficient.

Magnolia proposes a CO BACT emission limit for the new turbine of 2.0 ppmvd at 15% O2, on a 24-hour rolling average.⁴⁴ But again, the Application identifies several other RBLC sources with lower limits, but fails to offer any justification for why that lower limit is not achievable for the proposed project. Absent any technical or economic justification for why the more stringent limit of 1.5 ppmvd at 15% O2 is not achievable, LDEQ cannot claim that that 2.0 ppmvd at 15% O2 is BACT.

c. <u>The Application Fails to Identify the Source of the Required Emission</u> <u>Offsets.</u>

Under LAC 33:111.504.M, emission offsets are required for NOx, and/or VOC emissions from a new major source at an offset ratio of 1.0 to 1 for each pollutant. All emission reductions claimed as offset credit shall be federally enforceable prior to commencement of construction of the proposed new source or major modification. All emission reductions claimed as offset

 $^{^{43}}$ Magnolia Power Generating Station, App'x D – Best Achievable Control Technology (BACT) Analysis at 12 May 29, 2020) (EDMS Doc. 12927054 at pdf page 527) (emphasis added).

⁴⁴ *Id*. at 24.

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credit shall occur prior to or concurrent with the start of operation of the proposed major stationary source. 45

Here, Magnolia's Application fails to identify the source of the required offsets. Without identifying the source of the offsets, commenters and the public are unable to verify that the offsets will adequately mitigate the emissions from the proposed project. Moreover, without the source of the offsets, LDEQ cannot ensure that those emission reductions are enforceable, as required under Louisiana law. LDEQ has a statutory duty to deny the permit unless the Applicant Offsets its emissions, as required under LAC 33:111.504.M.

d. <u>Proposed Conditions of the Permit are Not Enforceable, and therefore</u> <u>Unlawful.</u>

As noted, BACT is "an emissions limitation" based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source.⁴⁶ The Clean Air Act and EPA's New Source Review Manual, upheld in numerous Environmental Appeals Board cases, requires that such emission limits must be met on a continuous basis at all levels of operation.⁴⁷ Moreover, the New Source Review Manual states:⁴⁸

The emissions limits must be included in the proposed permit submitted for public comment, as well as the final permit. BACT emission limits or conditions must be met on a continual basis at all levels of operation (e.g., limits written in pounds/MMbtu or percent reduction achieved), demonstrate protection of short term ambient standards (limits written in pounds/hour) and be enforceable as a practical matter (contain appropriate averaging times, compliance verification procedures and recordkeeping requirements). Consequently, the permit must:

- ! be able to show compliance or noncompliance (i.e., through monitoring times of operation, fuel input, or other indices of operating conditions and practices); and
- ! specify a reasonable averaging time consistent with established reference methods, contain reference methods for determining compliance, and provide for adequate reporting and recordkeeping so that the permitting agency can determine the compliance status of the source.

The Clean Air Act further requires any Title V permit to include "enforceable emission limitations and standards . . . and such other conditions as are necessary to assure compliance with applicable

⁴⁵ LAC 33:111.504.F.3.

⁴⁶ 40 C.F.R. § 52.21(b)(12); see also 42 U.S.C. § 7479(3).

⁴⁷ 42 U.S.C. § 7602(k).

⁴⁸ U.S. EPA, New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Area Permitting, Draft, October 1990, p. B.56.

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requirements" of the CAA.⁴⁹ Indeed, a fundamental purpose of the Title V permit is to set forth in one place not only all of the requirements applicable to a pollution source, but also provisions needed to assure compliance with each of those requirements. As U.S. EPA explained in the preamble to the Title V regulations, "regulations are often written to cover broad source categories" leaving it "unclear which, and how, general regulations apply to a source." U.S. EPA, *Operating Permit Program*, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992). Title V permits bridge this gap by "clarify[ing] and mak[ing] more readily enforceable a source's pollution control requirements," including making clear how general regulatory provisions apply to specific sources. S. Rep. 101-228, 1990 USCAAN 3385, 3730 (Dec. 20, 1989). In short, Title V permits are supposed to link general regulatory provisions to a specific source to provide a way "to establish whether a source is in compliance." *Id*.

In addition to "enforceable emission limitations and standards . . . [e]ach permit issued under [Title V] *shall* set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(a),(c) (emphasis added); *cf.* 40 C.F.R. § 70.6(c)(1) (providing that all Title V permits "shall contain" "compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit"). The U.S. Court of Appeals for the D.C. Circuit has explained that these provisions establish not only that "a permitting authority may supplement an inadequate monitoring requirement so that the requirement will 'assure compliance with the permit terms and conditions," but that "a monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards." *Sierra Club v. U.S. EPA*, 536 F.3d 673, 677, 680 (D.C. Cir. 2008).

As detailed in the attached Sahu Report, the Draft Permit fails to include emission limitations, monitoring, or reporting provisions necessary to ensure compliance with the permit terms or to ensure that the permit is actually enforceable. First, for startup, shutdown, or malfunction operations, the proposed permit refers to emission limitations like "normal operating mode" or "environmental compliance mode" to define compliance with the operational requirements of the turbine's SCR—and the injection of ammonia, specifically.⁵⁰ Vague references to "normal" operations and "environmental compliance mode" are not enforceable, and therefore

⁴⁹ 42 U.S.C. § 7661c(a).

⁵⁰ See, e.g., Briefing Sheet at 2.

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unlawful. LDEQ must revise the end of startup and beginning of shutdown using objective, practically enforceable criteria.

Second, the proposed permit's repeated references to "good combustion" practices, "proper operation," or "proper equipment design" are likewise unenforceable, unverifiable, and unlawful.⁵¹ LDEQ must define this term for each pollutant if it intends that it should be part of BACT. And it should do so, relying on objective, measurable parameters or criteria, so that it is enforceable in each case.

Third, the permit references compliance with the "manufacturer's instructions" as a specific condition for the operation of the main turbine and the auxiliary boiler.⁵² It is impossible for the public or LDEQ to verify or monitor whether Magnolia is complying with those "instructions." Moreover, as noted in the Sahu Report and below, the vendor for the Magnolia turbines is not even identified in the record; nor is there any record of instructions Magnolia is required to follow. For a permit condition to be enforceable, the permit must leave no doubt as to what the facility must do to comply with the condition. Here, the permit record does not include any record of the "manufacturer's instructions," so it is impossible to determine which instructions to which the permit is referring. LDEQ must spell out which instructions are enforceable limitations.

3. The proposed permit record fails to include documentation necessary to fully and independently review the availability of costeffective controls.

As detailed in the Sahu Report, the permit record is internally inconsistent and does not include complete copies of all of the information LDEQ apparently received in processing the Application. As a result, LDEQ cannot rationally approve the permit, for several reasons. First, LDEQ cannot rationally approve the permit because the bases for key terms—such as Specific Condition 1—are not in the record, and therefore neither the public nor the agency can verify that information. Second, including the underlying data for any emission limitation *in the record* is a foundational requirement of the Clean Air Act's Title V program. LDEQ has a legal obligation to issue permits that comply with the Clean Air Act and its implementing regulations, which require the state to support the permit and any control determination with technical analysis, modeling, and importantly, the underlying data necessary to conduct that analysis.⁵³ Moreover, LDEQ has an obligation to

⁵¹ Id.; see also Proposed Permit, Specific Requirements at 5, 39.

⁵² *Id.* at 39-40.

⁵³ See generally LAC 33:111.517 and 519.

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"make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted." ⁵⁴ Because the permit file does not include all such communications or the bases for Specific Conditions of the permit, LDEQ must supplement the record and provide the public with an opportunity to submit additional comment.

Third, LDEQ must supplement the permit record because EPA cannot fully review the permit since the state failed to include necessary information in the record. EPA has an independent obligation to ensure that LDEQ's final permit and any control analyses comply with the Clean Air Act. See Alaska Dep't of Envtl. Conservation v. EPA, 540 U.S. 461, 485 (2004) (upholding EPA's interpretation of the Clean Air Act as authorizing EPA to "review permits to ensure that a State's BACT determination is reasonably moored to the Act's provisions"). Here, EPA cannot possibly discharge its obligation to ensure that LDEQ's BACT determinations are "reasonably moored to the Act's provisions," Alaska Dep't of Envtl. Conservation, 540 U.S. at 485, because the basic data necessary to review those determinations and conditions is not in the record. EPA cannot approve a permit when the federal agency is unable to verify the accuracy of the data on which the plan is based.

D. The Public Trust Analysis Required by the State Constitution is Inadequate

The Louisiana Environmental Quality Act mandates that "[t]he applicant for a new permit . . . that would authorize . . . air emissions in sufficient quantity or concentration to constitute a major source [such as this plant] . . . shall submit an environmental assessment statement as a part of the permit application." La. Rev. Stat. § 30:2018(A). The Act further provides that "[t]he environmental assessment statement . . . shall be used [by LDEQ] to satisfy the public trustee requirements of Article IX, Section 1 of the Constitution of Louisiana." *Id.* at 30:2018(B). To satisfy the public trustee requirements, LDEQ must determine "that adverse environmental impacts have been minimized or avoided as much as possible consistently with the public welfare" before it can issue a final permit. *Save Ourselves, Inc. v. Louisiana Envtl. Control Comm*'n 452 So. 2d 1152, 1157 (interpreting La. Const. Art. IX, § 1) (emphasis added).

As part of its public trust duty, LDEQ must satisfy three issues when taking action that affects the environment:

Based on the *Save Ourselves* decision, it has been held that LDEQ's written findings of fact and reasons for decision must address whether (1) the potential and real adverse environmental effects of the proposed

⁵⁴ LAC 33:111.509.Q.

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> project have been avoided to the maximum extent possible; (2) a costbenefit analysis of the environmental impact costs balanced against the social and economic benefits of the project demonstrate that the latter outweighs the former; and (3) there are alternative projects or alternative sites or mitigating measures that would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.⁵⁵

In re Oil & Gas Exploration, Dev., & Prod. Facilities, Permit No. LAG260000, 2010-1640 (La. App. 1 Cir. 6/10/11), 70 So. 3d 101, 104. Section 30:2018 specifically requires the permit applicant to address each of these issues in the EAS that it submits to LDEQ. See La. Rev. Stat. § 30:2018(B).

Louisiana's public trustee duty has been analogized to the federal National Environmental Policy Act ("NEPA") and requires comparable environmental review and analysis.⁵⁶ As such, LDEQ must also consider the indirect and cumulative impacts that the proposed project may cause.⁵⁷ LDEQ, however, has never conducted its own independent public trust analysis on the Magnolia application, as required by Louisiana law, much less this new PSD extension.

1. Magnolia's EAS fails to Identify the Potential and Real Adverse Effects from the Proposed Plant

To fulfill its public trustee duty, LDEQ must determine that "the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible." *In re Oil & Gas Exploration*, 70 So. 3d at 104.

⁵⁵ Save Our Hills v. Louisiana Dep't of Env't Quality, 2018-0100 (La. App. 1 Cir. 11/5/18), 266 So. 3d 916, 928, writ denied, 2019-0057 (La. 3/18/19), 267 So. 3d 87 (citing In re Shintech, Inc., 00-1984 (La. App. 1 Cir. 2/15/02), 814 So.2d 20, 25, writ denied, 02-0742 (La. 5/10/02), 815 So.2d 845 (citing In re Belle Company, L.L.C., 00-0504 (La. App. 1 Cir. 6/27/01), 809 So.2d 225, 238; In re Rubicon, Inc., 95-0108 (La. App. 1 Cir. 2/14/96), 670 So.2d 475, 483)).

⁵⁶ See City Park for Everyone Coalition v. Federal Emergency Management Agency, No. 15-918, 2015 WL 6669666 (E.D. La., Nov. 2, 2015). ("It is true that there are similarities between NEPA environmental review and the analysis that Louisiana law requires as public trustees.")

⁵⁷ See Medina County Environmental Action Ass'n v. Surface Transp. Bd., 602 F.3d 687, 695 (5th Cir. 2010) ("[T]o comply with NEPA, an agency must consider, among other things, the 'cumulative impacts' of the proposed action"); see also, *Gulf Restoration Network v. U.S. Dept. of Trans.*, 452 F.3d 362 (5th Cir. 2006) ("[Environmental] [i]mpacts include 'ecological ... aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.'(citing 40 C.F.R. § 1508.8)); see also, *O'Reilly v. U.S. Army Corps of Engineers*, 477 F.3d 225, 234-35 (5th Cir. 2007).

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Any adequate consideration of the adverse environmental impacts of the Magnolia's facility's criteria emissions must go beyond mere adherence to the NAAQS and determine the actual impacts of the additional pollution in the area surrounding the facility. But the EAS fails to consider all of the potential and real adverse environmental effects of the proposed project providing an unreliable analysis of the constitutional duty to fulfill its public trustee analysis.

Magnolia Power alleges that the facility "will not cause or contribute to a violation of any NAAQS or prescribed PSD Class II increment so no adverse impacts will result from the emissions of the pollutants.⁵⁸ As explained in more detail in the above sections, using this logic, Magnolia Power declines to provide fully realized analysis of the possible effects of the pollutants emitted by the proposed facility.

 $^{^{\}rm 58}$ Application, appendix F at 244

12. Proposed Project Emissions [LAC 33:III.517.D.3]

List the total emissions following the proposed project for this facility or process unit (for process unit-specific permits). Speciate all criteria pollutants, TAP, and HAP for the proposed project.

| Pollutant | Proposed Emission Rate (tons/yr) | | |
|---|----------------------------------|--|--|
| Particulate matter (PM ₁₀) | 115.23 | | |
| Particulate matter (PM _{2.5}) | 115.14 | | |
| SO ₂ | 38.08 | | |
| NOx | 175.19 | | |
| CO | 163.84 | | |
| VOC | 74.46 | | |
| Sulfuric Acid Mist | 26.35 | | |
| 1,3-Butadiene | 0.01 | | |
| Acetaldehyde | 0.86 | | |
| Acrolein | 0.14 | | |
| Ammonia | 147.36 | | |
| Benzene | 0.27 | | |
| Dichlorobenzene | 0.004 | | |
| Ethylbenzene | 0.69 | | |
| Formaldehyde | 15.55 | | |
| n-Hexane | 5.31 | | |
| Naphthalene | 0.03 | | |
| Polynuclear Aromatic Hydrocarbons | 0.05 | | |
| Propylene | 0.003 | | |
| Propylene Oxide | 0.63 | | |
| Polycyclic Organic Matter | < 0.01 | | |
| Toluene | 2.82 | | |
| Xylene (mixed isomers) | 1.38 | | |
| Lead | < 0.001 | | |
| Barium | 0.002 | | |
| Chromium | < 0.001 | | |
| Nickel | 0.001 | | |
| Zinc | 0.01 | | |
| Sulfuric Acid | < 0.01 | | |
| CO2e | 2,569,673.00 | | |
| | 2,000,0,000 | | |
| | | | |
| | | | |
| | | | |

As seen in the chart of proposed project emissions provided in the Application, the list of emissions released by the plant include many potentially harmful substances such as PM2.5, SO2, NOX, AND VOCs that all contribute to higher risks of chronic respiratory diseases, elevated levels of cancer, and other Comments of Sierra Club on Magnolia Power Generating Station November 17, 2021 Page 26 of 33

health risks.⁵⁹ Adverse health effects are associated with all of the pollutants the facility will emit, such as methanol, n-hexane, and formaldehyde. *See* EPA Fact Sheets on Hazardous Air Pollutants (describing harmful human health effects for acetaldehyde, benzene, dichlorobenzene, formaldehyde, methanol, n-hexane, naphthalene, and toluene). Without accurate data including an accurate estimation of criteria pollutant emissions it is impossible for LDEQ to properly identify and plan to mitigate any potential or real adverse effects from the proposed plant.

LDEQ must consider the impacts of both the pollutants in these amounts on their own, as well as the combined effects of these pollutants with the other known toxic air pollutants already being emitted in the area. Iberville Parish already has several major sources of polluting facilities and there are several pending applications for new facilities currently under consideration by the LDEQ in the Iberville and surrounding Baton Rouge area. LDEQ's public trustee duty requires the agency to consider the whole picture, and "determine each permit application's substantive result."⁶⁰ Other states that have a similar public trustee duty require the same.⁶¹ Furthermore, the NEPA regulations require assessing the baseline environmental conditions in the area, along with the impacts from the source and looking at reasonably foreseeable impacts.⁶²

Tools and data exist to analyze the combined impact of Iberville Parish's toxic air emissions along with existing permitted or actual toxic air emissions in the area. A recent study that The Advocate, together with the nonprofit news outlet

⁵⁹ See e.g., National Institute of Environmental Health Sciences, Air Pollution and Your Health, available at https://www.niehs.nih.gov/health/topics/agents/air-pollution/index.cfm ⁶⁰ See In re Am. Waste v. Pollution Control, 93-3163 (La. 9/15/94), 642 So. 2d 1258, 1262. ⁶¹ See Robinson Twp. v. Pennsylvania, 623 Pa. 564, 659 (2013) (holding that the public trustee duty extends to the interests of present and future beneficiaries, requiring trustees to balance long term, incremental environmental impacts in decisions involving natural resources); Sullivan v. Resisting Env't Destruction on Indigenous Lands (REDOIL), 311 P.3d 625, 634-35 (Alaska 2013) (holding that the state constitution requires state's Department of Natural Resources to take a "hard look" at all factors relevant to the public interest, including consideration of cumulative impacts); In re Water Use Permit Applications, 9 P.3d 409, 455 (Haw. 2000) (citing Save Ourselves) (same). ⁶² 40 C.F.R. § 1508.7 (2019) (requiring consideration of cumulative impacts); see also 42 U.S.C. § 4332(C)(2) (requiring both discussion of the "environmental impact of the proposed action," as well as "any adverse environmental effects which cannot be avoided should the proposal be implemented") (emphasis added); Hanly v. Kleindienst, 471 F.2d 823, 831 (2d Cir. 1972) (even a slight increase in adverse condition can "represent the straw that breaks the back of the environmental camel."); see also 40 C.F.R. § 1502.15 (2020) ("The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration, including the reasonably foreseeable environmental trends and planned actions in the area(s).")

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ProPublica, published provides an example of how it can be done. The study analyzes the toxic air pollutants that LDEQ has authorized Formosa Plastics to emit together with existing toxic emissions from area sources.⁶³ Information about area emissions can also be gathered from LDEQ's ERIC database. The data can be run through EPA's RSEI database to determine relative impacts as toxic air pollutants have varying effects on human health due to toxicity, fate, and transport, etc. This is another readily-available analysis that could provide LDEQ with information on the negative environmental impacts of the Magnolia plant in an area already packed with polluting industries. LDEQ must perform or require Magnolia Power to perform an analysis using these or similar tools and provide the public an opportunity to review and comment on it.

a. <u>The permit fails to analyze the adverse and negative impacts of the project</u> <u>on the surrounding community and on communities of color in particular</u>

Before it can grant the permit, LDEQ must conclude that "there are no . . . mitigating measures which would offer more protection to the environmental that the proposed project without unduly curtailing non-environmental benefits to the extent possible." *In re Oil & Gas Exploration*, 70 So. 3d at 104. But the EAS fails to show any data or fully formed potential plans of action that Magnolia has mitigated the impacts of its proposed plant on the neighboring community.

LDEQ is required under Title V to conduct an environmental justice ("EJ") review of proposed major new facilities in an EAS. Under Executive Order 12898 a state environmental regulatory agency that receives federal funds for its Title V program, such as LDEQ, must require an EJ review when making major environmental permitting decisions and identify whether a proposed permit will result in any "disproportionately high and adverse human health or environmental effects" on minority or low-income populations.

The 2019 estimates for Iberville Parish show a racial makeup of 48.8% Black or African American, with a per capita personal income of \$22, 397.⁶⁴ The racial composition for the state is approximately 32.8% black and 62.8% white. *Id.* The data thus shows that the proposed site for the facility is located within an area that has a significantly higher African-American population than the parish as a whole or the state. Iberville Parish is also located along Louisiana's infamous Cancer

U.S. Census Data for Louisiana, available at https://www.census.gov/quickfacts/LA

⁶³ Lylla Younes, In a Notoriously Polluted Area of the Country, Massive New Chemical Plants Are Still Moving in, ProPublica, October 30, 2019,

https://projects.propublica.org/louisiana-toxic-air/

⁶⁴ U.S. Census Data for Iberville Parish, available at

https://www.census.gov/quickfacts/fact/table/ibervilleparishlouisiana/PST045219

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Alley, so named because of its high concentration of facilities releasing toxic pollutants and the high incidence of cancer in the local population.

There are already significant documented impacts to public health and environment of the communities surrounding the multiple plants around the parish. Between 2014-2018 Iberville Parish saw an age-adjusted incidence of cancer was 538 per 100,00 at a 95% confidence rate⁶⁵ while the US rates nationally was 442.4 per 100,000 persons.

The Environmental Assessment performed for the Magnolia plant acknowledges that the adverse impacts of the plant would disproportionately impact the majority communities of color surrounding the plant while providing less benefits for those same communities than other communities less impacted by adverse impacts the proposed plant.⁶⁶ The company presents a chart based on national census data and concludes that there are multiple areas within the vicinity of the proposed facility "that warrant greater concern from an EJ perspective due to relatively high levels of socioeconomic vulnerability".⁶⁷ However, the company declines to present any kind of the required mitigation or remedial measures with respect to the communities but instead says it will "consider these community characteristics in the development of future outreach and community investment initiatives...".⁶⁸ Without an adequate analysis of adverse impacts or potential plans to mitigate these impacts the LDEQ should reject the permit.

b. <u>The permit fails to adequately discuss how it will mitigate Adverse</u> <u>Impacts of Proposed Plant on Neighboring Community</u>

The nearest residences to the facility site are located only half a mile from the proposed facility site. ⁶⁹ Additionally, the proposed site is located within a 6-10mile radius of at least 3 grade level schools including Iberville Elementary School, Crescent Elementary School, and Plaquemine Senior High School increasing risks to children who are vulnerable population. According to Magnolia Power there are little to no physical barriers between the plant and the nearby residential area is likely to expose residents to light and noise pollution but Magnolia Power's only solution is to conduct operational studies to "ensure that the appropriate

⁶⁵ National Cancer Institute, State of Cancer – Incidents Rates Table,

 $[\]label{eq:https://statecancerprofiles.cancer.gov/incidencerates/index.php?stateFIPS=22&areatype=county&cancer=001&race=00&sex=0&age=001&stage=999&year=0&type=incd&sortVariable Name=rate&sortOrder=default&output=0&results \\$

 $^{^{66}}$ Application, appendix F at 262

 $^{^{67}}$ Application, appendix F at 263.

 $^{^{68}\}operatorname{Application}, appendix F at 264$

 $^{^{69}}$ Application, appendix F at 246

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measures...are implemented to mitigate noise exposure".⁷⁰ The company has stated that the company is seeking advice from various orgs but has not provided surveys or disclosed potential impacts. The company's awareness of these potential effects on the community and words taken at face value that they will reach out to whom they dem as appropriate sources does not negate their duty to adequately discuss potential mitigation efforts for the proposed plant.

LDEQ cannot blindly accept the Company's promise to conduct studies or its conclusory assertions that the impacts of the proposed plant on air, water, noise, and light pollution will be minimal. Instead, those studies must be made part of the record so that LDEQ and the public can review and comment on it. Without including those documents in the record, neither the public nor LDEQ can meaningfully evaluate the environmental impacts of the proposed plant, and it would be arbitrary and capricious to approve the permit without those documents.

c. <u>The permit fails to properly analyze or detail mitigation measures to</u> <u>prevent damage to historical sites</u>

Magnolia Power has identified in its partial review of the site area "five previous cultural resource investigations, and 15 recorded cultural resources, within one-mile of the proposed facility" and even more within a two mile radius of the proposed facility site.⁷¹ The company further acknowledges that "the relatively large number of previously recorded historic archaeological sites and historic structures within two miles of the proposed facility suggests there is a high potential for undiscovered historic archaeological sites within the proposed facility site".⁷² These sites have been identified as mostly relating to 19th and early 20th historic cultural resources within the proposed plant area is even greater when considering that the majority of the descendants of the 19th and 20th century enslaved people on the plantation currently make up the majority of the population surrounding the proposed plant site and the most at risk from the pollutants that will be released by the plant.

The company indicates that it "anticipates" applying for permits and performing cultural resource investigations of the area but provides no details for possible mitigation measures.

⁷⁰ Id.

 $^{^{71}\}operatorname{Application}, \operatorname{appendix} F$ at 254

 $^{^{72}}$ Id.

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d. <u>The permit does not look at whether GHG emissions associated with the</u> <u>plant would contribute to human caused climate change and global</u> <u>warming</u>

In order to take a hard look at this issue as the public trustee obligation requires, LDEQ must acknowledge and address the extent to which the proposed permit conflicts with national or local emissions reduction goals and international climate commitments. The U.S. has set ambitious climate reduction targets and established itself as an international leader on protecting the climate. For example, in December 2015 the international climate summit in Paris produced an historic agreement establishing the ambitious goal of limiting warming to 1.5 to 2 degrees Celsius above pre-industrial times, a target that will require ambitious emission reductions beyond those currently identified.⁷³ The nearby City of New Orleans has adopted a similarly ambitious climate plan.⁷⁴ LDEQ must evaluate the GHG impacts of the proposed project to make an informed and reasoned decision, as required by the public trustee obligation.

Magnolia power acknowledges that "the area is subject to extreme weather conditions such as thunderstorms. . .and hurricanes..." but the parish's "distance from the coast reduces the severity of impacts"⁷⁵. However, as recently as May 2021, outside of hurricane season, the city government of Iberville Parish were taking measures to employ flood control barriers to prevent severe flooding of residential areas.⁷⁶ The Parish also employed a temporary moratorium in June of this year on new high-density development in the region east of the Mississippi River because of flooding and draining issues that the residents currently face.⁷⁷

Communities of color and low-income communities are disproportionately at risk of living and suffering from the effects of areas with heavy pollution. A report released by the U.S. EPA in 2021 further confirmed that "the most severe harms from climate change fall disproportionately upon underserved communities" and that "racial and ethnic minority communities are particularly vulnerable to the

⁷³ White House, U.S. Leadership and the Historic Paris Agreement to Combat Climate Change (Dec. 12, 2015), formerly available at <u>https://www.whitehouse.gov/the-press-office/2015/12/12/us-leadership-and-historic-paris-agreement-combat-climate-change</u>.

 $^{^{74}\} https://www.nola.gov/nola/media/Climate-Action/Climate-Action-for-a-Resilient-New-Orleans.pdf.$

⁷⁵ Application, appendix F at 246

⁷⁶ WAFB9, Iberville Parish government working to deploy aqua dams to combat flooding, May 19, 2021, available at https://www.wafb.com/2021/05/18/iberville-parish-governmentworking-deploy-aqua-dams-combat-flooding/

⁷⁷ WAFB9, Iberville Parish Council approves temporary moratorium on development in part of parish, June 15, 2021, available at https://www.wafb.com/2021/06/16/iberville-parish-council-approves-temporary-moratorium-part-parish/

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greatest impacts of climate change."⁷⁸ EPA's report found that Black and African-American individuals are particularly at risk to face higher climate change impacts than all other demographic groups. They are 34% more likely to currently live in areas with the highest projected increases in childhood asthma diagnosis and 40% more likely to currently live in areas with the highest projected increases in extreme temperature related deaths.⁷⁹ In addition, Louisiana in particular is a state that faces the most immediate consequences of a warming planet as it increases the likelihood and severity of both floods and droughts.⁸⁰ These figures only go up as the climate continues to warm and weather patterns change.⁸¹ The risks of illnesses caused by the pollutants released by facilities such as the proposed Magnolia plant also contribute to increasingly high rates of respiratory illnesses and other underlying health conditions that have in part contributed to higher rates of death in people of color and low income communities during the Covid-19 pandemic.⁸²

It is clear that both the immediate surrounding communities, majority of color, as well as the entire state of Louisiana are at a higher risk of climate change related disasters than other parts of the country. Therefore, it is even more important for Magnolia Power and LDEQ to properly do its duty to assess the risks that the proposed plant poses to GHG and other emissions that lead to global warming.

2. LDEQ must fully consider and articulate the real and potential environmental costs of the proposed plant and balance such costs against the alleged economic and social benefits.

The Company concludes that the "social and economic benefits of the proposed facility greatly outweigh its environmental impact."⁸³ This conclusory assertion conclusion, however, is flatly inconsistent with the fact that the lower-income and predominately African-American communities surrounding the facility

⁷⁸ EPA, EPA Report Shows Disproportionate Impacts of Climate Change on Socially Vulnerable Populations in the United States, September 2, 2021, available at https://www.epa.gov/newsreleases/epa-report-shows-disproportionate-impacts-climatechange-socially-vulnerable

⁷⁹ Id.

⁸⁰ See EPA, What Climate Change Means for Louisiana, June 2016, available at https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climatechange-la.pdf

 $^{^{81}}$ *Id*.

⁸² See CDC, Health Equity Considerations & Racial & Ethnic Minority Groups, April 19, 2021, available at https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html

 $^{^{\}rm 83}$ Application, appendix F at 259

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area already over-burdened with air pollution and water pollution; adding to this pollution only exacerbates this burden. The conclusion also ignores the fact that the potential adverse health impacts of the proposed plant will have a proportionately adverse impact on African-Americans.

LDEQ cannot ignore this fact. Indeed, the agency must examine the disparate impact of the added pollution to this African-American community in order to fully examine the social costs of the proposed plant. LDEQ must conduct a disparate impact analysis before it can issue a decision on the proposed permits. LDEQ must consider less discriminating alternatives and may not issue these permits if less discriminating alternatives exist. LDEQ must reject the proposed plant will have on the residents of neighboring communities. LDEQ cannot fulfill its public trustee duty by relying on this deficient EAS. Therefore, LDEQ must reject the proposed plant will have on the residents of neighboring communities. LDEQ cannot fulfill its public trustee duty by relying on this deficient EAS. Therefore, LDEQ cannot fulfill its public trustee duty by relying on the residents of neighboring communities.

3. The permit does not adequately address the selection of proposed sites or no action alternative

The public trust doctrine requires an examination of alternatives that would offer more protection to the environment without unduly curtailing nonenvironmental benefits. *In re Rubicon, Inc.*, 95-0108 (La. App. 1 Cir. 2/14/96), 670 So. 2d 475, 483 (LDEQ must consider, among other things, whether "there are alternative projects or alternative sites or mitigating measures which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable").

But an alternatives analysis must detail *all* search criteria and provide a description of the sites evaluated. The information must be in the record for public comment. The information must provide the characteristics of each potential alternative site so that LDEQ can evaluate whether IGP Methanol has made a showing that are no alternative sites that would offer greater environmental protections.

Magnolia Powers gives no indication as to where the over 25 alternative locations they were considering were or why they were not chosen over the current proposed site. They simply state that they have "considered alternative[s]" and that the proposed site "represents the most effective approach to achieving the proposed Comments of Sierra Club on Magnolia Power Generating Station November 17, 2021 Page 33 of 33

facility's goals".⁸⁴ Without this information the company has not conducted a proper assessment of alternatives for LDEQ to grant the permit.

While the company provides a no-action alternative argument, the argument is missing several key factors in the potential harms and risks that the proposed plant poses. The No-Action Alternative section only mentions "potential minimal adverse impacts (e.g., impacts to wetlands, surface water quality, air and noise quality)."⁸⁵ It does not mention the potentially severe impacts on the surrounding community due to climate change, loss of cultural artifacts, pollution, or flood risk.

CONCLUSION

For these reasons, and for the reasons discussed more fully in the Comments of Dr. Sahu, Sierra Club respectfully requests that LDEQ deny Magnolia's Power Generating Station Unit 1 Proposed Initial Part 70 Air Operating Permit, AI Number 222431, Permit Number 1280-00292-V0, 1280-00292-IV0 and PSD-LA-839, and Activity Numbers PER20200003, PER20200001, and PER20200002. In addition, Sierra Club respectfully requests an opportunity for members of the public to attend a hearing on this draft permit and submit further comment.

 $^{^{84}}$ Application, appendix F at 265 85 Id.