



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. 2008-CZ-0002**

**Re: Application of Alma Properties, L.L.C. for a Coastal Zone Act Permit to Manufacture Mulch Ground Cover Products at a Yard Waste Recycling Plant to be Located at 601 Christiana Avenue, Wilmington, New Castle County-CZA Project 377P**

Date of Issuance: **January 24, 2008**

Effective Date: **January 24, 2008**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department") by *29 Del. C. §§8001 et seq.*, *7 Del. C. Chapters 60 and 70*, the following findings and conclusions are entered as an Order of the Secretary.

In an application deemed administratively complete on November 27, 2007, Alma Properties, L.L.C. ("Applicant") sought a permit under the Coastal Zone Act ("CZA"), *7 Del. C. Chap. 70*, to manufacture up to 100,000 tons annually of mulch ground cover products. The proposed manufacturing would occur at a new yard waste recycling facility ("Facility") located on an eight acre parcel at 601 Christiana Avenue, within the City of Wilmington, New Castle County and the "Coastal Zone" as defined by the CZA. The site has undergone "Brownfield" environmental remediation, and the City of Wilmington government's zoning allows the proposed use. The proposed use is estimated to create at least three new permanent jobs.

The Applicant's proposed manufacturing would use three diesel engines, which would grind the wood and yard waste materials and color approximately 20% of the mulch ground cover products. The Applicant estimates that 15.13 tons of air pollutants would be emitted annually, and this was the most significant negative environmental impact from the proposed project.

As required by the Department's *Regulations Governing the Coastal Zone Act*, the Applicant proposed an environmental offset that "must more than offset the negative environmental impacts associated with the proposed project." An offset must be "clearly and demonstrably more beneficial to the environment in the Coastal Zone than the negative environmental impacts associated with the permitting activities themselves." Applicant's proposed offset was based upon two actions. The first was the Facility's role to recycle of yard waste that otherwise would be treated as solid waste and disposed at the Delaware Solid Waste Authority's ("DSWA") Cherry Island Landfill ("CIL"). This action is estimated to reduce annual greenhouse gas emissions in the Coastal Zone by over 22,000 tons, along with reducing the need to use diesel equipment for moving yard waste at CIL. The second action was to provide \$2,500 in financial assistance towards implementing the recommendations in the South Wilmington Special Area Management Plan's Wetlands & Hydrologic Assessment Summary Report, dated October 2007, which is located near the Facility.

A duly noticed public hearing was held December 13, 2007 at the Department's Lukens Drive office in New Castle. Representatives from the Department and the Applicant were present at the public hearing, but no member of the public attended. The Department received one written comment.

The public comment supported the proposed recycling of yard waste into mulch products, but requested that the Department obtain more information on the proposed offset and how it could be enforced. The Department's CZA Program submitted a response to the comment in which it set forth the important Department goals and environmental benefits from recycling yard waste, as opposed to disposal as solid waste at DSWA's CIL. Senior Hearing Officer Robert P. Haynes, in a report dated January 17, 2008 ("Report"), and appended hereto and incorporated herein, recommended approval of the permit subject to reasonable conditions to protect the environment and public health consistent with the CZA.

I find and conclude that the Department should approve the issuance of CZA permit to the Applicant, as recommended by the Report, which is hereby adopted. This decision is based upon the Department's administrative record, including the public hearing record, and the technical expertise of the Department's personnel. I find that the Facility will provide Delaware with an important environmental benefit as an appropriate location for the recycling of yard waste and wood materials, which materials otherwise would be treated as solid waste and placed in a sanitary landfill for final disposal. The permit approved by this Order will allow yard waste to be recycled into mulch ground cover products for beneficial reuse. The process to make mulch uses power driven machines, but is more environmentally benign than most light manufacturing uses that seek CZA permits. The Brownfield location also allows for the recycling of the land in the CZA, and its prior industrial use makes unlikely any future use for tourism or recreation. Thus, two of the Department's important environmental goals will be served

by the CZA permit, namely, the Coastal Zone's environment will benefit from recycling and a Brownfield site will be reused to improve the economy.

I find that the use of a mulch manufacturing to recycle yard waste and wood products as an alternative to final disposal into a sanitary landfill is consistent with the Department's policies to encourage recycling and thereby reducing the landfill disposal of solid waste that can be recycled. The proposed reuse of a Brownfield site also will benefit the environment and the economy consistent with the CZA's goals of balancing environmental protection with industrial development. In sum, the proposed project satisfies the strict environmental standards imposed by the CZA and its approval will benefit the economy and the environment. Accordingly, I direct that the 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 in this proceeding;

2.) The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations, or should be waived as discussed in the Report;

3.) The Department held a public hearing in a manner required by the law and regulations;

4.) The Department considered all timely and relevant public comments in making its determination and makes its decision to modify the proposed offset through additional special conditions based in part on the public comment; and

5.) The Department has considered all the factors that the CZA requires to be considered and after weighing the considerations determines that a CZA permit should be

issued to the Applicant for the Facility based upon the application, subject to such reasonable conditions to protect the environment and public health consistent with the CZA.

s/John A. Hughes  
John A. Hughes  
Secretary

## HEARING OFFICER'S REPORT

TO: The Honorable John A. Hughes  
Secretary, Department of Natural Resources and Environmental Control

FROM: Robert P. Haynes, Esquire  
Senior Hearing Officer, Office of the Secretary  
Department of Natural Resources and Environmental Control

RE: Application of Alma Properties, L.L.C. for a Coastal Zone Act Permit to Manufacture Mulch Ground Cover Products at a Yard Waste Recycling Plant to be Located at 601 Christiana Avenue, Wilmington, New Castle County-CZA Project 377P

DATE: January 17, 2008

### I. BACKGROUND AND PROCEDURAL HISTORY

This hearing officer, acting on behalf of the Secretary of the Department of Natural Resources and Environmental Control (“DNREC” or “Department”) pursuant to *29 Del. C. §6606*, *7 Del. C. Chapter §6004*, and the Coastal Zone Act, *7 Del. C. Chapter 70*, presided over a duly noticed public hearing held December 13, 2007 at the Department’s Lukens Drive office in New Castle, New Castle County.

The public hearing provided the public with an opportunity to be heard on Alma Properties, L.L.C.’s (“Applicant”) CZA permit application submitted to the Department on November 12, 2007. The Department published notice of the application and public hearing and determined that the application was administratively complete on November 27, 2007.<sup>1</sup> The Secretary issued the Environmental Assessment Report dated November 2007 and the Offset Review Committee submitted its analysis of the proposed offset on December 11, 2007. This hearing officer requested more information on the proposed offset from the CZA Program, which was provided in a January 16, 2008 memorandum attached hereto as Appendix A.

---

<sup>1</sup> The publication of the notice and the Secretary’s Assessment may have preceded the administrative completeness determination, but the application did not change and that any delay in issuing the finding was a harmless error.

The application seeks approval to manufacture up to 100,000 tons annually of mulch ground cover products, which will be made by recycling yard waste and wood biodegradable waste, primarily from site clearing. The manufacturing will occur at a new recycling plant located at 601 Christiana Avenue in the City of Wilmington, New Castle County (“Facility”). This Report summarizes the public hearing record and discusses the legal and factual issues and makes a recommendation for the Secretary, who will make the final decision.

## **II. SUMMARY OF THE PUBLIC HEARING RECORD**

The public hearing record contains a verbatim transcript of the public hearing, and documents, marked as DNREC Exhibits (“Exh.”), which were admitted into the record as hearing exhibits. Elena Tkacz, the Department’s responsible employee for this application, presented the Department’s position and hearing exhibits into the record. The exhibits included the evidence of publication of legal notices, the Secretary’s Environmental Assessment, the Department’s notice of a completed application, and the CZA Offset Review Committee’s memorandum. The Department submitted one written comment into the record on behalf of Professor Kenneth T. Kristl, who was unable to attend the public hearing. No member of the public attended the public hearing, but the Department and Applicant had representatives in attendance.

## **III. DISCUSSION**

This application is for a permit issued under the CZA, which was enacted for the following stated statutory purpose:

It is hereby determined that the coastal areas of Delaware are the most critical areas for the future of the State in terms of the quality of life in the State. It is, therefore, **the declared policy of the State to control the location, extent and type of industrial development in Delaware’s coastal areas. In so doing, the State can better protect the natural environment of its bay and coastal areas and safeguard their use primarily for recreation and tourism...** While it is the declared public policy of the State to encourage the introduction of new industry into Delaware, the protection of the environment, natural beauty and

recreation potential of the State is also of great concern. In order to strike the correct balance between these 2 policies, careful planning based upon a thorough understanding of Delaware's potential and her needs is required. Therefore, **control of industrial development** other than that type of heavy industry in the coastal zone of Delaware through a permit system as the state level is called for....

*7 Del. C. §7001(emphasis supplied).*

The above purpose may be summarized as to protect the coastal area in Delaware for recreation and tourism, and to control industrial development within the Coastal Zone through a permit system consistent with protecting recreational and tourism uses and regulating industrial economic development. The CZA achieves this purpose by requiring any new manufacturing or any expansion of any existing manufacturing within the Coastal Zone to seek a CZA permit from the Department. The CZA's strict regulation of industrial activities also is highlighted by prohibiting the Department from issuing any CZA permit for a new "heavy industrial use" or a new "bulk transport facility." The Department is charged with the administration of the CZA, and promulgated regulations consistent with the CZA's statutory purposes and established a rigorous permit application procedure that ensures that the Coastal Zone will not have an overall negative environmental impact as a result of a CZA permit.

The Department's application requires an applicant to disclose any and all negative environmental impacts as a result of the proposed manufacturing. This duty to disclose assists the Department by allowing for a faster review of an application within the statutory ninety day review period, which begins when the application is determined to be administratively complete. If an application does have a negative impact, then the *CZA Regulations* require that the Applicant must provide an environmental offset that "more than offset the negative impacts of the project or activity that is the subject of the application for a Coastal Zone permit." *CZA Regulation 1.1.b.* Moreover, the regulations require that an applicant must propose an offset as

part of the CZA permit process, and prohibits relying on any voluntary improvement undertaken in the past.

The Facility will be within the “Coastal Zone,” as defined by the CZA.<sup>2</sup> I also find that the proposed production of mulch ground cover products, as described in the application, is manufacturing, which the CZA defines as “the mechanical or chemical transformation of organic or inorganic substances into new products, characteristically using power-driven machines and material handling equipment, including establishments engaged in assembling component parts of manufactured products, provided the new product is not a structure or other fixed improvement.” *7 Del. C. §7002 (d)*. Based upon the Department’s past regulation of similar permanent mulching and composting operations as manufacturing, I find that mulching entails a type of transformation of materials (yard waste and wood from site clearing) into a different product-mulch ground cover. Moreover, the transformation uses power-driven and material handling equipment. The mulch ground cover products is something different from the source materials as a result of the mechanical transformation, even without the chemical transformation of adding color to the mulch. The Department’s interpretation also is consistent with the intent of the CZA, which is to strictly regulate any industrial activity within the Coastal Zone in order to preserve the coastal zone for recreation and tourism activities.

I also find that the proposed manufacturing also is not a prohibited use in the CZA because it will not be a “heavy industry use” or a “bulk transfer facility,” as these terms are defined by the CZA. The nature and size of the Facility is inconsistent with the CZA’s

---

<sup>2</sup> The Department previously issued CZA status decisions and orders on proposed uses at this address for other applicants named Resource Recovery of New Castle, Inc., Peninsula Composting Co., and F.A. Potts & Co. International, Inc. The Department’s records do not indicate that the Applicant sought a status decision as required by CZA regulation, but the clear intent of the regulations as a whole is that this “requirement” is a voluntary step. I recommend that this regulation be waived for this permit, particularly in light of the issuance of status decisions for the same site. This site is not a green field, but instead would be located on a “brownfield site that will be properly reused for industrial use. I also recommend that CZA regulation G.4 be clarified or eliminated as an application requirement for any future permit applications, and that status decision be voluntary similar to a petition for declaratory relief filed to obtain a judicial determination on jurisdiction.

definition of these types of industrial uses that the CZA prohibits in the Coastal Zone as new industrial manufacturing.

The Facility is subject to the Department's *Regulations Governing the Coastal Zone Act* ("CZA Regulations"), which require that any 'recycling plant' obtain a CZA permit.<sup>3</sup> CZA Regulation F. 2.<sup>4</sup> The Department, within its authority to promulgate regulations, subject to approval by the Coastal Zone Industrial Control Board, previously determined that "recycling" entails a "transformation" of waste product(s) into a product that may be reused. Consequently, recycling is "manufacturing" as defined by the CZA and subject to a specific CZA permit regulation, particularly when power-driven equipment is used. *CZA Regulation F.2.*

The Department evaluates a CZA application based weighing on the statutorily mandated considerations. The first consideration is environmental impact, which is defined broadly as follows:

including but not limited to, probable air and water pollution likely to be generated by the proposed use under normal operating conditions as well as during mechanical malfunction and human error; likely destruction of wetlands and flora and fauna; impact of site preparation on drainage of the area in question, especially as it relates to flood control; impact of site preparation and facility operations on land erosion; effect of site preparation and facility operations on the quality and quantity of surface, ground and subsurface water resources, such as the use of water for processing, cooling, effluent removal, and other purposes; in addition, but not limited to, likelihood of generation of glare, heat, noise, vibration, radiation, electromagnetic interference and obnoxious odors.

*7 Del C. §7004 (b)(1).*

The Applicant has set forth in the Department's CZA application the proposed impacts, including the release of air pollutants totally 15.13 tons per year based upon the air pollution control permit application's potential to emit. The air pollution control permit application for the

---

<sup>3</sup> The CZA mentions recycling plants as not being heavy industrial use. The Department's regulation is consistent with this the legislative intent to regulate recycling plants by permits as a light industrial use.

<sup>4</sup> Given the prior discussion of manufacturing, the question of whether a recycling plant that does not manufacture a product is not raised by this application.

stationary sources is currently under Department review. The application discloses other impacts on: water quality, including stormwater, water quantity (use of temporary 6,000 gallon storage tank), solid waste, hazardous waste, habitat protection, and other environmental effects. The coastal zone application indicates that front end loaders, excavators and bull dozers will be used at the Facility. Trucks will bring the materials to be recycled to the Facility and remove the mulch products from the Facility, but these uses would replace the traffic going to CIL.

The CZA's second consideration is the economic effect. The application indicates that approximately three new jobs will be created and estimates the positive tax benefit from the project on government. The third CZA consideration is the number and type of supporting facilities required and their impacts on all other factors. The application discloses that no supporting facilities are required. The fourth CZA consideration is aesthetic and the application discloses that the project is visible from public roads, but not from any residential area, public park or public meeting place. The fifth consideration is the effects on neighboring land uses, and the application states that there would be no adverse impacts and that the closest residential property is 0.25 miles from the location. The sixth consideration is that the county and municipal comprehensive plans, and the application submits a letter from the City of Wilmington indicating that the proposed use was consistent with the City's M-2 zoning.

I find that the Applicant adequately has disclosed the environmental impacts based upon completing the Department's CZA permit application.

The Applicant's proposed mulching operations would cause certain quantified negative environmental impacts based primarily on using two diesel machines to grind the yard waste and wood products into the mulch and one diesel machine to add color to the mulch. The application estimated that its mulching operations' maximum production capacity would be 100,000 tons per year, which reflects the equipment's usage as limited by the air pollution control permit for the

diesel powered equipment that is under Department review.<sup>5</sup> The negative environmental impact conservatively assumed that all materials would be processed twice, so the emission impact was based on processing 200,000 tons annually. The resulting negative impact was a total potential to emit 15.13 tons of air pollutants annually, including 5.67 tons of particulate matter (“PM”), 0.84 tons of carbon monoxide (“CO”), 8.10 tons of nitrogen oxide (“NOx”), 0.37 tons of sulfur dioxide (“SOx”), and 0.15 tons of HC.

The Applicant proposed an environmental offset based upon the avoided emissions at Delaware Solid Waste Authority’s (“DSWA”) Cherry Island Landfill (“CIL”).<sup>6</sup> This offset estimated that its mulching operations would recycle the yard waste that otherwise would be placed in CIL for final disposal. The offset estimated it would receive approximately 45,000 tons a year of yard waste from the diversion from CIL, based upon receiving all the yard waste that DSWA estimates is disposed annually at CIL. The remaining 5,000 tons for the 50,000 estimated total annual production would be from land clearing. As noted earlier the permit sought approval to manufacture 100,000 tons per year and this was based on the air pollution control limits on operating the machinery. The offset’s theory is that the ban on yard waste will reduce DSWA’s need to operate its diesel machinery as much due to the absence of 45,000 tons of annual yard waste, and that the yard waste will not emit harmful gases, such as methane, which are released as a result of the natural biodegradation of wood and yard waste in a landfill. The application also mentioned the benefits of recycling and not disposing of yard waste in a sanitary landfill.

---

<sup>5</sup> The air pollution control permit application was submitted by Strobert Tree Services. The difference in names on these permits does not prohibit the air pollution control permit from issuing as the CZA permit approves the use based on the same air emitting under the CZA.

<sup>6</sup> The formal name is Northern Landfill at Cherry Island landfill, which is located within the City of Wilmington and the Coastal Zone

The public comment questioned whether the proposed offset was supported sufficient information and whether it was enforceable by an audit of DSWA's landfill operations. For example, comment questioned the offset's assumption that DSWA will use its equipment less in direct proportion to the decline in waste received. I agree with the public comment that direct regulation to enforce the offset's assumption will not occur; however, the Department comprehensively regulates DSWA's CIL. The Department's regulation will mean that the Department can enforce the yard waste ban, which is central to the offset. If less waste is received for disposal at CIL, then the offset's significantly environmental benefits will be realized. The Department strongly supports the yard waste ban, and considers the Facility to provide a viable and valuable environmental resource as an alternative to landfill disposal of yard waste. Moreover, the offset reliance on operating the machinery is relatively minor compared to the huge environmental benefit from recycling yard waste as opposed to its final disposal in CIL. As highlighted by the January 16, 2008 memorandum from the CZA program, the recycling of yard waste will provide considerable environmental benefits by reducing the air emission of over 22,000 tons of greenhouse gases and reducing the need to increase the height of CIL, which is estimated to cost \$3.8 million per each vertical foot. To realize this important environmental goal, the Department strongly has supported the construction of a suitable recycling facility for yard waste and avoid its disposal at CIL. The Facility is near CIL and its location will allow the beneficial reuse of a Brownfield site, which is another of the Department's important policies. Thus, while the comment is factually correct that there will be no direct control over DSWA's operation of its equipment at CIL, the Department could approve this project under the CZA based on the Department's control over CIL and the strong environmental policies to support recycling of yard waste and reusing of Brownfield sites. A far greater environmental benefit than reduced hours of equipment operation is gained from the reduced emissions of over 22,000 tons

from recycling and not landfill disposal of yard waste than occurs from the operation of machinery to move the yard waste.

The *CZA Regulations*' environmental offset clearly require that the environment in the Coastal Zone be improved and the Facility will provide an alternative to the final disposal of yard waste at CIL consistent with the two Department goals of yard waste recycling and reuse of Brownfield sites. *CZA Regulations I*. The Department's yard waste ban is to go into effect January 24, 2008. This deadline means that there is a need to have an alternative to CIL disposal approved by the date of the yard waste ban. The Department, based upon this immediate need for suitable locations to recycle yard waste, should approve this application as quickly as possible. I find that that the applicant's offset is consistent with the *CZA Regulations* based upon the overriding environmental policies of promoting recycling and reusing a Brownfield site, and that it is "a project or activity that is clearly and demonstrably more beneficial to the environment." *CZA Regulation I.1.a*). "[A]ll applicants are required to more than offset the negative impacts of project..." *CZA Regulation I.2.c*). The *CZA Regulations* set forth preferences on the offsets, and CIL's location within the CZA satisfies this preference since the reduced emission in greenhouse gases will occur at CIL, which is in the Coastal Zone.<sup>7</sup> *CZA Regulation I.1. c*). "Offset proposals should be well-defined and contain measurable goals or accomplishment that can be audited..." *CZA Regulation I.1. d*). The requirement that an applicant do something is highlighted by the fact that an applicant must obtain all permits needed for an offset before a CZA permit may be issued. *CZA Regulation I.1.f*).

I find the permit application meritorious because it is so strongly aligned with the Department's efforts to promote recycling of yard waste and to reuse Brownfield sites. The

---

<sup>7</sup> The South Wilmington Special Management Area wetlands project is located approximately 1 mile from the Coastal Zone, but the improvement of the wetlands will provide significantly improvements to the Coastal Zone through improvements to storm water and sanitary releases now experienced in the Coastal Zone and adjacent areas, such as the residential community of Southbridge.

Coastal Zone in Wilmington contains Brownfield sites and their reuse for tourism or recreational uses is not feasible in the foreseeable future. The best alternative is the reuse of these sites through economic redevelopment such as the Applicant had proposed with the Facility. The negative impact of the project is relatively small and an argument could be made that manufacturing is not the type of manufacturing that the CZA intended to regulate, but that decision is for a court to decide. The Department in the past has determined that similar mulching and composting operations require a CZA permit and as noted above I agree. In sum, the Department strongly encourages mulching as an excellent environmental alternative to the landfill disposal of yard waste at Cherry Island and that this provides an overwhelming offset that dwarfs an offset from not operating equipment.

Based upon the entire record, including the public hearing record, I find that a CZA permit should be issued with special conditions to ensure that the permit is consistent with the CZA, the Department's regulations, and the Department's statutory purposes and policies.

#### **IV. RECOMMENDED FINDINGS AND CONCLUSIONS**

Based on the record developed, and the above stated reasons, I find and conclude that the record supports approval of the issuance of a Coastal Zone Act permit to the Applicant, subject to such reasonable conditions the Secretary determines are appropriate and consistent with the CZA.

In conclusion, I recommend the Secretary adopt following findings and conclusions:

- 1.) The Department has jurisdiction under its statutory authority to make a determination in this proceeding;
- 2.) The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations and any delay in determining a administratively complete application was a harmless error;

3.) The Department held a public hearing in a manner required by the law and regulations and the requirement to seek a status decision should be waived for this application and any future applications;

4.) The Department considered all timely and relevant public comments in making its determination and makes its decision to modify the proposed offset through additional special conditions based in part on the public comment;

5.) The Department has considered all the factors that the CZA requires to be considered and after weighing the considerations determines that a CZA permit should be issued to the Applicant subject to the Department's standard CZA conditions, and the following special condition:

a) The Applicant shall be allowed to manufacture up to 100,000 tons of mulch ground cover products, as described in Applicant's CZA application, in any twelve month period, beginning with the commencement of permanent on-site operations, and shall submit an annual report to the Department on its production level.

*s/Robert P. Haynes*  
Robert P. Haynes, Esquire  
Senior Hearing Officer



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

**MEMORANDUM**

**TO:** Robert P. Haynes  
**THRU:** Philip J. Cherry  
**FROM:** Elena Tkacz  
**RE:** Response Document to Public Commentary on CZA Project 377P  
**DATE:** January 16, 2008

---

**Introduction**

On December 13, 2007, a public hearing was held for ALMA Properties, LLC on the matter of their Coastal Zone Act (CZA) Permit application for a proposed yard waste recycling facility in Wilmington. Although no public opposition had been received prior to the public hearing, the Department received written comments from Kenneth T. Kristl which were submitted in lieu of his attendance to the public hearing later that night. This memorandum serves to respond to the points made by Mr. Kristl in his December 13, 2007 letter and to expand upon the grounds on which the Department should approve this CZA Permit.

**Analysis**

Mr. Kristl states that the applicant has not accurately taken into consideration the negative environmental impacts of the proposed project. He points out after considering the new air emissions from the proposed project and the emissions which would be offset at the landfill, that there would still be a net of 4.82 TPY of additional pollution in the coastal zone. Mr. Kristl did not take into account the reduction of 22,255.66 TPY of greenhouse gas emissions which would result from this proposed project as well.

While evaluating the Offset Proposal, the DNREC Offset Committee considered the 15.13 TPY of air emissions which would be generated by these proposed operations, the 10.31 TPY of air emissions that would be removed from the Coastal Zone by taking these materials out of the landfill, the 22,255.66 TPY of greenhouse gases which would be avoided, the value of the landfill space at CIL, the public service this project would provide and the financial contribution to the South Wilmington Special Area

*Delaware's Good Nature depends on you!*

Management Plan (SAMP). In a memo from Dr. Harry W. Otto, Chair, CZA Offset Review Committee, dated December 11, 2007, he concludes that after taking into account the entire offset proposal, the applicant clearly and demonstrably offsets the environmental impacts associated with this project.

Legal Counsel was also requested during this application review process. Robert F. Phillips, Deputy Attorney General, was assigned to review both the application and the Offset Proposal for compliance with the Coastal Zone Act and the corresponding Regulations Governing Delaware's Coastal Zone. Mr. Phillips states that it is the responsibility of DNREC technical experts to determine whether the offset calculation and the results are reasonably accurate and backed by scientific evidence. He also uses 7 *Del. C. § 7004 (b)* to support the statement that while reviewing an offset proposal, DNREC has the authority to consider the potential environmental benefits of extending the life of the Cherry Island Landfill (CIL) by diverting yard waste from it. This is one of the factors that the DNREC technical staff considered while reviewing the entirety of the emissions calculations and deeming the Offset Proposal sufficient.

Mr. Kristl continues to question ALMA's emission calculations by stating that it is not appropriate to assume that by diverting the yard waste material from the CIL, that there would be a corresponding reduction in heavy equipment needed to process the material at the CIL. He states that the one-to-one reduction based on volume is likely to be overstated. His reasoning is based on ALMA having stated that the heavy equipment at the CIL will operate 7.8% less because diverting the yard waste would reduce the volume by 7.8%. Mr. Kristl is incorrect in making the assumption that the one-to-one ratio is overstated. The one-to-one ratio is appropriate in the case of CIL because as part of their current landfilling operations, the yard waste is managed separately from the rest of the municipal waste. There is a separate part of the landfill which is dedicated to processing the material and they have separate heavy equipment and machinery to move and process the yard waste material. They also do not use cover materials for the processed yard waste at CIL so Mr. Kristl's assertion that daily cover would still be required is also inaccurate.

Additionally, we suggest that Mr. Kristl may have undervalued the landfill space at CIL. Data from the Delaware Solid Waste Authority (DSWA) puts a value of \$3.8 million for each vertical foot at CIL. This figure is based upon the calculations of how much it would cost DSWA to add 23 feet in height to the landfill as per their latest expansion request. Yard waste presently accounts for 1/3 of every foot of landfill at CIL; therefore, potentially accounting for \$1.56 million per year. By diverting yard waste from CIL, there is potential savings of \$26.52 million to the residents of New Castle County during the remaining life of the landfill. While all these savings may not be attributed to ALMA, the value of landfill space saved by this project is significant and was not well described in our previous assessment of the Offset Proposal.

I would also like to respond to another point which has surfaced since the public hearing. It has been suggested that due to the impending yard waste ban, the applicant's offset of avoided emissions at the landfill should be negated. At the time this application was

received, the yard waste ban imposed on DSWA was not in effect and in fact was stayed by an act of the General Assembly. Efforts continue to this day in order to overturn the yard waste ban which, as of this writing, still has not taken effect. Claiming avoided emissions at the landfill after the ban is in effect would be inapplicable; however, given the past and current state of the yard waste ban, the avoided emissions argument is valid.

In regards to the potential odor issue resulting from the mulching process, the Offset Committee did take the odor potential into consideration while evaluating the application and the Offset Proposal. This project is not a composting facility and therefore, not anticipated to generate significant odors. There is a high turnover rate and different composition of materials in a mulching operation as compared to a composting operation. In the mulching of the yard waste, there is a fast rate of processing of the materials; therefore, the materials would not be decomposing. Since the materials would not be decomposing, they would not be emitting odors associated with decomposition. Odors are not expected to be a problem on site nor are they expected to affect any nearby communities.

As Mr. Kristl has stated, the Southbridge community is located approximately ¼ mile from the proposed project site. The applicant and DNREC have involved the community in this permitting process and any concerns from the community have been sufficiently addressed. Not only has the community's concerns been addressed, but the Southbridge community will stand to benefit from this proposed project. The SAMP is a comprehensive planning process that seeks to revitalize South Wilmington, including the historic neighborhood of Southbridge, in a manner which is socially, economically and environmentally sustainable. Environmental projects implemented through the SAMP (including drainage improvements, wetland restoration and urban forestry) seek to rectify long-standing environmental justice issues and contribute to community economic growth and stability. The financial contribution will go towards research and development for this plan, for which the Southbridge community is supportive and finds beneficial.

### **Conclusion**

Given the past uncertainty of the yard waste ban and the assistance this project provides to residents and businesses of New Castle County, DNREC finds that the avoided emissions from the CIL, the extension of the life to the landfill and the contribution to the SAMP more than offset potential air emissions which would result from this project. The applicant has addressed all issues sufficiently throughout this permitting process and should be granted this CZA Permit for operating a yard waste recycling facility in the Coastal Zone.