



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

OFFICE OF THE
SECRETARY

89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: (302) 739-9000
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February 28, 2012

CERTIFIED MAIL

Robert Stewart
Site Director
Croda, Inc.
315 Cherry Lane
New Castle, Delaware 19720

Re: Coastal Zone Act Permit Decision

Dear Mr. Stewart:

Your application for a Coastal Zone Act Permit for the installation and operation of a combined heat and electric power (CHEP) system featuring two 1.1 MW lean-burn gas generator sets, a waste heat recovery system, and an absorption chiller has been approved. A copy of the permit is enclosed. Please be sure to carefully review and comply with any and all permit conditions.

There is a fourteen day appeal period following the date of publication of the legal notice announcing this decision. I have enclosed a copy of the notice for your files. If an appeal against this decision is filed, you will be notified. If you have any questions or concerns, please call Kevin Coyle at (302) 739-9071 or e-mail kevin.coyle@state.de.us.

Sincerely,

A handwritten signature in black ink, appearing to read "Collin P. O'Mara".

Collin P. O'Mara
Secretary



Enclosure

Delaware's Good Nature depends on you!

**DELAWARE
COASTAL ZONE ACT
PERMIT**

NUMBER: 393

ISSUED TO: Croda, Inc.

TO PERMIT: The installation and operation of a combined heat and electric power (CHEP) system featuring two 1.1 MW lean-burn gas generator sets, a waste heat recovery system, and an absorption chiller.

SITE LOCATION: 315 Cherry Lane, New Castle, Delaware

Conditions Incorporated and Made Part of this Permit:

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 significant deviations from the plan and operations approved by the Secretary, the Permittee shall notify the Secretary as soon as possible. This permit may be revoked and a new permit application required if the Secretary deems the deviation to substantially change the nature of scale of the project and to be of actually or probably harm to the purposes of the Coastal Zone Act.

Signature: _____



Date: _____

2/28/12

Collin P. O'Mara, Secretary

Department of Natural Resources & Environmental Control



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Secretary's Order No. : 2012-CZ-0008

RE: Application of Croda, Inc., for a Coastal Zone Act Permit to install and operate a combined heat and electric power (CHEP) system, featuring two 1.1 MW lean-burn gas generator sets, a waste heat recovery system, and an absorption chiller, at their facility located at 315 Cherry Lane, New Castle, Delaware

Date of Issuance: **February 28, 2012**

Effective Date: **February 28, 2012**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control under 29 Del. C. §§8001 et seq., the following findings and conclusions are entered as an Order of the Secretary:

The Applicant, Croda, Inc., seeks a Coastal Zone Act Permit to install and operate a combined heat and electric power (CHEP) system, featuring two 1.1 MW lean-burn gas generator sets, a waste heat recovery system, and an absorption chiller. The CHEP will utilize two Cummins C1100 N6C reciprocating engine generators with a total capacity of 2.2 MW. The engines will use landfill gas from the nearby Cherry Island Landfill facility as fuel. The landfill gas will be delivered to the Croda site via pipeline following any necessary pre-treatment conducted at the Cherry Island landfill site. It should be noted

that the transportation and treatment systems for the landfill gas will be provided by others, and are not a part of this project.

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 will more than offset the proposed negative impacts of any proposed project. In the present matter, Croda, Inc.'s proposed project will produce no new water discharges, and no changes to current levels. There will be no change in sanitary wastewater, which is discharged to the New Castle County sewer system. No increase in stormwater discharge is anticipated. There will be no new or increased solid and/or hazardous wastes, and there will be no new impacts to wildlife.

With regard to air quality, environmental impacts are, in fact, anticipated. However, the CHEP system proposed by Croda, Inc., is a *net* environmental air emission improvement project, and thus the environmental offset is embodied within the project proposal, resulting in an overall net *decrease* in air emissions. The proposed installation of the aforementioned CHEP system in this project will offset the new emissions from the generators (and, in turn, will lower overall environmental emissions) by (1) eliminating current emissions from flaring the landfill gas at the Cherry Island Landfill; (2) reducing current boiler emissions by using generator exhaust to pre-heat boiler feed water; and (3) reducing electric generation emissions by avoidance of the purchase of 2 megawatts of electricity per day on average.

The Department provided public notices of this CZA Application's submission and the determination of an administratively complete application following the Secretary's Assessment, which was signed on December 2, 2011. CZA Regulation 8.3.6 requires that the Secretary shall, within ninety (90) days of receipt of an administratively complete application, reply to the request for a CZA permit by "...either granting the permit, denying the permit, or granting the permit, but with special conditions. The Secretary shall state the reasons for his decision." In the present instance, the ninety (90) day deadline is March 2, 2012.

A duly noticed public hearing was held on January 4, 2012, at the DNREC offices located at 391 Lukens Drive, New Castle, Delaware. State Representative James Johnson attended the public hearing as a supporter of this project, noting that he believed this proposal by Croda, Inc., is a "good opportunity to get some benefit out of Cherry Island". No additional public comments were received from the public by the Department during any phase of this public hearing process. Subsequent to the public hearing of January 4, 2012, the Department's presiding Hearing Officer, Lisa A. Vest, prepared a Hearing Officer's Report dated February 15, 2012 (Report).

I find and conclude that the record developed in this matter supports approval of issuing the Applicant a CZA permit, as recommended in the aforementioned Report. Based on the record, and the technical expertise of the Department's personnel who assisted in this application, the record supports approval of Croda, Inc.'s application for the permit, as consistent with the CZA and its regulations. I further find that Croda, Inc.'s permit application is consistent with the CZA, which is to balance the economic and environmental interests of the State of Delaware. The issuance of the

aforementioned permit will allow Croda, Inc. to install and operate the aforementioned combined heat and electric power (CHEP) system, featuring two 1.1 MW lean-burn gas generator sets, a waste heat recovery system, and an absorption chiller. The engines will use landfill gas from the nearby Cherry Island Landfill facility as fuel.

Accordingly, I direct that a Coastal Zone permit be issued to the Applicant, and enter 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 Croda, Inc., and of the public hearing held on January 4, 2012, and held said hearing to consider public comment on the application, in a manner required by the law and regulations;
3. The permit applied for by Croda, Inc., is for production/manufacturing activities which will take place within the defined Coastal Zone of Delaware, and is for a new manufacturing activity within an existing facility located within the Coastal Zone of Delaware, which requires a CZA permit for the same, to wit: to install and operate a combined heat and electric power (CHEP) system, featuring two 1.1 MW lean-burn gas generator sets, a waste heat recovery system, and an absorption chiller. The engines will use landfill gas from the nearby Cherry Island Landfill facility as fuel;
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 Croda, Inc.'s application;

5. The Department shall issue a permit to the Applicant, Croda, Inc., 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 Department 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 detail in the application;
8. The Department has an adequate record for its decision, and no further public hearing is appropriate or necessary;
9. The Department shall serve and publish its Order on all affected persons in a manner consistent with the service and publication of Secretary's Orders; and
10. This proposed project 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.



Collin P. O'Mara
Secretary