



**TO:** John Hughes  
Secretary of DNREC

**FROM:** Professor Kenneth T. Kristl, Director  
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**DATE:** November 6, 2007

**RE:** Comments on the Request by Premcor Refining Group, Inc., Delaware City, For a Coastal Zone Act Status Decision

This memo is a public comment in response to Premcor Refining Group, Inc., Delaware City's ("Premcor") request for a Status Decision under the Delaware Coastal Zone Act ("CZA") regarding the proposed DCR 20 PPM FCCU NO<sub>x</sub> pollution control project ("Project") at the Delaware City Refinery ("Refinery"). This memo is intended for inclusion in the public comments on the Coastal Zone Act Status Decision request from Premcor. Premcor, in its request, is asking you to decide if the Project is subject to regulation under the CZA.<sup>1</sup>

Premcor's Request requires you to decide an important legal question under the CZA. The Refinery, as a nonconforming use, is not itself subject to regulation under the CZA; but "expansions" and "extensions" of nonconforming uses are regulated by the CZA permitting process. Thus, you must decide whether the Project is an "expansion" or an "extension" of the Refinery's nonconforming use.

We believe that you should find the Project is an "expansion" or "extension" requiring a CZA permit. The primary purpose of the Project is to remove nitrous oxide compounds from the air emissions of the Refinery—according to Premcor, approximately 700 tons per year ("TPY") of NO<sub>x</sub> compounds. We applaud any project (even if done under the duress of a court order) which improves air quality in Delaware. However, Premcor's Request makes clear that there is an additional environmental impact from the project: 1209 TPY of pollutants will be discharged into the Delaware River. Precisely because of this impact on the River, and the net 500 TPY of pollutants that the Project will put into the environment, we believe that a status decision finding the Project outside the regulatory reach of the CZA would be inconsistent with the Act itself, as well as the 1999 Regulations issued pursuant to the CZA. We therefore strongly urge you to find

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<sup>1</sup> A person whose proposed activity is not exempt "may request of the Secretary a status decision to determine whether or not the proposed activity requires a Coastal Zone permit under the Act or these regulations." *See* Code Del. Regs. 7-100-101 §7.2 (2007).

that the Project is an “expansion or extension of a nonconforming use” falling within the purview of the CZA so as to require a CZA permit under § 7004.

### **FACTUAL BACKGROUND**

Premcor, a subsidiary of Valero, owns and operates the Refinery, which has been in operation since 1957. On August 1, 2007, Premcor DCR requested from DNREC a Coastal Zone Act Status Decision for a 20 PPM FCCU NO<sub>x</sub> pollution control project known as WGS+. The project is proposed to be a remedy consistent with the July 2006 Agreement between Premcor and DNREC to reduce the NO<sub>x</sub> from the FCCU unit. The project involves the installation of equipment through a Wet Gas Scrubber Stack via oxidative conversion to nitrates and subsequent removal via “scrubbing” or absorption. Chemical additive tanks and a caustic tank will be added to the facility for chemical processing as well as construction of an additional 30 foot extension to a preexisting scrubbing tower. The proposed project will utilize and require shipment to the facility numerous chemicals including: sodium hypochlorite, sodium chlorite, sodium bisulfite, and other similar caustic solutions for scrubbing. The remnants of the WGS+ will introduce a heavier load for the waste water treatment plant and increase the amount of discharged pollutants in the Delaware River.

Premcor’s Request states that the Project would reduce 700 tons of nitrous oxide from the Refinery’s air emissions into the atmosphere every year. However, Premcor’s October 9, 2007 letter to DNREC makes clear that the WGS+ will generate 683 net TPY of chlorides, 307 net TPY of sulfates, and 219 net TPY of nitrogen compounds, all of which will end up in the Delaware River.<sup>2</sup> Although Premcor tries mightily to downplay the significance of these new water pollutants, the numbers do not lie: in exchange for a reduction of 700 TPY of air pollutants in the coastal zone, the Project will add 1209 TPY of pollutants into the coastal zone.

Of course, these new water pollutants are not completely harmless (as Premcor seems to believe). Premcor itself acknowledges that there is a National Water Quality Criteria for Chloride<sup>3</sup> put in place by the EPA because Chloride is a known pollutant. Chloride in high levels can contaminate fresh water streams and lakes causing many fish and aquatic communities to die.<sup>4</sup> Premcor states in its request for a Coastal Zone Act Status Decision that the Delaware City Refinery is located “within Zone 5... designated by the Delaware River Basin Commission.”<sup>5</sup> According to the Water Quality Regulations of the DRBC’s Administrative Manual the following water uses “are to be protected in this Zone... Maintenance of resident fish and other aquatic life, propagation of resident fish, passage of anadromous fish, wildlife.”<sup>6</sup> The effects of Chloride can be detrimental to fish and aquatic life. Discharge of 683 additional TPY of chloride into the Delaware River at outfall 001 is a significant environmental impact above and beyond Premcor’s current use.

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<sup>2</sup> October 9, 2007 Letter, Premcor’s Chart - Attachment A – Summary of Predicted Effluent Concentrations and Potential for Environmental Impact Based on Available Water Quality Criteria.

<sup>3</sup> Premcor Request Attachment section A, page A-4

<sup>4</sup> Kentucky water quality control board study of Chloride in water supply, available at <http://kywater.org/ww/ramp/rmcl.htm>

<sup>5</sup> Attachment section A, page A-5

<sup>6</sup> *Id.*

The EPA has also determined that Nitrates do pose an environmental concern and can be very harmful and even deadly if leaked into a drinking water supply.<sup>7</sup> Nitrates are “very soluble and do not bind to soils,” thus giving them a “high potential to migrate to ground water.”<sup>8</sup> Nitrates also “do not evaporate and are therefore likely to “remain in water until consumed by plants or other organisms.”<sup>9</sup> Likewise, the EPA states that sulfate seeping into a drinking water supply can be very hazardous to humans who drink the water.<sup>10</sup> Thus, both nitrates and sulfates are pollutants. Discharge of 219 additional TPY of Nitrates and 307 additional TPY of sulfates into the Delaware River at outfall 001 are significant environmental impact above and beyond Premcor’s current use.

Quite simply, the Project will generate a net addition of 509 TPY of pollutants into the coastal zone. The legal questions here must take that undisputed fact into account.

### **LEGAL ANALYSIS**

The CZA was developed because “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.”<sup>11</sup> By enacting the CZA, Delaware’s governmental officials stated their awareness that there must be a law in place to protect Delaware’s precious coastal habitat. The Act itself states, “It is, therefore, the declared public policy of the State to control the location, extent and type of industrial development in Delaware’s coastal areas.”<sup>12</sup> The CZA was clearly enacted to enable governmental agencies to monitor and control industrial development within the state’s coastal zone.

Since its enactment in 1971, the CZA’s purpose has remained unchanged: To safeguard the natural environment in the state’s coastal areas for use primarily for recreation and tourism.<sup>13</sup> The Act’s flat prohibitions against certain industrial development have led to the CZA being called “the first comprehensive coastal land use law in the world aimed at curbing industrial uses of a coastal area.”<sup>14</sup> The Act prohibits entirely “construction of new heavy industry in its coastal area, which industry is determined to be incompatible with the protection of that natural environment in those areas,” and new bulk product transfer facilities.<sup>15</sup> It also regulates through a permitting process the development or expansion of non-conforming uses and manufacturing uses.<sup>16</sup>

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<sup>7</sup> EPA Consumer Factsheet on Nitrates/Nitrites available at:  
[http://www.epa.gov/safewater/contaminants/dw\\_contamfs/nitrates.html](http://www.epa.gov/safewater/contaminants/dw_contamfs/nitrates.html)

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> See EPA Website at: <http://www.epa.gov/ebtpages/watewaterpollutants.html>

<sup>11</sup> 7 DEL. C. § 7001 *emphasis added*.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> James May and Wendy Meyers, *It Is Still Not A Shore Thing: Environmental Improvement And Industrial Uses of Delaware’s Coastal Zone*, DEL. LAYWER at 20 (Spring 1999).

<sup>15</sup> 7 DEL. C. § 7001, 7003.

<sup>16</sup> 7 DEL. C. §§ 7002(b), 7002(d), 7004(a).

The Refinery, as an oil refinery, is clearly heavy industry under §7002(e) of the CZA. New heavy industry is prohibited under the CZA pursuant to §7003. However, the Refinery has been in operation since 1957 and was in use on June, 28 1971 when the CZA took effect so that it qualifies as a nonconforming use under § 7002(b). Under § 7004(a), a nonconforming use is allowed to operate under the CZA, but an “expansion” or “extension” of a nonconforming use is “allowed only by permit.” Thus, the question here is whether the Project is an “expansion” or “extension” of the Refinery’s nonconforming use. If it is not, then it appears that the Project is outside the scope of the CZA because it is merely the nonconforming use continuing to operate. If it is an “expansion” or “extension,” then Premcor must get a CZA permit.

## **I. THE PROJECT IS AN EXPANSION OR EXTENSION AND THEREFORE GOVERNED BY THE CZA AND ITS REGULATIONS**

We believe that the Project is an expansion or extension of Premcor’s current nonconforming use and therefore should be regulated via a CZA permit under §7004. This conclusion is based on an exercise of statutory construction involving the straightforward application of recognized rules.

The terms “expansion” or “extension” are not defined in the text of the CZA or the 1999 Regulations governing the CZA. The closest either comes to being defined is in § 5 of the 1999 Regulations, which gives 19 examples of what are not expansions or extensions under the Act (without defining what is an expansion or extension). Therefore, the applicable terms are ambiguous. When interpreting ambiguous terms in the CZA, deference should be given to the overarching purpose and legislative intent of the Act. The Delaware Supreme Court has consistently taken this approach, interpreting the CZA according to four principles of statutory construction that serve as guideposts, allowing interpretations of the Act to be guided by the purpose and intent of the Act. The principles are: (1) recognizing that the purpose of the Act is important; (2) interpreting so as to harmonize all sections of the Act; (3) liberally construing the Act to maximize its applicability; and (4) favoring interpretations with reasonable consequences over those that produce unreasonable consequences or absurd results. With the Act’s four principles in mind, Premcor’s proposed Project should be found to be an expansion of a nonconforming use, and thus, it should be regulated pursuant to the permitting requirements of Section 7004(b).

### **1. Regulating the Project by Permit Furthers the Purpose of the Act.**

Paramount to the interpretation of any statute is that it be interpreted in such a way that gives effect to its underlying legislative intent. As the Supreme Court has said, in construing the Act and its regulations, “the fundamental rule is to ascertain and give effect to the intent of the legislature.”<sup>17</sup> The words of the Act’s very first section (§ 7001) clearly and concisely state the Act’s purpose and public policy is “to protect the natural environment of its bay and coastal areas and safeguard their use primarily for recreation and tourism” because “the coastal areas of Delaware are the most critical areas for the future of the State in terms of quality of life in the State.”<sup>18</sup> The Act calls for complete prohibition of new heavy industry because such industry “is

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<sup>17</sup> *Coastal Barge Corp. v. Coastal Zone Industrial Control Board*, 492 A.2d 1242, 1246 (Del. 1985).

<sup>18</sup> 7 DEL. C. § 7001.

determined to be incompatible with the protection of that natural environment in those areas.” It prohibits new bulk product transfer facilities because they “represent a significant danger of pollution to the coastal zone.” Meanwhile, “the protection of the environment, natural beauty and recreation potential of the State is also of great concern” to the regulation of manufacturing uses and expansions or extensions to nonconforming uses, and thus must be regulated by a permit process. Therefore, the Act clearly favors environmental protection over certain types of development, and makes the protection of the environment the clearly stated centerpiece of the CZA.

While Premcor’s proposal for an extension of its original WGS+ will effectively remove 700 TPY of nitrous oxides from the air, it will result in the discharge of 1209 TPY of pollutants into the Delaware River, a waterway protected by the CZA. This net increase of pollution exemplifies precisely what the CZA was designed to regulate; “Environmental impact, including but not limited to, probable air and *water pollution likely to be generated by the proposed uses*” is but one factor listed in the Act that shall impact the decision to pass on permit requests.<sup>19</sup>

Given the express purpose and public policy of the CZA to protect the environment of Delaware’s coastal zones, we believe that purpose is best served through regulation by permit of any pollutants that are added to the coastal zone. The Act’s purpose would not be adequately served by a statutory interpretation which found that the addition of pollutants need not be regulated. Therefore, in order to serve the purpose of the Act, Premcor’s Project should be regulated by a CZA permit.

## **2. Regulating the Project by Permit Best Harmonizes the Entire Act.**

Interpretations of the CZA and its regulations must consider the language of all sections of the Act as read together. Merely focusing on one word or a single phrase within the Act, while ignoring the rest, is improper interpretation.<sup>20</sup> This holistic approach to statutory interpretation avoids unreasonable consequences in light of the statute’s expressed purpose.

Of critical importance is § 5.16 of the Regulations. Under that section, the installation of pollution control devices are not deemed an expansion or extension, but only if “such installation and modification *does not result in any negative environmental impact over and above* impacts associated with the *present* use.”<sup>21</sup> Based on Premcor’s own numerical data, the Project will create a net of 509 TPY of pollution *over and above* that which it is currently discharging to the air and water. Regulation §5.16 indicates that industries cannot hide behind the fact that they are attempting to improve the environment in one circumstance while creating more pollution in another, for they can only claim the protection of § 5.16 if there is no net increase in environmental effect. Given this language, a statutory interpretation which finds that the Project is not an expansion or extension would be inconsistent with the language of §5.16 and not harmonize with that regulation. Therefore, the principle of harmonizing the entire Act is best served by finding that Premcor is required to apply for a CZA permit.

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<sup>19</sup> 7 DEL. C. § 7004(b)(1) *emphasis added*.

<sup>20</sup> *Coastal Barge Corp.*, 492 A.2d at 1246.

<sup>21</sup> Code Del. Regs. 7-100-101 at §5.16 *emphasis added*.

### **3. Regulating the Project by Permit Best Liberally Construes the Act.**

In *City of Wilmington v. Parcel of Land*, the Delaware Supreme Court concluded that the broad statement of purpose of Section 7001 required the Court to construe the Act liberally “in order to fully achieve the legislative goal of environmental protection.”<sup>22</sup> The Court reasoned that it was necessary to reject the defendant’s narrow interpretation of the Act to prevent an outcome that would conflict with the purpose of the CZA.<sup>23</sup> The bias is toward inclusion: It is more appropriate to err on the side of applying the Act, than to find that the use does not fall within the purview of the Act. This guarantees that the Act’s provisions are fully implemented and its purpose carried out as intended.

Because the broad purpose of the Act is grounded in strict prohibitions,<sup>24</sup> with exceptions only as delineated in Section 7004(a), those exceptions must be interpreted and applied narrowly. Premcor proposes to dump nitrates, sulfates, and chlorides into the Delaware River. Finding the Project not to be an expansion or extension means that those pollutants will not be subject to regulation under the CZA, and the purpose of the CZA will not be served. Finding that the Project is an expansion or extension will mean that the pollution is subject to the terms of the Act, including the requirements for mitigating environmental impacts, which is consistent with the CZA’s purpose. Therefore, liberally construing the Act absolutely requires that Premcor’s proposal be deemed an expansion or extension subject to the CZA permit process so that the new pollution of the coastal zone that the Project will produce can fall within the regulatory purview of the Act.

### **4. Regulating the Project by Permit Produces an Interpretation with Reasonable Consequences instead of one with Unreasonable Consequences.**

The final recognized principle of statutory construction is to favor reasonable interpretations over unreasonable ones. Interpretations of the CZA that lead to results contrary to the Act’s purpose must be rejected as unreasonable and irrational. Where a pollution control proposal, like Premcor’s, includes a net increase in pollution, the proposal should be viewed as an expansion subject to regulation under the CZA according to Section 7004(b).

An interpretation which finds that Premcor’s Project is not an expansion, despite its 509 TPY net increase in pollution, produces irrational consequences in at least two ways. First, Premcor’s pollution will go unregulated under the CZA, which is contrary to the Act’s express purpose to control pollution in the coastal zone. Second, the language of Regulation 5.16 will be rendered virtually meaningless. Regulation 5.16 only exempts from the CZA permit requirement the installation of pollution control equipment by nonconforming uses when that equipment will not create “negative environmental impact *over and above* impacts associated with the present use.”<sup>25</sup> If the Project is not an expansion, despite its 509 TPY net increase in pollution, then you will have rendered the language of § 5.16 concerning environmental impacts meaningless surplusage, for the installation of pollution control equipment will not be considered an

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<sup>22</sup> 607 A.2d 1163 (Del. 1992).

<sup>23</sup> *Id.*

<sup>24</sup> See 7 Del. C. §§ 7001, 7003.

<sup>25</sup> Code Del. Regs. 7-100-101 at §5.16 *emphasis added*.

expansion whether or not there is an increase in environmental impact. The general rule of statutory construction is to avoid interpretations which render terms meaningless or mere surplusage;<sup>26</sup> thus, an interpretation that the Project is not an expansion violates this legal rule as well. By contrast, finding that the Project is an expansion honors the CZA's purpose by regulating a new source of pollution into the coastal zone and gives full effect to the language of § 5.16. Clearly, finding the Project is an expansion or extension produces reasonable consequences that uphold and affirm the Act, and should be adopted here.<sup>27</sup>

Based on the four principles of statutory interpretation, you should conclude that a pollution control project which results in a net increase in pollutants discharged to the coastal zone qualifies as an expansion or extension. As such, the proposal is subject to the CZA's permitting requirements. This interpretation will ensure that the purpose of the CZA is honored, and irrational and unreasonable results are avoided.

### **CONCLUSION**

Due to the discharge of 500 TPY of net pollution into the environment that Premcor's proposed new NO<sub>x</sub> scrubber will have on the waters of Delaware, thereby causing a negative environmental impact, we respectfully suggest that you find that Premcor's Project is an extension or expansion under § 7004(a) and therefore is required to apply for a CZA permit. Requiring a CZA permit will have the salutatory effect of requiring mitigation of the effects of the discharge to the Delaware River to complement the reduction in air pollution the Project will generate. That is a win-win proposition for Delaware's Coastal Zone.

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<sup>26</sup> See *Grimes v. Alton*, 804 A.2d 256, 264 (Del. 2002).

<sup>27</sup> Another indication of the reasonableness of an interpretation finding the Project to be an expansion or extension is the common meaning of the terms themselves. "Extension" is defined in the American Heritage dictionary as "Any part added to or extended from a main structure to form an addition; a prolongation." The American Heritage Dictionary of the English Language, pg. 464 (1981). Likewise, "expansion" is defined in the American Heritage dictionary as "An enlargement, increase, or extension as of business, currency, or territory; Increase in the dimensions of a body." *Id.* at 461. Clearly the words "expansion" and "extension" in the English language are words used and associated with an alteration of a current state, as in Premcor's extension of its existing WGS+ scrubber stack. Therefore, under the CZA, §7004(a), Premcor's request to build pollution control devices at the DCR needs to be governed by a permitting authority.