

TCEQ AIR QUALITY PERMIT NUMBER 56552

APPLICATION BY	§	BEFORE THE
CABOT NORIT AMERICAS, INC.	§	
ACTIVATED CARBON	§	TEXAS COMMISSION ON
PRODUCTION FACILITY	§	
MARSHALL, HARRISON	§	ENVIRONMENTAL QUALITY
COUNTY		

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the New Source Review Authorization application.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk timely received comment letters from the following persons: Frankie Baxter and Pam Spurr. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.texas.gov.

BACKGROUND

Description of Facility

Cabot Norit Americas, Inc. applied to the TCEQ for a New Source Review Authorization under Texas Clean Air Act (TCAA), § 382.055. This will authorize the continued operation of an existing plant that may emit air contaminants.

This permit will authorize the Applicant to continue operation of an existing permitted facility in which three kilns produce activated carbon from lignite. Ancillary sources and equipment also authorized via this permit are: an ash pit, refractory pit, conveyors, dust collectors, storage tanks, control equipment, fugitives, and associated maintenance, startup, and shutdown (MSS) emissions. The plant is located at 3200 University Avenue, Marshall, Harrison County. Contaminants authorized under this permit include volatile organic compounds (VOC), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), hydrogen sulfide (H₂S), and particulate matter (PM) including particulate matter with diameters of 10 microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}).

Procedural Background

To continue operating an existing permitted plant that may emit air contaminants, the person planning the continued operation must obtain a permit renewal from the commission. This permit application is for a permit renewal of Air Quality Permit Number 56552.

The permit application was received on May 27, 2014, and declared administratively complete on June 9, 2014. The Notice of Receipt and Intent to Obtain an Air Quality Permit (public

notice) for this permit application was published in English on June 25, 2014, in the *Marshall News Messenger* and in Spanish on June 25, 2014, in *La Opinion*.

COMMENTS AND RESPONSES

COMMENT 1: Health & Welfare / Air Pollution:

A commenter stated she was concerned about air pollution. A commenter stated that the air pollution from the plant aggravates her chronic obstructive pulmonary disease. A commenter stated that TCEQ should require the Applicant to prove they won't hurt those in the community who suffer from respiratory diseases.

RESPONSE 1: As part of previous permitting actions at the plant, a technical review was conducted, which consisted of an assessment of best available control technology (BACT) and an impacts review of human health and welfare effects related to emissions from operation. The technical review found that the operation of the plant would comply with all the rules of the TCEQ and the intent of the TCAA, and no adverse health effects were expected. The current permit renewal application does not seek to authorize any new facilities, nor does it authorize any modification to the existing plant. Further, the permit renewal application does not request an increase in the plant's allowable emission rates, nor does it request to emit any new air pollutants. Therefore, reevaluation of previous health and welfare effects is not necessary for this permit renewal application.

Generally, potential impacts to human health and welfare or the environment are determined by comparing air dispersion modeling predicted emission concentrations from the proposed facility to appropriate state and federal standards and effects screening levels.¹ The specific health-based standards or guidance levels employed in evaluating the potential emissions include the National Ambient Air Quality Standards (NAAQS), TCEQ standards contained in Title 30 of the TAC, and TCEQ Effect Screening Levels (ESLs).²

NAAQS are created by the United States Environmental Protection Agency (EPA) and are set to protect sensitive members of the population such as children, the elderly, and individuals with existing respiratory conditions. The NAAQS, as defined in 40 Code of Federal Regulations (CFR) § 50.2, include both primary and secondary standards. The primary standards are those which the Administrator of the EPA determines are necessary, with an adequate margin of safety, to protect the public health, including sensitive members of the population such as children, the elderly, and individuals with existing lung or cardiovascular conditions. Secondary NAAQS are those which the Administrator determines are necessary to protect the public welfare and the environment, including animals, crops, vegetation, and buildings, from any known or anticipated adverse effects associated with the presence of an air contaminant in the ambient air. The standards are set for criteria pollutants: ozone, lead (Pb), CO, SO₂, NO_x, and respirable PM. "Criteria pollutants" are those pollutants for which a NAAQS has been established.

After a permit application's modeling review is complete, in most instances, the modeling

¹Documents referenced in this response that are available on the TCEQ website are also available in printed form at a small cost from the TCEQ Publications office at 512-239-0028.

²To view the ESL list or obtain more information on ESLs, visit the TCEQ website at www.tceq.texas.gov/toxicology/esl/list_main.html

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results are then sent to the TCEQ's Toxicology Division to evaluate whether emissions from the proposed facility are expected to cause health or nuisance problems. The Toxicology Division reviews the results from air dispersion modeling by comparing those results to the TCEQ ESLs. ESLs are constituent-specific guideline concentrations used in TCEQ's effects evaluation of constituent concentrations in air. These guidelines are derived by the Toxicology Division and are based on a constituent's potential to cause adverse health effects, odor nuisances, and effects on vegetation. Health-based screening levels are set at levels lower than levels reported to produce adverse health effects, and as such are set to protect the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. Adverse health or welfare effects are not expected to occur if the air concentration of a constituent is below its ESL. If an air concentration of a constituent is above the screening level, it is not necessarily indicative that an adverse effect will occur, but rather that further evaluation is warranted. Generally, maximum concentrations predicted to occur at a sensitive receptor which are at or below the ESL would not be expected to cause adverse effects.

With regards to this specific facility, appropriate air dispersion modeling was performed in 2010 via site-wide modeling in support of an amendment to Construction Permit No. 78421 in which federal review (Prevention of Significant Deterioration, Permit No. PSDTX1183) was triggered. The likelihood of whether adverse health effects caused by emissions from Cabot Norit's plant could occur in members of the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions, was determined by comparing the plant's predicted air dispersion computer modeling concentrations to the relevant state and federal standards and ESLs. The permit reviewer also used the modeling results to verify that predicted ground level concentrations from the proposed plant were not likely to adversely impact off-property receptors. TCEQ background concentrations from the geographic area surrounding the site or other appropriate background concentrations are added to the modeled concentrations when applicable. The overall evaluation process provides a conservative prediction that is protective of the public health. The modeling predictions were reviewed by the TCEQ Air Permits Division, and the results were determined to be protective of public health and welfare.

In addition to complying with the federal and state standards and guidelines mentioned above, applicants must also comply with 30 TAC § 101.4, which prohibits nuisance conditions. Specifically the rule states, "No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property." As long as the sources are operated in compliance with the terms of its permits, nuisance conditions are not expected. According to the plant's maximum allowable³ emission rates table (MAERT) in the draft permit, the facility will emit approximately 132 tons per year PM, 499 tons per year NO_x, 342 tons per year SO₂, 412 tons per year CO, and 108 tons per year volatile organic compounds (VOC). These emissions are not expected to create nuisance conditions.

Individuals are encouraged to report any concerns about nuisance issues or suspected

³ The term "allowable" means the maximum emission rate of a specific pollutant from a given source, as specified in the permit.

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noncompliance with terms of any permit or other environmental regulation by contacting the TCEQ Regional Office at 903-535-5100, or by calling the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186. If the plant is found to be out of compliance with the terms and conditions of the permit, it will be subject to possible enforcement action. Citizen-collected evidence may be used in such an action. See 30 TAC § 70.4, Enforcement Action Using Information Provided by Private Individual, for details on gathering and reporting such evidence. Under the citizen-collected evidence program, individuals can provide information on possible violations of environmental law and the information can be used by the TCEQ to pursue enforcement. In this program, citizens can become involved and may eventually testify at a hearing or trial concerning the violation. For additional information, see the TCEQ publication, "Do You Want to Report an Environmental Problem? Do You Have Information or Evidence?" This booklet is available in English and Spanish from the TCEQ Publications office at 512-239-0028, and may be downloaded from the agency website at www.tceq.texas.gov/ (under Publications, search for document number 278).

COMMENT 2: Upsets / Emission Events:

A commenter stated that Cabot Norit is not reporting all emissions. A commenter stated that Cabot Norit is not reporting upsets and that a major event and explosion on July 7, 2013, was only reported via community complaint. A commenter stated that TCEQ should require proper controls, such as flares, for emissions events. Another commenter asked that TCEQ and/or Cabot Norit evaluate process conditions related to the various public complaints.

RESPONSE 2: The TCEQ defines an upset event as an unplanned or unanticipated occurrence or excursion of a process or operation that results in an unauthorized emission of air contaminants. An upset event that results in unauthorized emissions from an emission point is an emissions event. Emissions resulting from emissions events are unauthorized. If an upset occurs, the plant must comply with the state requirements in 30 TAC § 101.201 regarding the recording and reporting of emissions events. If the plant fails to report in accordance with 30 TAC § 101.201, the commission may initiate enforcement action for both failing to report the emissions event and the underlying emissions event itself.

Cabot Norit is currently working with the TCEQ Tyler Regional Office and the TCEQ Enforcement Division regarding alleged emissions events which occurred in 2009, 2010, and 2013. Between October 2009 and September 2014, TCEQ Regional staff performed 118 investigations of this plant in order to determine any possible violations and compliance issues. The investigations conducted between October 2009 and September 2014 consisted of 12 on-site investigations and 106 records reviews. These investigations documented violations of TCEQ rules including emissions events violations.

Violations are usually addressed through a notice of violation letter that allows the operator a specified period of time within which to correct the problem. The violation is considered resolved upon timely corrective action. A formal enforcement referral will be made if the cited problem is not timely corrected, if the violation is repeated, or if a violation is causing substantial impact to the environment or neighbors. In some cases, formal enforcement results in an agreed enforcement order including penalties and technical requirements for corrective action. Penalties are based upon the severity and duration of the violation(s). Violations are maintained on file and are included in the calculation of a facility and an applicant's compliance history. (Note that the compliance history review performed for this proposed renewal is

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discussed starting with paragraph six of Response 4.) Process conditions resulting in these noncomplying events are considered and evaluated as part of the enforcement investigations and proceedings.

Agreed orders between the applicant and TCEQ were issued in 2009, 2010 (2), 2012, and 2014, with the Applicant paying total administrative penalties greater than \$125,000 from the agreed orders. Corrective measures at the plant are included in these agreed orders. For example, the 2014 agreed order corrective measures included: sampling of stacks to show compliance with maximum allowable emission rates; notification of incidents / upsets and training on timely notification reports; establishment of procedures to safely resolve cyclone plugs which are alleged to have caused a fire in June 2013; and shut-down and installation of safety devices on the multi-hearth furnaces.

Emissions events do not exempt the plant from the prohibition of the creation of a nuisance found in 30 TAC § 101.4 and complying with opacity limits as set forth in 30 TAC Chapter 111. Individuals are encouraged to report any concerns about nuisance issues, upsets or suspected noncompliance with terms of any permit, or other environmental regulation by contacting the Tyler Regional Office (903-535-5100), or by calling the twenty-four hour toll-free Environmental Complaints Hotline at 1-888-777-3186. The TCEQ investigates all complaints received. If the plant is found to be out of compliance with the terms and conditions of the permit, it will be subject to possible enforcement action. Additionally, the general public can view the emissions event database on the TCEQ website at www.tceq.texas.gov/nav/cec/.

Regarding controls for the plant which are authorized by this permit, please see Response 4.

COMMENT 3: Plant Operation / Noncompliance and Enforcement:

A commenter stated that Cabot is covering up their non-compliance. A commenter stated that there is a culture of dishonesty and cover up at Cabot Corporation. A commenter stated that there have been a number of explosions at the plant, and recommended that TCEQ require that Cabot Norit evaluate the history of explosions at the plant and describe how it plans to prevent future explosions. The commenter noted that employees mention black clouds when loading or unloading ash. A commenter stated that Cabot Norit should evaluate the history of the boilers to determine if they have been damaged and if they have been replaced. A commenter stated that TCEQ should take steps to ensure that west Marshall isn't the next West, Texas.

RESPONSE 3: The plant must comply with the requirements in 30 TAC § 101.201 regarding the recording and reporting of emissions events. If the plant fails to report in accordance with 30 TAC § 101.201, the commission will initiate enforcement action for failing to report the emissions event and the underlying emissions event itself. Violations are usually addressed through a notice of violation letter that allows the operator a specified period of time within which to correct the problem. The violation is considered resolved upon timely corrective action. A formal enforcement referral will be made if the cited problem is not timely corrected, if the violation is repeated, or if a violation is causing substantial impact to the environment or neighbors. In some cases, formal enforcement results in an agreed enforcement order including penalties and technical requirements for corrective action. Penalties are based upon the severity and duration of the violation(s). Violations are maintained on file and are included in the calculation of a facility and an applicant's compliance history. See Response 2 for a detailed discussion of specific violations and TCEQ enforcement actions at the plant.

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With regard to observation of and/or exposure to PM by employees, the TCEQ's jurisdiction is established by the Legislature and is limited to the issues set forth in statute. Accordingly, the TCEQ does not have jurisdiction to consider employee health and safety, noise, or traffic at the plant when considering whether to approve or deny an application for an air permit. Concerns about on-site safety should be brought to the attention of the Occupational Health and Safety Administration (OSHA). The loading and unloading of ash as described in the permit is typical for this type of plant; however, if an employee believes the allowable limits or conditions of the permit are being exceeded, or if a nuisance condition exists, the individual may anonymously contact the Tyler Regional Office at 903-535-5100, or the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186, and submit a complaint.

COMMENT 4: Best Available Control Technology (BACT):

Commenters stated that the Applicant should be required to demonstrate removal efficiency of hydrogen chloride (HCl) in their kilns. The Applicant should have to perform a stack test to prove 94% SO₂ removal efficiency for the kilns. A commenter stated that pollutants are not being controlled. A commenter asked TCEQ to make Cabot Norit tell the truth and control their emissions.

RESPONSE 4: Pursuant to 30 TAC § 116.314(a), "The executive director shall renew a permit and notify the permit holder in writing if it is determined that the facility meets the requirements of this subchapter." Subchapter D of Section 116, concerning permit renewals, provides for a limited application review by the Executive Director when the applicant has a satisfactory compliance history and does not seek any change to production rates, controls, raw materials, character of emissions, or emissions rates.

The applicant originally received a construction permit for these kilns and associated equipment in 2004. The issued permit represented that the pollution controls employed at Cabot Norit's facility met BACT as required by applicable state law. As part of that permit evaluation process, the permit reviewer identified all sources of air contaminants at the facility and verified that the facility would be using BACT applicable for the sources and types of contaminants emitted. BACT is based upon control measures that are designed to minimize the level of emissions from specific sources at a plant. Applying BACT results in requiring technology that best controls air emissions with consideration given to the technical practicability and economic reasonableness of reducing or eliminating emissions. See TCAA, § 382.0518 and 30 TAC §116.111(a)(2)(C).

The use of existing appropriate control measures will control the amount of air contaminants emitted into the atmosphere by this facility. The contaminants emitted from the sources authorized under this permit are VOC, NO_x, CO, SO₂, H₂S and PM₁₀/PM_{2.5}. The primary control measures applied to this facility are: flue gas combustion, capture, heat recovery, scrubbing, and separation of air and water before the clean gas is exhausted. Exhaust from all three of the separators is combined and is emitted through the main stack (EPN MAINSTACK). Each kiln has an emergency stack, which is also used during kiln startup and shutdown (when there is no lignite in the kiln). The Applicant must notify the Regional Office anytime the emergency stacks are used. Emissions from the other emission point numbers (EPNs) involved with material handling are equipped with fabric filter dust collectors with an outlet grain PM loading limit of 0.01 grains per dry standard cubic foot (gr/dscf). Natural gas limited to 5 gr sulfur per 100 dscf is used for natural gas-fired units. Other control measures required by the permit include

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restrictions on visible fugitive emissions, lignite feed rates, and recordkeeping of process and control equipment parameters. The controls are considered reasonable given the age, size, and impact of emissions from the facility and are BACT.

Federal Periodic Monitoring and Compliance Assurance Monitoring apply, and require monthly observations of opacity from the MAINSTACK, quarterly observations of other EPNs, and daily monitoring of pressure drop across fabric filters that are used to demonstrate compliance with the permit limits. The applicable federal requirements for this permit renewal do not require further controls or monitoring requirements (i.e., demonstration of removal efficiencies) beyond those already present for contaminants such as hydrogen chloride or SO₂.

TCAA § 382.055(e) and 30 TAC § 116.311(b)(2) state that the commission shall impose only economically reasonable and technically practicable conditions for a permit renewal of a facility considering the age of the facility and the impact of its emissions on the surrounding area. Cabot Norit requested a permit renewal without any change to production rates, controls, raw materials, character of emissions, or emission rates. The Executive Director's finding that the facility operations would not result in adverse health effects remains constant and unchanged.

During the technical review, a compliance history review of the company and the site is conducted based on the criteria in 30 TAC Chapter 60. These rules may be found at the following website: <http://www.tceq.state.tx.us/rules/index.html>. The compliance history for the company and site is reviewed for the five year period prior to the date the permit application was received by the Executive Director. The compliance history includes multimedia compliance related components about the site under review. These components include the following: enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs, and early compliance.

Cabot Norit's permit application was received after September 1, 2002, and the company and site have been rated and classified pursuant to 30 TAC Chapter 60. A company and site may have one of the following classifications and ratings:

- High: rating below 0.10 – complies with environmental regulations extremely well;
- Satisfactory: rating 0.10 – 55.00 – generally complies with environmental regulations;
- Unsatisfactory: rating greater than 55.00 – fails to comply with a significant portion of the relevant environmental regulations.

This site has a rating of 6.84 and a classification of "Satisfactory." The company rating and classification, which is the average of the ratings for all sites the company owns, is 7.94 and a classification of "Satisfactory."

Cabot Norit's compliance history rating of "satisfactory" does not fall into the "poor performer" category. Therefore, because the renewal application meets all of the applicable regulation requirements, and the Applicant's compliance history is satisfactory, the Executive Director has no grounds to deny the renewal of permit number 56552.

COMMENT 5: Public Meeting Request:

A commenter requested a public meeting in Marshall where Cabot Norit must face the public.

RESPONSE 5: In order to determine whether a public meeting should be held, the Executive Director considers the factors set out in 30 TAC § 55.154. These rules require the Executive Director to hold a public meeting if: (1) the Executive Director determines that there is a substantial or significant degree of public interest in an application; (2) a member of the legislature who represents the general area in which the plant is located or proposed to be located requests that a public meeting be held; or (3) when a public meeting is otherwise required by law. Given the limited number of public comments and requests for a public meeting, the Executive Director determined that there was not a substantial or significant degree of public interest in this application to warrant a public meeting.

COMMENT 6: Confidential Information in the Application:

Commenters stated that Cabot is hiding important information in their application. Commenters stated that process descriptions, process flow diagrams, and calculations are labeled as confidential and hidden from the public. A commenter stated that it is unlikely that emissions sources such as gasoline fueling pumps, diesel fueling pumps, dust collectors, ash pit fugitives, general plant fugitives, refractory pit fugitives, lime tanks, main 50 percent sodium hydroxide (NaOH), and /or main HCl storage tanks have confidential processes or calculations. Some process descriptions, sources, controls, and calculation bases (scrubber pH and flow rate requirements) have been revealed and discussed in TCEQ documents (such as the Special Conditions and Technical Review), and therefore, are not confidential. A commenter noted that process data should be as detailed as in previous applications to ensure that this application is a renewal and not a modification.

RESPONSE 6: Process descriptions, process flow diagrams, plot plans, emissions sources (such as gasoline fueling pump, diesel fueling pump, dust collector, ash pit fugitives, general plant fugitives, refractory pit fugitives, lime tank, main 50 percent NaOH, and main HCl storage tanks), and calculations were included in the confidential portion of the application. According to THSC § 382.041, an agent of the commission "may not disclose information submitted to the commission relating to secret processes or methods of manufacture or production that is identified as confidential when submitted." The TCEQ interprets this data as a secret method of production and not subject to 40 CFR 51.166(q)(2)(ii). If information submitted to the TCEQ under a confidential stamp is requested through a Public Information Act (PIA) request, the TCEQ would be required to request an opinion from the Texas Attorney General regarding whether the information may be excepted from disclosure under the PIA.

COMMENT 7: Speciated / Hazardous Air Pollutants:

A commenter stated that the Applicant should identify the individual emissions of NaOH, lime, and HCl, rather than including them all collectively under PM. A commenter stated that TCEQ should properly evaluate mercury, lead, and manganese emissions and require proper controls for each of these emissions. A commenter stated that mercury, lead, manganese, HCl, hydrogen fluoride (HF), and sulfuric acid (H₂SO₄) are not included in the permit, and therefore, the plant should shut down until these pollutants are permitted. A commenter stated that the Applicant must have authorization for HCl, HF, and H₂SO₄ emissions. A commenter stated that TCEQ should impose chlorine and fluorine limits on the coal.

RESPONSE 7: As part of the permit evaluation process, the permit reviewer identifies all sources of air contaminants at the proposed facility, assures that the facility will be using the BACT applicable for the sources and types of contaminants emitted, and determines that no adverse effects to public health, general welfare, or physical property are expected to result from a facility's proposed emissions. NAAQS compliance is evaluated for ozone, CO, Pb, NO_x, respirable PM, and SO₂. TCEQ standards stated in 30 TAC Chapter 112 address maximum ground level concentrations at or beyond the property line for sulfur compounds. It is not uncommon for minute emissions of contaminants to not be speciated on the MAERT, even if the impacts of those contaminants have been reviewed and found acceptable. Constituents such as mercury, manganese, HCl, HF, H₂SO₄, lime (calcium hydroxide, CaH₂O₂), NaOH, chlorine, and fluorine are also reviewed using TCEQ's ESLs, even if these constituents are not speciated on the MAERT. ESLs are constituent-specific guideline concentrations used in TCEQ's evaluation of constituent concentrations in air, as discussed previously in Response 1.

For the sources authorized by this permit, appropriate air dispersion modeling (discussed further in Response 1) was performed via site-wide modeling for this site in 2010 in support of an amendment to Construction Permit No. 78421. As part of the amendment review, the likelihood of whether adverse health effects caused by emissions from Cabot Norit's plant could occur in members of the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions, was determined by comparing the plant's predicted air dispersion computer modeling concentrations to the relevant state and federal standards and ESLs. The permit reviewer used modeling results to verify that predicted ground level concentrations from the proposed plant are not likely to adversely impact off-property receptors. TCEQ background concentrations from the area surrounding the site or other appropriate background are added to the modeled concentrations when applicable. The overall evaluation process provides a conservative prediction that is protective of the public. The modeling predictions were reviewed by the TCEQ Air Permits Division, and the modeling analysis was determined to be acceptable. Constituents such as mercury, lead, manganese, HCl, HF, H₂SO₄, NaOH, calcium oxide (CaO), chlorine, and fluorine were included in this analysis and are authorized. Because these contaminants have previously been reviewed and authorized, and because the Applicant is seeking a renewal with no increases in emission rates, no change in the character of the emissions, and no change in the controls, the Commission's finding that the facility operations would not result in adverse health effects remains constant and unchanged.

COMMENT 8: EPNs Missing:

Commenters noted that points mentioned in the application are not listed (main stack) and that the Applicant failed to locate emissions points in the permit application.

RESPONSE 8: Eighteen different emission points are authorized by this permit and are identified on the application and the MAERT. One of these emission points is the Main Stack which exhausts emissions produced from Kilns 2, 3, and 4 after controls are applied.

COMMENT 9: New Requirements to Ensure Compliance with the Law:

Commenters stated that the Applicant should be required to measure sulfur or perform a sulfur analysis in (every pound of) their coal before they use it. A commenter would like a copy of the permit to review and comment on before it is issued. A commenter stated that the permit

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should have new requirements to ensure compliance with all laws and to ensure protection of the environment.

RESPONSE 9: Air quality permit applications are evaluated to determine whether standards outlined in the Texas Clean Air Act (TCAA) and applicable state and federal rules and regulations are met. TCEQ standards stated in 30 TAC Chapter 112 address maximum ground level concentrations at or beyond the property line for sulfur compounds. See discussion of Health and Welfare and Air Pollution in Response 1 and speciated / hazardous air pollutants in Response 7.

The TCEQ cannot deny a permit if the Applicant demonstrates that all applicable statutes, rules, and regulations will be met. Special conditions and a MAERT are created to establish guidelines for the operation of the facility. The permit conditions are developed such that a plant that is operated within the terms and conditions of its permits should be able to operate in compliance with standards outlined in the TCAA and applicable state and federal rules and regulations. As stated previously, Subchapter D of Section 116, concerning permit renewals, provides for a limited application review by the Executive Director when the Applicant has a satisfactory compliance history, and does not seek any change to production rates, controls, raw materials, character of emissions, or emissions rates.

30 TAC § 116.311(b)(2) states that the commission shall impose only economically reasonable and technically practicable conditions for a permit renewal of a facility in considering the age of the facility and the impact of its emissions on the surrounding area. Cabot Norit requested a permit renewal without any change to production rates, controls, raw materials, or character of emissions. The Commission's finding that the facility operations would not result in adverse health effects is unchanged. Further, existing conditions and requirements of NSR Permit No. 56552 and Federal Site Operating Permit No. O3335 ensure that the plant remains in compliance with the law. Therefore, because the renewal application meets all of the applicable regulation requirements, and the Applicant's compliance history is satisfactory, the Executive Director has no grounds to deny the renewal of permit number 56552.

COMMENT 10: Contested Case Hearing:

A commenter requested a contested case hearing.

RESPONSE 10: The contested case hearing request received for this renewal application will be processed in accordance with the TCAA and applicable TCEQ rules. The TCAA provides that the commission may not hold a contested case hearing for a renewal application where there is no change in the allowable emissions rates or in the emission of any new contaminant, unless the plant is classified as a "poor performer" under the commission's compliance history rules.³ Cabot Norit's compliance history rating does not fall into the "poor performer" category. A final determination of whether a contested case hearing will be granted will be made by the commission in an open meeting.

COMMENT 11: Emission Rates and Calculations:

Commenters stated that Cabot may be emitting HDR, LFP, speciated compounds from Ash pit Fugitives, and Refractory Fugitives, and requested that Cabot identify these chemicals. A

³ TCEQ compliance history rules can be found in 30 TAC Chapter 60.

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commenter stated that there is no reference to Lignite or Activated Carbon emissions, and the Applicant should explain why these are not emitted. A commenter stated that the coal should have a sulfur limit when being burned and asked what the limit is. A commenter stated that the calculations of the ash pit emissions were doubtful: 0.002 TPY (4 lb/yr) PM. A commenter stated that the calculations of General Plant Fugitive Emissions were doubtful: 8 lb/yr PM and that fugitive PM emissions from facilities seem to be dramatically underestimated.

RESPONSE 11: HDR and LFP are acronyms used in the application by Cabot Norit which refer to Hydro Darco R (a registered trademark activated carbon product produced at the plant) and Lignite Furnace Product (activated carbon product from the lignite furnace process), respectively. Lignite and activated carbon emissions, as well as speciated compounds from fugitive sources, were previously reviewed and accepted with respect to the NAAQS, TCEQ standards, and TCEQ ESLs. These emissions are included in the PM₁₀ and PM_{2.5} emission rates for these sources.

Sulfur content of the lignite is considered by the Applicant to be confidential. Sulfur dioxide limits shown in the MAERT were calculated based on lignite feed rates, stack tests, and efficiencies of control equipment, which include a saturator and a venturi scrubber with addition of an alkaline reagent. The addition of a reagent ensures that the pH of the scrubber liquid is high enough to absorb SO₂. Special Condition No. 9 requires proper operation of the venturi scrubber, including proper pH of the scrubber liquid, and Special Condition No. 12 requires associated recordkeeping.

Ash pit and refractory pit fugitives were calculated based on EPA's Compilation of Air Pollutant Emission Factors guidance for fugitive emissions sources from aggregate handling and storage piles (AP-42 Manual, Section 13.2.4). The EPA emission factor is determined from an empirical equation based on particle size, mean wind speed, and material moisture content. The factor is multiplied by the amount of material transferred to determine the estimated PM₁₀ emissions of 4 lb/yr from each of these sources. Emissions from other fugitive sources (Kilns 2, 3, and 4, and general plant fugitive emissions associated with this NSR permit) are estimated as 10.4 lb/yr. Therefore, the permit reviewer confirmed that the calculation of ash pit and refractory pit fugitives emissions provided for in the application were accurate.

Note that other EPNs (not labeled fugitives) authorize emissions from a conveyor, a mill, and dust collectors. Several other NSR permits, standard permits, and permits by rule authorize other emission points at this site.

COMMENT 12: Monitoring / Sampling:

Commenters stated that TCEQ should impose mercury, lead, and manganese limits on the coal, including sampling requirements. A commenter stated that the current permit has no method of ensuring compliance with VOC and CO limits. A commenter stated that Cabot Norit should be required to measure and report combustion in the boilers.

RESPONSE 12: Subchapter D of Section 116, concerning permit renewals, provides for a limited application review by the Executive Director when the applicant has a satisfactory compliance history, and does not seek any change to production rates, controls, raw materials, character of emissions, or emissions rates. Pursuant to 30 TAC § 116.314(a), "The executive director shall renew a permit and notify the permit holder in writing if it is determined that the

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facility meets the requirements of this subchapter.”

The federal standards (NAAQS) include limits on CO, lead, and ozone. VOC is also considered as it is a pre-cursor to ozone formation. Further, ESLs are used in TCEQ's evaluation of mercury and manganese concentrations in the air. See Response 1 for a discussion of how ESLs are developed. For the sources authorized by this permit, appropriate air dispersion modeling was performed via site-wide modeling for this site in 2010. Representations of constituents such as mercury, lead, and manganese were included in this analysis and are authorized. VOC and CO emissions are monitored via stack sampling, which was conducted prior to issuance of the NSR permit. The plant is required to maintain records demonstrating compliance with maximum allowable emission rates. The applicable federal requirements for this permit renewal do not require further controls or monitoring requirements beyond those already present for combustion of the boilers or for mercury, lead, manganese, VOC, or CO. The site as a whole is subject to federal Title V requirements, which include periodic and compliance assurance monitoring and associated reporting of emissions.

30 TAC § 116.311(b)(2) states that the commission shall impose only economically reasonable and technically practicable conditions for a permit renewal of a facility in consideration of the age of the facility and the impact of its emissions on the surrounding area. Cabot Norit requested a permit renewal without any change to production rates, controls, raw materials, or character of emissions. The Commission's finding that the facility operations would not result in adverse health effects is unchanged. Therefore, because the renewal application meets all of the applicable regulation requirements, and the Applicant's compliance history is satisfactory, the Executive Director has no grounds to deny the renewal of permit number 56552

COMMENT 13, Nuisance:

A commenter requested PM limits, noting that the plant is a nuisance on the west side of Marshall.

RESPONSE 13: Particulate matter (PM) limits are present for this permit, in both the Special Conditions and the MAERT. Opacity / visible emissions limitations serve as a surrogate for PM limits, and are limited to 15% from the Kilns, 20% from the lignite feed conveyors, and 30% from other stationary vents in Special Condition No. 3. Special Condition No. 3 also describes how the Applicant is to show compliance with these opacity limits. Special Condition Nos. 4–7 require that the plant not cause a nuisance, that emissions events be reported to the TCEQ regional office, that dust collectors meet a minimum collection standard, and that the plant properly maintain and operate all air pollution controls. The MAERT for this permit also contains particulate matter limits for the kilns (including fugitives, startup, and shutdown operations), as well as other bins, fugitives, dust collectors, conveyors, stationary vents, and a tank.

In addition to complying with the federal and state standards and guidelines discussed in Response 1 and elsewhere, applicants must also comply with 30 TAC § 101.4, which prohibits nuisance conditions. Specifically the rule states, “No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property.” As long as the plant is operated in compliance

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with the terms of its permits, nuisance conditions are not expected. According to the MAERT in the draft permit, these permitted sources will emit approximately 132 tons per year of particulate matter. These emissions are not expected to create nuisance conditions.

See Response 1 for instructions on reporting nuisance conditions.

COMMENT 14: Deficiencies in Initial Application:

A commenter asked what item (4) on pages 15, 16, 17 of the application meant.

RESPONSE 14:

The item (4) on pages 15 through 17 (Table 1(a)) of the initial application refers to a footnote found in the draft MAERT. The footnote, which is standard language regarding fugitive emissions and has been renumbered for the current project to (6), states: Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

COMMENT 15: Deficiencies in Public Notice:

A commenter requested proper public notice. Specifically, the commenter requested that the Applicant go through Public Notice again with all required public information and without claiming any information as confidential.

RESPONSE 15: For permit applications subject to 30 TAC § 39.411(b)(8), (c)(5), the Applicant is required to make a copy of the application and the Executive Director's preliminary decision on the application available for review and copying at a public place in the county where the plant is located. Cabot Norit has provided TCEQ with documentation that it met the stated public notice regulatory requirements as laid out in the Procedural Background above. Company representatives confirmed that the permit application was available at the Marshall Public library during the comment period. Additionally, the draft permit and other updates to the application are kept in a file maintained by the permit engineer reviewing the application until the permit becomes effective. During the permit review, information regarding the application can be obtained from the reviewing engineer and/or other engineers on the applicable NSR team. The file containing the effective permit, technical summary, and all other information are returned to the file room (512-239-2900) at the end of the technical review. The permit reviewer may be contacted in order to determine how copies of illegible or missing permits can be obtained.

Process descriptions, process flow diagrams, plot plans, emissions sources, and calculations were included in the confidential portion of the application. According to TCAA, § 382.041, an agent of the commission "may not disclose information submitted to the commission relating to secret processes or methods of manufacture or production that is identified as confidential when submitted." The TCEQ interprets this data as a secret method of production and not subject to 40 CFR 51.166(q)(2)(ii). If information submitted to the TCEQ under a confidential stamp is requested through a Public Information Act Request, the TCEQ would be required to request an opinion from the Texas Attorney General regarding whether the information is to be released.

COMMENT 16: Federal Requirements:

A commenter stated that EPA regulations (i.e., 40 CFR 60 Subparts Db or Dc and/or 40 CFR 63 Subparts DDDDD or JJJJJ) should be applied to the boilers.

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RESPONSE 16: The Marshall Plant began operations in 1921, with modifications since 1971 in accordance with EPA's New Source Performance Review standards (NSPS). The site as a whole is considered a major source of VOC, SO₂, PM, NO_x, CO, and hazardous air pollutants, and is authorized by federal Site Operating Permit (SOP) No. O3335. Federal applicability was reviewed in the issuance of SOP No. O3335 in 2011, and it was determined that the coal processing facility (authorized by NSR Permit Nos. 78421 and PSDTX1183) is subject to 40 CFR 60, Subpart Y, Coal Preparation and Processing Plants. 40 CFR 60 Subpart Y defines standards for thermal dryers, pneumatic coal cleaning equipment, coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles. The boilers authorized via NSR Permit No. 56552, which fire natural gas and are used for VOC control of kiln flue gases, are too small to be subject to the standards for industrial, commercial, or institutional boilers found in 40 CFR 60 Subpart Db or Subpart Dc. Boilers at this major source site are not subject to 40 CFR 63, Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. SOP No. O3335 is subject for renewal in 2016, at which time federal applicability of the boilers per 40 CFR 63, Subpart DDDDD, Maximum Available Control Technology for Industrial, Commercial, and Institutional Boilers at Major Sources of HAPs will be determined.

CHANGES MADE IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

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