



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

Office of the
Secretary

Phone: (302) 739-9000
Fax: (302) 739-6242

Secretary's Order No.: 2018-CZ-0033

RE: Application of Essential Minerals, LLC, for a Coastal Zone Act Permit to construct and operate a calcium carbonate (limestone) powder manufacturing facility at 901 A/B Lambson Lane, New Castle, Delaware

Date of Issuance: May 30, 2018

Effective Date: May 30, 2018

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") pursuant to 7 *Del.C.* §§6001 *et seq.*, 7 *Del.C.* §§7001 *et seq.*, and 7 DE Admin. Code 101, *Regulations Governing Delaware's Coastal Zone*, the following findings of fact based on the record, reasons, and conclusions are entered as an Order of the Secretary in the above-referenced Coastal Zone Act permitting proceeding.

Background and Findings of Fact

The Applicant, Essential Minerals, LLC ("Applicant"), seeks a Coastal Zone Act ("CZA") Permit to construct and operate a calcium carbonate (limestone) powder manufacturing facility at 901 A/B Lambson Lane, New Castle, Delaware. The facility will grind pieces of calcium carbonate ore into fine powder having a diameter of 40 microns or less for use in food and pharmaceutical products.

As described in the Applicant's CZA permit application, the facility will receive calcium carbonate ore (1-2 inch diameter) via flatbed truck. The material will be contained in super sacks, which will be stored in the existing warehouse areas. When ready for processing, the super sacks will be transferred, via a vibrating tube feeder, from inside the building to a bucket elevator outside the building and discharged into a 1,100 cubic-foot feed silo. The ore from the silo will then be fed into a grinding mill inside the building, reduced to a fine powder, and heated to approximately 390°F using a natural gas fired air heater. The product will then be pneumatically transferred to one of the two 4,100 cubic-foot finished product silos located outside the building via a pneumatic conveying line and packaged into 50 pound bags or super sacks weighing 1,000 – 3,000 pounds. The packaged product will then be stored in the warehouse to await shipping in van trucks to customers and/or distributors.

The Department requires a CZA applicant to set forth in its application the proposed project's possible environmental impacts, including, but not limited to, any increased air emissions of pollutants, water quality/water quantity/water use, and the disposal of solid and hazardous wastes. Furthermore, any application for a CZA permit for an activity or facility that will result in any negative environmental impact shall contain an offset proposal, which must more than offset the environmental impacts of any proposed project, pursuant to Section 9.0, "Offset Proposals" of Delaware's Coastal Zone Regulations.

In the present matter, Essential Minerals, LLC's proposed project will result primarily in air emissions and a minimal increase in solid waste generation. The facility will use a natural gas air heater to generate the heat needed for the above-described process. The air emissions from the natural gas air heater represent the only emissions from this proposal.

This project will not utilize any water intake structures, or discharge to surface water. Water will be provided by the local water utility. There will be no additional stormwater discharges to surface waters as a result of this project, and all construction activities will occur within an area that is already an impervious surface.

This proposed project will result in a minimal increase in solid waste from broken pallets, paper bags, super sacks, cardboard, plastic and household waste. Powdered limestone unable to be reclaimed will also be a waste product. Total waste is expected to be less than 100 tons per year. The Applicant will utilize local recycling and waste haulers for these materials. No hazardous waste will be generated by the project.

The net economic impact from this project is expected to be positive. The Applicant states that approximately 10-15 workers will be engaged in direct project construction activities. The weekly construction payroll is estimated to be \$30,000, and an estimated \$850,000 - \$1,000,000 of construction services and supplies will be purchased in Delaware. There will be an anticipated 15 new permanent jobs as a result of this project, with estimated annual tax revenues of \$200,000 in personal income taxes and \$167,000 in corporate income taxes.

There will be no new supporting facilities or services required to support this proposed project. The project will occur within the footprint of the existing facility, and will be compatible in appearance. There are no anticipated effects to neighboring land uses, nor will the project impede river or roadway access. Lastly, the proposed facility and operation is consistent with the New Castle County Comprehensive Plan. It is zoned Heavy Industry by New Castle County, and is in a State Investment Area Level 1.

With regard to the Applicant's Offset Proposal in this matter, DNREC Policy stipulates that negative environmental impacts resulting from projects requiring a CZA Permit be offset at a 1.3:1 ratio. As noted previously, the emissions associated with the project result solely from the natural gas heater used to dry powered material. The emissions from combustion include carbon monoxide, carbon dioxide, methane, nitrous oxide, nitrogen oxides, particulate matter, sulfur dioxide and volatile organic matter, with total emissions (excluding carbon dioxide) totaling 2.03 tons per year¹. The Applicant's purchase of three emission reduction credits from the Division of Small Business and Tourism will offset the total emissions by a ratio of 1.47:1, thus exceeding the 1.3:1 offset stipulated by DNREC policy.

Procedural History

The Department received the CZA permit application of Essential Minerals, LLC on January 22, 2018 (which was then subsequently amended by the Applicant on February 8, 2018, March 30, 2018, and April 2, 2018). Accordingly, the Department provided public notice of receipt of the Applicant's revised application on April 8, 2018. The Applicant's CZA permit application was then determined to be administratively complete by my signing of the Secretary's Environmental Assessment Report on April 19, 2018. Thereafter, the Department held a public hearing at the DNREC offices located at 391 Lukens Drive, New Castle, Delaware on Wednesday, May 16, 2018. Proper notice of the hearing was provided as required by law.

The only comments received by the Department in this matter were those offered by Martin Willis, who was the only member of the public that attended the public hearing on May 16, 2018. Mr. Willis stated that he believed the Applicant's proposed project's facility would be beneficial to the community, and recommended that the Department approve Essential Minerals, LLC's pending CZA permit application.

¹ The Department has not historically required offsets for carbon dioxide.

Mr. Willis did, however, have several questions with respect to the application itself. In response to those questions, the Department's Division of Energy and Climate provided a Technical Response Memorandum ("TRM") to specifically address those issues. The Department's TRM identifies all of the questions raised by Mr. Willis at the public hearing on May 16, 2018, and responds to them in a balanced manner, accurately reflecting the information contained in the formal hearing record.

At the conclusion of the public hearing, the record was closed with regard to public comment. The Department's presiding Hearing Officer, Lisa A. Vest, prepared a Hearing Officer's Report dated May 18, 2018 ("Report").

Reasons and Conclusions

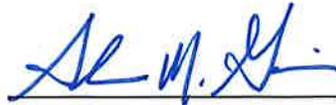
Based on the record developed by the Department's experts and established by the Hearing Officer's Report, I find and conclude that the record developed in this matter supports approval of Essential Minerals, LLC's application for its CZA permit, as consistent with the intent of the CZA and its regulations, which is to balance the economic and environmental interests of the State of Delaware. Therefore, the recommendations of the Hearing Officer are hereby adopted, and I direct that the currently pending CZA Permit Application of Essential Minerals, LLC, to construct and operate a calcium carbonate (limestone) powder manufacturing facility at 901 A/B Lambson Lane, New Castle, Delaware, be ***granted***.

Accordingly, I direct that a Coastal Zone Act permit be issued to the Applicant, and that the following reasons and conclusions are entered:

1. The Department has jurisdiction under its statutory authority to issue a CZA Permit to the Applicant, subject to reasonable permit conditions deemed appropriate and consistent with the CZA's purposes;

2. The Department provided adequate and lawful public notice of the Coastal Zone Act Application of Essential Minerals, LLC, and of the public hearing held on May 16, 2018, and held said hearing to consider any public comment that may be offered on the application, in a manner required by the law and regulations;
3. The permit applied for by Essential Minerals, LLC, is for production/manufacturing activities that will take place within the defined Coastal Zone of Delaware, and is for the construction and operation of a calcium carbonate (limestone) grinding facility at 901 A/B Lambson Lane, New Castle, Delaware. Environmental impacts are anticipated; however, the three emission reduction credits to be purchased by the Applicant from the Division of Small Business and Tourism will offset the total new emissions by a ratio of 1.47:1, thus exceeding the 1.3:1 offset stipulated by DNREC policy. The increase in solid waste generation as a result of this proposed project will be minimal;
4. The Department has carefully considered the factors required to be weighed in issuing a CZA permit, and finds that the proposed use is appropriate for the Coastal Zone at the proposed location, and that it should be permitted as set forth in Essential Minerals, LLC's application;
5. The Department shall issue a permit to the Applicant, Essential Minerals, LLC, and said permit shall include all conditions consistent with the final Order and any other reasonable conditions that the Department includes in a CZA permit, to ensure that Delaware's environment will be protected from harm, consistent with the CZA and its regulations;

6. The Department has carefully considered all the statutory factors to be considered in making a decision on a CZA permit, and those required to be considered under the CZA regulations;
7. The issuance of the aforementioned CZA permit does not relieve Essential Minerals, LLC, of the legal obligation of compliance with all building permits, subdivision, and other applicable code requirements of the county or municipality wherein the permitted project is located;
8. If there are deviations from the Applicant's proposed plan and operations previously approved by the Secretary, Essential Minerals, LLC, shall notify the Secretary as soon as possible. If the Secretary receives information which he or she believes may alter the scope of the project, the Secretary may revoke the permit or require Essential Minerals, LLC, to submit a new application to reflect the altered nature of the project;
9. The aforementioned CZA permit will allow the Applicant to operate its business while reducing the overall environmental impacts to the Coastal Zone area, in furtherance of the purposes of 7 *Del. C. Ch. 70*;
10. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and
11. The Department shall serve and publish its Order on all affected persons in a manner consistent with the service and publication of the Secretary's Order.


Shawn M. Garvin
Secretary

**DELAWARE
COASTAL ZONE ACT PERMIT**



NUMBER: 433
ISSUED TO: Essential Minerals, LLC.
TO PERMIT: Construction and operation of a limestone powder manufacturing facility
SITE LOCATION: 901 A/B Lambson Lane, New Castle, Delaware, 19720

Conditions incorporated and made part of this permit:

Standard:

1. This permit is conditional upon the Permittee's compliance with all other applicable permit requirements, regulations, and laws of the State of Delaware.
2. Issuance of this permit does not relieve the Permittee of the legal obligation of complying with all building permits, subdivision, and other applicable code requirements of the county or municipality wherein the permitted project is located.
3. If there are deviations from the plan and operations approved by the Secretary, the Permittee shall notify the Secretary as soon as possible. If the Secretary receives information which he or she believes may significantly alter the scope of the project, the Secretary may revoke the permit or require the Permittee to submit a new application to reflect the altered nature of the project.

Special Conditions:

1. To offset the negative environmental impacts of the project, Permittee will obtain three Emission Reduction Credits from the Delaware Division of Small Business.
2. Purchase of Emission Reduction Credits shall be completed within 180 days of the date of this permit. Permittee shall notify the Secretary when the proposed offset project has been completed.

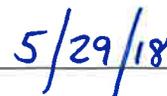
Signature: _____



Shawn M. Garvin, Secretary

Department of Natural Resources & Environmental Control

Date: _____



HEARING OFFICER'S REPORT

TO: The Honorable Shawn M. Garvin
Cabinet Secretary, Department of Natural Resources and Environmental Control

FROM: Lisa A. Vest
Public Hearing Officer, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: Coastal Zone Act Permit Application of Essential Minerals, LLC, to construct and operate a calcium carbonate (limestone) powder manufacturing facility at 901 A/B Lambson Lane, New Castle, Delaware, 19720

DATE: May 17, 2018

I. BACKGROUND AND PROCEDURAL HISTORY:

A public hearing was held on Wednesday, May 16, 2018, at 6:00 p.m. at the Department of Natural Resources and Environmental Control (“DNREC”, “Department”) located at 391 Lukens Drive, New Castle, Delaware, to receive comment on the application of Essential Minerals, LLC (“Applicant”), for a permit from DNREC under its authority in the Coastal Zone Act (“CZA”), 7 *Del. C.*, Ch. 70. The CZA regulates new manufacturing activities, or the expansion of existing manufacturing uses, within Delaware’s “Coastal Zone”, which is a geographic area along the Delaware Bay and Atlantic Ocean Coastlines, as defined by the CZA. This hearing was held pursuant to the aforementioned Delaware Coastal Zone Act and Delaware’s *Regulations Governing Delaware’s Coastal Zone*.

Pursuant to this Applicant’s CZA permit application received by the Department on January 22, 2018 (and subsequently amended on February 8, 2018, March 30, 2018, and April 2, 2018¹), Essential Minerals, LLC seeks permission to construct and operate a calcium carbonate (limestone) powder manufacturing facility at 901 A/B Lambson Lane, New Castle, Delaware.

¹ The receipt date does not determine when an application is deemed administratively complete, pursuant to CZA Regulations 8.3.1 and 8.3.6. The application was deemed administratively complete on April 19, 2018.

The facility will grind pieces of calcium carbonate ore into fine powder having a diameter of 40 microns or less for use in food and pharmaceutical products.

As described in the Applicant's CZA permit application, the facility will receive calcium carbonate ore (1-2 inch diameter) via flatbed truck. The material will be contained in super sacks, which will be stored in the existing warehouse areas. When ready for processing, the super sacks will be transferred, via a vibrating tube feeder, from inside the building to a bucket elevator outside the building and discharged into a 1,100 cubic-foot feed silo. The ore from the silo will then be fed into a grinding mill inside the building, reduced to a fine powder, and heated to approximately 390°F using a natural gas fired air heater. The product will then be pneumatically transferred to one of the two 4,100 cubic-foot finished product silos located outside the building via a pneumatic conveying line and packaged into 50 pound bags or super sacks weighing 1,000 – 3,000 pounds. The packaged product will then be stored in the warehouse to await shipping in van trucks to customers and/or distributors.

The grinding operation is a closed-loop system. Each of the closed-loop processes will have dust collection systems to contain fine particles and prevent them from escaping into the surrounding areas. The dust collection systems consist of large enclosed housings known as baghouses, which are large fabric bags with exhaust fans used to draw the dust into the housings by generating high negative pressures with the processing systems. The building itself will have large fans installed to draw in filtered air from the outside. The Applicant anticipates that 6,000 tons per year of limestone dust will be recaptured by the closed-loop system.

The Department requires a CZA Applicant to set forth in its application the proposed project's possible environmental impacts, including, but not limited to, any increased air emissions of pollutants, water quality/water quantity/water use, and the disposal of solid and

hazardous wastes. Furthermore, any application for a CZA permit for an activity or facility that will result in any negative environmental impact shall contain an offset proposal. Offset proposals must more than offset the proposed environmental impacts of any proposed project².

In the present matter, Essential Minerals, LLC's proposed project will result primarily in air emissions and a minimal increase in solid waste generation. The facility will use a natural gas air heater to generate the heat needed for the above-described process. The air emissions from the natural gas air heater represent the only emissions from this proposal. New total emissions (excluding carbon dioxide) equal 2.03 tons per year³. The Applicant will purchase three emission reduction credits from the Division of Small Business and Tourism (formerly the Delaware Economic Development Office). The Department believes that the three emission reduction credits more than meet the offset criteria. The new on-site air emissions associated with the operation of a natural gas heater, as set forth in Table 1, Change in Air Emissions Resulting from Proposed Project, of the Secretary's Environmental Assessment Report issued in this matter (dated April 19, 2018), is expressly incorporated into this Hearing Officer's Report and attached hereto as Appendix "A" for that purpose.

This project will not utilize any water intake structures, or discharge to surface water. Water will be provided by the local water utility. There will be no additional stormwater discharges to surface waters as a result of this project, and all construction activities will occur within an area that is already an impervious surface. This proposed project will result in a minimal increase in solid waste from broken pallets, paper bags, super sacks, cardboard, plastic and household waste. Powdered limestone unable to be reclaimed will also be a waste product. Total waste is expected to be less than 100 tons per year. The Applicant will utilize local

² 7 DE Admin. Code 101, *Regulations Governing Delaware's Coastal Zone*, Section 9.0, "Offset Proposals"

³ The Department has not historically required offsets for carbon dioxide.

recycling and waste haulers for these materials. No hazardous waste will be generated by the project.

The net economic impact from this project is expected to be positive. The Applicant states that approximately 10-15 workers will be engaged in direct project construction activities. The weekly construction payroll is estimated to be \$30,000, and an estimated \$850,000 - \$1,000,000 of construction services and supplies will be purchased in Delaware. There will be an anticipated 15 new permanent jobs as a result of this project, with estimated annual tax revenues of \$200,000 in personal income taxes and \$167,000 in corporate income taxes.

There will be no new supporting facilities or services required to support this proposed project. The project will occur within the footprint of the existing facility, and will be compatible in appearance. There are no anticipated effects to neighboring land uses, nor will the project impede river or roadway access. Lastly, the proposed facility and operation is consistent with the New Castle County Comprehensive Plan. It is zoned Heavy Industry by New Castle County, and is in a State Investment Area Level 1.

With regard to the Applicant's Offset Proposal in this matter, DNREC Policy stipulates that negative environmental impacts resulting from projects requiring a CZA Permit be offset at a 1.3:1 ration. The Department has determined that Essential Minerals, LLC's proposed project exceeds this requirement. As noted previously, the emissions associated with the project result solely from the natural gas heater used to dry powered material. The emissions from combustion include carbon monoxide, carbon dioxide, methane, nitrous oxide, nitrogen oxides, particulate matter, sulfur dioxide and volatile organic matter, with total emissions (excluding carbon dioxide) totaling 2.03 tons per year⁴. The Applicant's purchase of three emission reduction

⁴ The Department has not historically required offsets for carbon dioxide.

credits from the Division of Small Business and Tourism will offset the total emissions by a ratio of 1.47:1, thus exceeding the 1.3:1 offset stipulated by DNREC policy.

The Department provided public notice of this CZA Application's submission, initially received by the Department on January 22, 2018, and the determination of an administratively complete application following the Secretary's Assessment, which was signed on April 19, 2018. Consequently, the Department held a public hearing on May 16, 2018, at the DNREC office located at 391 Lukens Drive, New Castle, Delaware. Public comment was received was received by the Department at that public hearing, and will be discussed in further detail below. Proper notice of the hearing was provided as required by law.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The public hearing record consists of the following documents: (1) a verbatim transcript; (2) ten documents introduced by responsible Department staff at the public hearing held on May 16, 2018, and marked by this Hearing Officer accordingly as "Department Exhibits 1-10"; and (3) Technical Response Memorandum from Susan Love, Climate and Sustainability Section Manager, DNREC Division of Energy and Climate, dated May 17, 2018. The Department's person primarily responsible for reviewing this CZA Application, Susan Love, Climate and Sustainability Section Manager, DNREC Division of Energy & Climate, developed the record with the relevant documents in the Department's files.

Representing the Applicant at the hearing was Tim Layton, Chief Operating Officer, Essential Minerals, LLC. Following opening remarks from Ms. Love on behalf of the Department (and the introduction of the Department's exhibits to be entered into the hearing record), Mr. Layton proceeded to offer a brief presentation on behalf of the Applicant for the benefit of the hearing record. At the conclusion of the Applicant's presentation, the floor was

then opened for the purpose of offering public comment on the record regarding this proposed project.

The only comments received by the Department in this matter were those offered by Martin Willis, who was the only member of the public that attended the public hearing on May 16, 2018. Mr. Willis began his comments by stating that he was impressed by the Applicant's presentation, and that he believed the proposed project's facility would be beneficial to the community. While Mr. Willis recommended that Essential Minerals, LLC's pending CZA permit application be approved by DNREC, he did have several questions with respect to the application itself. To that end, this Hearing Officer requested a Technical Response Memorandum ("TRM") from Ms. Love to specifically address those issues. This TRM was provided for inclusion into the hearing record by Ms. Love on May 17, 2018.

I find that the Department's TRM does an excellent job of identifying all of the questions raised by Mr. Willis' comments offered at the public hearing of May 16, 2018, and responds to them in a thorough and balanced manner, accurately reflecting the information contained in the formal hearing record. Thus, the aforementioned TRM is attached hereto as Appendix "B" and expressly incorporated herein as such.

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

This application is for a permit issued under the CZA. Preliminarily, I find that the Applicant's facility is located within Delaware's "Coastal Zone". I also find that, while Essential Minerals, LLC's proposed project will result in new air emissions (from the natural gas heater used to dry powdered material) totaling 2.03 tons per year, the three emission reduction credits to be purchased by the Applicant from the Division of Small Business and Tourism will offset the total emissions by a ratio of 1.47:1, thus exceeding the 1.3:1 offset stipulated by DNREC policy.

As stated previously, there will be a minimal increase in solid waste generation. There will be no utilization of any water intake structures, or discharges to surface water (as water will be provided by the local water utility), nor will there be any additional stormwater discharges to surface waters. There will be no new supporting facilities and/or services required to support this proposed project. Furthermore, there are no anticipated effects to neighboring land uses, and the proposed facility and operation is consistent with the City of New Castle's Comprehensive Plan. Lastly, net economic impacts associated with Essential Minerals, LLC's proposed project are expected to be positive.

The Department is to evaluate a CZA application based upon a consideration of the CZA's balancing of economic and environmental factors. The CZA requires the Department to consider the following issues of any given proposed project: (1) environmental impacts; (2) economic impacts; (3) aesthetic impacts; (4) the number and type of supporting facilities required and their impacts on all other factors; (5) the impact on neighboring land uses; and (6) the county and municipal comprehensive plans. *7 Del.C. §7004.*

The record developed in this matter indicates that the Department's experts have considered the above factors, and have recommended issuance of a permit to the Applicant in this matter. Further, the experts recommended that the Essential Minerals, LLC's Coastal Zone permit application, as well as the proposed offset proposal, was sufficient.

Based on the record developed, I find and conclude that the Applicant has adequately demonstrated its compliance with all requirements of the Delaware Coastal Zone Act Regulations and Statutes, as noted herein, and that the record supports approval of Essential Minerals, LLC's CZA permit application. In conclusion, I recommend that a Coastal Zone Permit consistent with the record developed in this matter be issued by the Department in the

customary form, and with appropriate conditions, to ensure continued improvement of environmental quality in the Coastal Zone of the State of Delaware.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has jurisdiction under its statutory authority to issue a CZA Permit to the Applicant, subject to reasonable permit conditions deemed appropriate and consistent with the CZA's purposes;
2. The Department provided adequate and lawful public notice of the Coastal Zone Act Application of Essential Minerals, LLC, and of the public hearing held on May 16, 2018, and held said hearing to consider any public comment that may be offered on the application, in a manner required by the law and regulations;
3. The permit applied for by Essential Minerals, LLC, is for production/manufacturing activities which will take place within the defined Coastal Zone of Delaware, and is for the construction and operation of a calcium carbonate (limestone) grinding facility at 901 A/B Lambson Lane, New Castle, Delaware. Environmental impacts are anticipated, however, the three emission reduction credits to be purchased by the Applicant from the Division of Small Business and Tourism will offset the total new emissions by a ratio of 1.47:1, thus exceeding the 1.3:1 offset stipulated by DNREC policy. The increase in solid waste generation as a result of this proposed project will be minimal;
4. The Department has carefully considered the factors required to be weighed in issuing a CZA permit, and finds that the proposed use is appropriate for the Coastal Zone at the proposed location, and that it should be permitted as set forth in Essential Minerals, LLC's application;

5. The Department shall issue a permit to the Applicant, Essential Minerals, LLC, and said permit shall include all conditions consistent with the final Order and any other reasonable conditions that the Department includes in a CZA permit, to ensure that Delaware's environment will be protected from harm, consistent with the CZA and its regulations;
6. The Department has carefully considered all the statutory factors to be considered in making a decision on a CZA permit, and those required to be considered under the CZA regulations;
7. The issuance of the aforementioned CZA permit does not relieve Essential Minerals, LLC, of the legal obligation of compliance with all building permits, subdivision, and other applicable code requirements of the county or municipality wherein the permitted project is located;
8. If there are deviations from the Applicant's proposed plan and operations previously approved by the Secretary, Essential Minerals, LLC, shall notify the Secretary as soon as possible. If the Secretary receives information which he or she believes may alter the scope of the project, the Secretary may revoke the permit or require Essential Minerals, LLC, to submit a new application to reflect the altered nature of the project;
9. The aforementioned CZA permit will allow the Applicant to operate its business while reducing the overall environmental impacts to the Coastal Zone area, in furtherance of the purposes of 7 *Del. C.*, Ch. 70;
10. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and

11. The Department shall serve and publish its Order on all affected persons in a manner consistent with the service and publication of the Secretary's Order.



LISA A. VEST
Public Hearing Officer

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Attachments/Appendices:

Appendix A: Secretary's Assessment Report, (04/19/18)
Appendix B: Divisional TRM (05/17/18)

APPENDIX “A”

**SECRETARY'S ENVIRONMENTAL ASSESSMENT REPORT
FOR A COASTAL ZONE ACT PERMIT APPLICATION**

**Essential Minerals, LLC
Calcium Carbonate Grinding Facility
901 A/B Lambson Lane, New Castle, Delaware
CZA Permit No. 433P**

April 19, 2018

Introduction

As required by §8.3.4 of the "Regulations Governing Delaware's Coastal Zone" dated May 11, 1999, and amended October 1, 2001, the Secretary of the Department of Natural Resources and Environmental Control (DNREC) shall provide a written assessment of a proposed project's likely impact on the six criteria listed in §8.1 of the regulations, as well as a preliminary determination of the sufficiency of the offset project as required in §9.0 of these same regulations. This assessment and determination is completed prior to deeming a permit application administratively complete.

The fact that DNREC considers an application to be preliminarily, administratively complete does not constitute the Department's position as to whether the application should be approved or denied. That decision will not be made until after the public hearing. The purpose of the Secretary's written assessment is to assist the applicant and the public to focus on issues presented in the application. It constitutes an administrative determination that the application is sufficient to proceed to a public hearing. In addition, should the Department eventually issue a Coastal Zone Act (CZA) Permit, it does not guarantee the applicant will receive other required permits.

The following is such an environmental assessment for the proposed project described in an application for a CZA permit, received from Essential Minerals, LLC on January 22, 2018 and subsequently amended on February 8, 2018, March 30, 2018 and April 2, 2018.

The Proposed Project

Essential Minerals, LLC is seeking a permit to construct and operate a calcium carbonate (limestone) grinding facility at 901 A/B Lambson Lane, New Castle, Delaware. The facility will grind pieces of calcium carbonate ore into fine powder having a diameter of 40 microns or less for use in food and pharmaceutical products.

The facility will receive calcium carbonate ore (1-2 inch diameter) via flatbed truck. The material will be contained in super sacks, which will be stored in the existing warehouse areas. When ready for processing, the super sacks will be transferred, via a vibrating tube feeder, from inside the building to a bucket elevator outside the building and discharged into a 1,100 cubic-foot feed silo. The ore from the silo will then be used to feed a grinding mill inside the building where the material will be reduced to a fine powder and heated to approximately 390 degrees F using a natural gas fired air heater. The product will then be pneumatically transferred to one of the two 4,100 cubic-foot finished product silos located outside the building. The material will then be transferred to one of two packaging lines inside the building via a pneumatic conveying line to be packaged into 50 pound bags or supersacks weighing 1,000 – 3,000 pounds. The packaged product will then be stored in the warehouse, to await shipping in van trucks to customers/distributors.

The grinding operation is a closed-loop system. Each of the closed loop processes will have dust collections systems to contain fine particles and prevent them from escaping into the surrounding areas. The dust collection systems consist of large enclosed housings known as baghouses. The housings are filled with large fabric bags with exhaust fans used to draw the dust into the housings by generating high negative pressures with the processing systems. The building itself will have large fans installed to draw in filtered from outside. The application indicates that 6,000 tons per year of limestone dust will be recaptured by the closed-loop system.

The facility will use a natural gas air heater to generate heat needed for the process. The emissions from the natural gas air heater represent the only emissions from this proposal. The emissions from combustion include carbon monoxide, carbon dioxide, methane, nitrous oxide, nitrogen oxides, particulate matter, sulfur dioxide and volatile organic matter. New total

emissions (excluding carbon dioxide) equal 2.03 tons per year. The applicant will purchase three emissions reduction credits from the Division of Small Business and Tourism (formerly the Delaware Economic Development Office). The three emission reduction credits will offset the total emissions by a ratio of 1.47:1. The Department typically requires that emissions are offset by 1.3:1; the purchase of three emission reduction credits more than meets the offset criteria. The Department has not historically required offsets for carbon dioxide.

Environmental Assessment

In assessing an application, §8.3.2 directs the Secretary to consider how the proposed project will affect the six criteria cited in the Coastal Zone Act, including direct and cumulative environmental impacts, economic effects, aesthetic effects, number and type of supporting facilities and their anticipated impacts, effect on neighboring land uses, and compatibility with local comprehensive plans.

Division of Energy and Climate staff reviewed the application for the above-mentioned factors. The permit application was also sent to DNREC staff in the Divisions of Air Quality, Waste and Hazardous Substances, Water, and Fish and Wildlife for review and feedback, including adequacy of the proposed offset project. No substantive comments regarding project impacts were received from DNREC reviewers.

Assessment of each of the six criteria is below:

Direct and Cumulative Environmental Impacts

The proposed project will result in increased air emissions on-site and a minimal increase in solid waste generation.

Air Emissions

All particulate matter will be recaptured in a closed-loop system. New on-site air emissions are associated only with the operation of a natural gas heater. See Table 1 below. Total new emissions (excluding carbon dioxide) equal 2.03 tons per year.

Table 1. Change in Air Emissions Resulting from Proposed Project

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year	
CO	0	0	0.001728	0.63	0.001728	0.63	100%
CO2	0	0	2.465754	900	2.465754	900	100%
Methane	0	0	0.0000477	0.0174	0.0000477	0.0174	100%
N2O	0	0	0.00004602	0.0168	0.00004602	0.0168	100%
NH3	0	0	0.000066	0.024	0.000066	0.024	100%
NOX	0	0	0.002052	0.75	0.002052	0.75	100%
PART	0	0	0.000156	0.057	0.000156	0.057	100%
PM-10	0	0	0.000156	0.057	0.000156	0.057	100%
PM2.5	0	0	0.000156	0.057	0.000156	0.057	100%
SO2	0	0	0.00001314	0.0048	0.00001314	0.0048	100%
VOM	0	0	0.001134	0.414	0.001134	0.414	100%

Water Use and Discharge

This project will not utilize any water intake structures, or discharge to surface water. Water will be provided by the local water utility.

Stormwater

There will be no additional stormwater discharges to surface waters as a result of this project. All construction activities will occur within an area that is already an impervious surface.

Solid and Hazardous Waste

This project will result in a minimal increase in solid waste from broken pallets, paper bags, supersacks, cardboard, plastic, and household waste. Powdered limestone unable to be reclaimed will also be a waste product. Total waste is expected to be less than 100 tons per year. The applicant will utilize local recycling and waste haulers for these materials. No hazardous waste will be generated.

Economic Effects

The net economic impact from this proposal is expected to be positive. The application states that approximately 10-15 workers will be engaged in direct project construction activities. The weekly construction payroll is estimated to be \$30,000 per week for the duration of construction activities. The application also states that \$850,000 - \$1,000,000 of construction services and supplies will be purchased in Delaware. There will be 15 new permanent jobs as a result of this project, with estimated annual tax revenues of \$200,000 in personal income taxes and \$167,000 in corporate income taxes.

Number and Type of Supporting Facilities

There will be no new supporting facilities and services required to support the proposed project.

Aesthetic Effects

The project will occur within the footprint of the existing facility and will be compatible in appearance.

Effect on Neighboring Land Uses

There are no anticipated effects to neighboring land uses. The site is bordered on all sides by manufacturing and light industrial uses. The nearest year-round residence is approximately 0.50 miles away to the west. Effects on these neighboring uses will be minimal. The project will not impede river or roadway access, nor will it interfere with use of recreational facilities or resources.

Compatibility with County and Municipal Comprehensive Plans

The proposed facility and operation is consistent with the New Castle County Comprehensive Plan. It is zoned Heavy Industry (HI) by New Castle County and is in a State Investment Area Level 1 (2015 State Strategies for Policies and Spending).

Offset Proposal

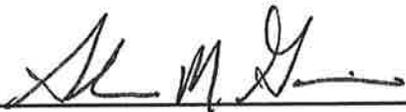
DNREC policy stipulates that negative environmental impacts resulting from projects requiring a Coastal Zone Permit be offset at a 1.3:1 ratio. The proposed project exceeds this requirement.

The emissions associated with the project result solely from the natural gas heater used to dry powdered material. The emissions from the natural gas air heater represent the only emissions from this proposal. The emissions from combustion include carbon monoxide, carbon dioxide, methane, nitrous oxide, nitrogen oxides, particulate matter, sulfur dioxide and volatile organic matter. New total emissions (excluding carbon dioxide) equal 2.03 tons per year (see Table 1). As per DNREC policy, negative environmental impacts must be offset at a 1.3:1 ratio. Therefore, air emission improvements of 2.62 tons per year are required. The applicant has proposed the purchase of three emissions reduction credits from the Division of Small Business and Tourism (formerly the Delaware Economic Development Office). The three emission reduction credits will offset the total emissions by a ratio of 1.47:1. This exceeds the 1.3:1 offset stipulated by DNREC policy. It is not currently DNREC's practice to require offsets for carbon dioxide emissions; therefore those emissions have not been included in the offset calculation.

Sufficiency Statement and Conclusion

The Coastal Zone Act allows for, through the issuance of a new permit, expansion or extension of uses for which a CZA permit was previously issued. This application for a CZA Permit, including supplemental information, has been reviewed by the Department to determine its completeness. After a thorough review of the company's application and file, the Department considers this application to be administratively complete and sufficient for proceeding to public hearing.

Approved:



Shawn M. Garvin

Secretary

Date:

4/19/18

APPENDIX “B”



STATE OF DELAWARE
DIVISION OF ENERGY & CLIMATE
100 W. WATER STREET
SUITE 5A
DOVER, DELAWARE 19904

Department of Natural Resources
And Environmental Control

Phone: (302) 735-3480
www.dnrec.delaware.gov/energy

Technical Response Memorandum

To: Lisa Vest, DNREC Hearing Officer
Thru: Andrea Kreiner, Division Director *AK*
From: Susan Love, Climate and Sustainability Section Manager *SL*
Re: Coastal Zone Permit Application, Essential Minerals, LLC Limestone Powder Manufacturing Facility (CZA-433P)
Date: May 17, 2018

On May 17, 2018, you requested a Technical Response Memorandum from the Division of Energy and Climate to provide expert technical assistance for the Hearing Officer's Report and Recommendation to the DNREC Secretary with regard to the Coastal Zone Act Permit Application of Essential Minerals, LLC for the construction and operation of a limestone powder manufacturing facility. You specifically asked for a formal response to the comments made by Mr. Martin Willis at the May 16, 2018 permit hearing, and for development of a decision record to assist and support the Secretary's final decision. This memo provides the requested information and a recommendation from staff regarding permit issuance.

In his comments at the hearing, Mr. Willis recommended permit issuance and shared his opinions regarding the benefits of the facility. However, he had several questions pertinent to the application, which are summarized and answered below:

1. *How will the three Emission Reduction Credits obtained by Essential Minerals as their offset project benefit the community?* There is no requirement in the Coastal Zone Act or Regulations Governing Delaware's Coastal Zone that an offset proposal directly benefit a surrounding community, and in this case, a direct benefit to the community would be difficult to establish. Emission reduction credits represent emission reductions that have already occurred, thus the air quality benefits have also already occurred. By purchasing these credits, Essential Minerals has taken the credits out of circulation for other future uses, which may indirectly benefit the surrounding community in the future. However, as noted below, there is an anticipated benefit of new job opportunities for residents of the surrounding community as the applicant indicated a desire to hire locally for vacancies.
2. *How will truck traffic be controlled?* In his presentation, Tim Layton of Essential Minerals outlined the truck route and emphasized that trucks would not utilize residential roads. He indicated that all drivers performing deliveries from the port will be instructed to use a designated truck route and the route will be discussed with the trucking company prior to ore delivery campaigns. In a follow-up email dated May 17, 2018, he also indicated that he would add signage to the exit to direct trucks to the designated route. He also provided a phone number that can be given to community members to report problems or violations.
3. *Why does the applicant, or the previous owner, not have a storm water discharge permit?* Stormwater discharge permits are issued for projects that have direct discharge to surface waters. This project does not include a direct discharge to surface waters. On this site, all stormwater is directed to the sanitary sewer system and treated at the wastewater treatment facility in Wilmington before discharge, therefore no storm water discharge permits are required. In addition, the land disturbing activities on the site are well below the threshold for sediment and stormwater permits.
4. *Do threatened and endangered species exist on site, and where is the documentation for the response in the application?* It is highly unlikely that an industrial site with characteristics like this one would have any rare, threatened, or endangered species concerns. However, as part of our due diligence, staff reached out to the DNREC

Species Conservation and Research Program for a review of their rare and endangered species database. This review confirmed that there are no rare, threatened, or endangered species on site and no special actions or time of year restrictions are necessary to protect rare, threatened, or endangered species.

5. *When will noise surveys be conducted and how will the results be shared?* In a follow up email, the applicant indicated that the noise study would be completed once the plant is in operation, perhaps between July and September 2018. They do not plan to post the results publically, but would be willing to discuss the results with individuals as needed. He also indicated that they plan to comply with relevant noise regulations.
6. *Will Essential Minerals hire from the surrounding neighborhoods, and would they be willing to reach out to the local library and community center with job postings?* In a follow up email, Mr. Layton indicated that they would share job postings with the community center and library and with other community contacts. They also plan to post all jobs on the Indeed Jobs web site, a common job-posting site.
7. *Have air quality permits been granted to Essential Minerals?* In a follow up email, Mr. Layton indicated that permits from the Division of Air Quality are required for the four dust collectors that are part of the limestone processing facility. The permit applications have been submitted to the Division of Air Quality and are under review. Receipt of this permit is not a prerequisite for the issuance of a Coastal Zone Act permit.

Based upon our review of the application for the proposed project, its proposed offset project, and the testimony provided at the public hearing, I find that the proposed construction and operation of a limestone powder facility at 901 A/B Lambson Lane, New Castle, DE meets the criteria and standards set forth in the Regulations Governing Delaware's Coastal Zone for issuance of a Coastal Zone Permit and recommend issuance of the permit.

