



"J Sevilla"  
<qmakeda@chesapeake.net>

10/02/2007 02:12 AM

To Peter Gold/R3/USEPA/US@EPA, Paul  
Arnold/R3/USEPA/US@EPA, Dave  
Campbell/R3/USEPA/US@EPA, Donald  
cc "Abrams, Ben" <Ben.Abrams@mail.house.gov>,  
<gabum@mde.state.us>, <swilson@mde.state.us>,  
<roy.dyson@senate.state.md.us>, "Governor"  
bcc

Subject Fw: APPEAL to EPA Re: Dominion Cove Point LNG - MDE  
Final Decision to Renew Title V Part 70 Operating Permit

History:  This message has been forwarded.

Mr. Stephen L. Johnson, US EPA Headquarters  
Mr Donald Welsh - EPA Region 3

Per letter from Peter Gold, below, I am resubmitting my appeal to the EPA and also the appeal on behalf of citizens of High Risk Communities (scroll down to appeal email sent July 24, 2007, sent per instructions from MDE). I have also included a "big picture" drawing of the situation regarding this appeal. This "big picture" illustrates the situation at Cove Point and provides an integrated view of our concerns which have been detailed in the attached documents previously submitted to MDE and EPA. This appeal also reiterates the emphasis that must be placed on the "big picture" which affects us all, not just Cove Point. Human health, the environment, Homeland Security, and Maryland's seafood commerce are just a few of the reasons why we are appealing to regulators to look at this perspective to do the right thing. This means putting human health and the environment at the forefront. The reason EPA and MDE were established are evident in the agency titles and in your mission statements. Failure to meet those means lack of accountability to the citizens/taxpayers and to yourselves.

To summarize a few of the major points of our appeal, this is a bare minimum **MUST HAVE** and these requests are reasonable and doable. We ask that MDE and EPA be accountable and make this happen:

1. That MDE and EPA would require **Dominion Cove Point LNG to install Hazardous AIR Pollution (HAP) reduction equipment** as part of the requirements for vaporization. The current mode of operation has **NO CONTROLS** on these HAPs which far exceed Maryland Toxic Air Pollution limits from 200% up to 67,500%. At the very least, we were expecting Secretary Shari Wilson to render a report on MDE's planned course of action and timeline to mitigate this critical hazard to human health and the environment. We are appealing to EPA to assist in making this happen. (installation of HAP reduction equipment.)
2. That MDE and EPA would require **Dominion Cove Point LNG to IMMEDIATELY CEASE DUMPING HAP-polluted water into Gray Creek which feeds the Chesapeake Bay.**
3. We are asking that sufficient **equipment for pollution reduction controls with (CEM) Continuous Monitoring Equipment** (especially for vaporizers) be installed at the LNG facility prior to emissions release into the environment. To date only minimal pollution reduction is installed for the turbines only, the high

polluting vaporizers have NO POLLUTION REDUCTION EQUIPMENT and no CEM.

4. We ask that **Air Quality monitoring be installed at Dominion's expense, in strategic places in High Risk Communities** such as Cove Point Beach. This will be used as an Independent Air Quality Assurance Compliance measurement tool to keep Dominion's emissions in check.

**FYI on Homeland Security issues:** This is a serious matter because the current "security measures" at the Dominion facility is a joke at best. Two things are happening according to sources in the know and with recent first hand experiences:

a) the Security forces at Dominion are only paying lip service to this very important task of Security. They have been quoted to say, "We believe there is no danger, we are just doing this security routine to please the politicians." This was reported as first hand knowledge by one of our Cove Point Beach Association Board Members.

b) Entrance through the Dominion facility construction has NO SECURITY CHECKS. The public and workers alike come and go as they please, there are no guards or ID checks taking place. This is the recent experience of one of our Cove Point Beach Association Board members.

Accomplishing the above 4 ACTION ITEMS is a start. To use on analogy: If an ordinary citizen/taxpayer were to release even a small fraction of the toxins being released by Dominion Cove Point LNG, that person would be arrested, jailed, and labeled a terrorist. Why then is a multi billion dollar company like Dominion LNG being permitted to release these highly toxic emissions and be protected as "in compliance"? Does this make sense? It is the citizens and the environment needing protection; Dominion is the deep-pocket offender and can afford to pay the price of doing business as a responsible entity. Looking to MDE and EPA to do their job as intended for the public's protection.

*June Sevilla*

Board Member, Cove Point Beach Association  
301-351-3161

representing the HIGH RISK Communities adjacent to the Cove Point LNG Facility:  
Cove Point Beach Association (130 property owners)  
Chesapeake Ranch Estates (11,000 residents)  
Other concerned residents and communities

----- Original Message -----

From: <[Gold.Peter@epamail.epa.gov](mailto:Gold.Peter@epamail.epa.gov)>

To: <[qmakeda@chesapeake.net](mailto:qmakeda@chesapeake.net)>

Cc: <[Arnold.Paul@epamail.epa.gov](mailto:Arnold.Paul@epamail.epa.gov)>; <[Campbell.Dave@epamail.epa.gov](mailto:Campbell.Dave@epamail.epa.gov)>

Sent: Monday, August 06, 2007 3:20 PM

>

> June,

>

> As per our earlier conversation, attached is our response to your

> petition request. Our 45-day review period concludes on September 13th

> and a petition can be filed with EPA from September 14, 2007 through

> November 12, 2007. As stated in our response, we would participate in a  
> meeting with you and MDE to discuss the Title V permit. Please feel  
> free to contact me at 215-814-5236 or [gold.peter@epa.gov](mailto:gold.peter@epa.gov) if you have any  
> questions or comments. Thank You  
>  
>  
> (See attached file: AX-07-001-1972 Sevilla.PDF)

----- Original Message -----

**From:** J Sevilla

**To:** [welsh.donald@epa.gov](mailto:welsh.donald@epa.gov) ; [johnson.stephen@epa.gov](mailto:johnson.stephen@epa.gov) ; [donlon.janice@epa.gov](mailto:donlon.janice@epa.gov)

**Cc:** [Abrams, Ben](mailto:Abrams, Ben) ; [gaburn@mde.state.us](mailto:gaburn@mde.state.us) ; [swilson@mde.state.us](mailto:swilson@mde.state.us) ; [roy.dyson@senate.state.md.us](mailto:roy.dyson@senate.state.md.us)  
; [governor@gov.state.md.us](mailto:governor@gov.state.md.us) ; [Sally Wingo@Mikulski.senate.gov](mailto:Sally_Wingo@Mikulski.senate.gov)

**Sent:** Tuesday, July 24, 2007 12:57 AM

**Subject:** APPEAL to EPA Re: Dominion Cove Point LNG - MDE Final Decision to Renew Title V Part 70 Operating Permit

To: Mr Donald Welsh - EPA Region 3  
Mr. Stephen L. Johnson, US EPA Headquarters

**Re: APPEAL to EPA, MDE's Final Decision to Renew Title V Part 70 Operating Permit - Dominion Cove Point LNG**

Dear Mr. Welsh and Mr Johnson,

I wish to file a formal APPEAL to the EPA regarding MDE's Final Decision to Renew Title V Part 70 Operating Permit - Dominion Cove Point LNG. I am appealing on behalf of myself and over 5,000 concerned citizens I represent including Cove Point Beach, Chesapeake Ranch Estates, other residents and HIGH RISK communities adjacent to the Cove Point LNG facility in Lusby, MD.

Attached are 5 documents submitted to MDE and EPA supporting our concerns as citizens and residents of Maryland. Reason for this appeal to EPA is the document received from MDE in response to the May 15th Public hearing on Cove Point LNG is UNSATISFACTORY and IRRESPONSIBLE as far as public health and environmental protection is concerned. It appears that MDE's decision does not comply with ALL state and federal regulatory requirements for the protection of public health and the environment.

We, the concerned and very much affected citizens would like to request a public hearing from the EPA and request suspension of any EPA approvals of Dominion Cove Point LNG's Title V Part 70 Operating Permit until such public hearing is held and until adequate and satisfactory responses have been received from MDE.

Based on the content and timing of MDE's response document sent by USPS last Friday, July 20th and received today, Monday, July 23rd, gave us citizens only ONE DAY notice to meet the appeal deadline of July 24th to EPA. We, the taxpayers, will

not be collateral damage. These and many other reasons show MDE's lack of concern for public health and welfare. Additional information is coming forward to your attention.

Thank you and we look forward to your favorable response on this appeal and request for an EPA public hearing.

*June Sevilla*

Board Member, Cove Point Beach Association  
301-351-3161

representing the HIGH RISK Communities adjacent to the Cove Point LNG Facility:  
Cove Point Beach Association (130 property owners)  
Chesapeake Ranch Estates (11,000 residents)  
Other concerned residents and communities

----- Original Message -----

**From:** J Sevilla

**To:** [welsh.donald@epa.gov](mailto:welsh.donald@epa.gov)

**Cc:** [donlon.janice@epa.gov](mailto:donlon.janice@epa.gov)

**Sent:** Saturday, May 05, 2007 3:32 AM

**Subject:** Cove Point LNG - MDE Public Hearing May 15th and Request for Support from Mr. Donald S. Welsh-EPA Region3

Dear Mr. Welsh,

Your support for the environment especially the AIR QUALITY and WATER QUALITY are much appreciated. I am sure LNG concerns are known to you and some very critical issues are currently at stake in the Cove Point LNG facility in Southern MD. Your support and active participation are being solicited for the **Cove Point LNG Public Hearing on May 15th**, 7PM at the Holiday Inn Select, located at 155 Holiday Drive, Solomons, MD 20688.

Issues and problems include , just to name a few:

1. **data inconsistencies** submitted by Dominion LNG in the permit process,
2. **uncontrolled Toxic Air Pollutants** significantly exceeding Maryland Toxic Air List thresholds in Tons Per Year,
3. **INSUFFICIENT Air Pollution Controls** affecting High Risk Communities like Cove Point Beach and others, adjacent to the Cove Point LNG facility,
4. Air Pollution from LNG equipment causing nitrates and Toxic Particulate Matter **pollution fallout to the Chesapeake Bay,**
5. threats of increased **salinity in the Chesapeake Bay favoring red algae blooms from LNG tanker activity, etc.**

Attached are 4 supporting documents describing our concerns, as follows:

- **MDE letter - Summary for regulators.doc** provides highlights on the Cove Point LNG AIR QUALITY and WATER QUALITY impacts; describes problems, issues, and some suggested solutions.
- **MDE letter - Part 70-CovePointLNG.doc** is a copy of my letter sent to MDE

March 1, 2007, providing details on our concerns and asking MDE for a Public Hearing.

- **MDE letter - Part 70- Exhibits.doc** companion document to the MDE letter; contains supporting tables and graphs that tell their story visually.
- **Background on LNG and the Cove Point LNG Facility.doc** - this information was not sent to MDE. I prepared this document which contains excerpts from research I did on history, facts, regulation, and other LNG-related background pertinent to Cove Point LNG. I hope you find this helpful.

Once again, thank you for your support and assistance in resolving these critical Air Quality and Water Quality issues that affect not only the HIGH RISK residential and business communities adjacent to the Cove Point LNG facility, but all of us in Maryland - health, commerce, recreation, Chesapeake Bay and the food chain. Looking forward to meeting you at the Cove Point LNG Public Hearing on May 15th.

Sincerely,

June Sevilla

Board Member, Cove Point Beach Association

representing self and 130 property owners at Cove Point Beach, other MD residents



301-351-3161 BACKGROUND on LNG and the Cove Point LNG Facility.doc MDE letter-Part 70-CovePointLNG.doc



MDE Letter Part 70 - Exhibits.doc LNG Hearing - talk 051507-summ.doc MDE letter - Summary for regulators.doc



LNGProcess-pollution-75pct.jpg

## **BACKGROUND on LNG and the Cove Point LNG Facility:**

(Excerpts from a Staff Paper prepared by the California Energy Commission, July 2003)

(where indicated, excerpts from SENATE ENERGY and NATURAL RESOURCES COMMITTEE CONFERENCE)

### **HISTORY**

#### **LNG Receiving Terminals in the U.S.**

In the late 1960s, the U.S. faced declining natural gas production as a result of federal price controls on interstate gas transactions. Because of these controls, **producers withheld natural gas from interstate markets to avoid federal regulation.** Since price controls did not apply to intrastate transactions, however, **producers could sell gas in the state within which it was produced at prices above federal controls.** These circumstances led to a perception that domestic natural gas reserves were declining, which, in turn, led some firms to explore LNG imports as an alternative source of natural gas.

In 1969, Distrigas Corporation started constructing the first U.S. LNG receiving terminal in Boston Harbor. In 1971, Distrigas's Everett, Massachusetts facility received its first delivery of LNG from Algeria. Two additional marine import and regasification facilities went into service during the 1970s, one at Elba Island, Georgia, owned by Columbia LNG Corporation and Consolidated Systems LNG Company, and one at **Cove Point, Maryland, owned by Southern Natural Gas Company.** These three companies purchased LNG from El Paso Algeria Corporation, operating under the title El Paso I LNG Project. In 1975, Trunkline LNG Company signed a long-term supply contract with Algeria's national oil and gas company for delivery of LNG to its planned Lake Charles, Louisiana facility. In 1978, Congress passed the Natural Gas Policy Act lifting price controls on all domestic natural gas discovered after 1977. With price controls lifted, natural gas exploration and drilling expanded, and producers began to make domestic natural gas available to the interstate market. This change in federal policy diminished the cost advantage of imported LNG. As a consequence, U.S. imports of LNG declined after reaching an all-time peak of 253 billion cubic feet (Bcf) in 1979. Around the same time, the El Paso I Project companies began to dispute the prices their Algerian LNG supplier, Sonatrach, was charging them pursuant to the terms of long-term contracts originally signed in 1969. These disputes were never resolved, and, in 1980, Algeria ceased deliveries to Elba Island, Georgia, and **Cove Point, Maryland, leading to the closure of both facilities.**

Trunkline suspended its LNG imports and shut down its Lake Charles facility in 1983 because, it claimed, the high price of the LNG made it unmarketable. Trunkline eventually resumed LNG imports during the late 1980s, in part, because of Algeria's willingness to enter into more flexible long-term contracts. In 1984, Distrigas became the sole importer of LNG in the U.S.<sup>10</sup>

.....>

In 2000, the annual average price of imported LNG was actually lower than the price of pipeline gas.<sup>13, 14</sup> Lower prices led the owners of the remaining two LNG import facilities in the U.S. to resume operations. The Elba Island LNG facility, currently owned by El Paso, Inc., reopened in 2001 and, in October of that year, received its first LNG shipment in more than 20 years.<sup>15</sup> In early October 2001, the Federal Energy Regulatory Commission (FERC) authorized Williams Companies, Inc.<sup>16</sup>, then owner of the Cove Point facility, to reactivate its LNG receiving terminal and expand storage capacity. Following the terrorist attack of September 2001, however, FERC reconsidered its order, because the facility is within four miles of a nuclear power plant.<sup>17</sup> Based on confidential evidence submitted by the FBI, Coast Guard, Nuclear Regulatory Commission, and Department of Transportation - Office of Pipeline Safety, FERC reaffirmed its finding that the proximity of the nuclear power plant to the Cove Point LNG facility does not raise a specific national-security concern.<sup>18</sup> Restart of the facility is now scheduled for the end of 2003.<sup>19</sup> In 2002, FERC also granted final approval for expanding the Trunkline LNG terminal in Louisiana.<sup>20</sup>

## Safety Record

The most notable safety incident occurred in Cleveland, Ohio in 1944 at a peak-shaving plant. The East Ohio Gas Company had built the plant in 1941 and its owners decided to add a new tank in 1944. Because certain stainless steel alloys were scarce during World War II, East Ohio built the new tank with a steel alloy that had low-nickel content (3.5 percent). Shortly after going into service, the tank failed, spilling its contents into the street and storm-sewer system. A disastrous explosion and fire within the confined space of the storm-sewer system killed 128 people. The last death involving LNG in the U.S. occurred at the **Cove Point, Maryland terminal** in 1979. From the spring of 1978, when it began to operate, until the accident, more than 80 LNG ships had unloaded at Cove Point. The accident began when LNG leaked through an inadequately tightened electrical-penetration seal on an LNG pump. The LNG vaporized, passed through 200 feet of underground electrical conduit, and entered a substation building. The normal arcing contacts of a circuit breaker ignited the gas-air mixture causing an explosion within the confined space of the substation building. **The explosion killed one operator in the building, seriously injured a second, and caused \$3 million in damages.** (*editorial comment: It was also around this time that the Cove Point LNG closed down, "due to economic reasons".*)

## Properties of LNG

LNG is essentially no different from the natural gas used in homes and businesses everyday, except that it has been refrigerated to minus 259 degrees Fahrenheit at which point it becomes a clear, colorless, and odorless liquid. As a liquid, natural gas (LNG) occupies only one six-hundredth of its gaseous volume and can be transported economically between continents in special tankers. LNG weighs slightly less than half as much as water, so it floats on fresh or sea water. However, when LNG comes in contact with any warmer surface such as water or air, it evaporates very rapidly ("boil"), returning to its original, gaseous volume. As the LNG vaporizes, a vapor cloud resembling ground fog will form under relatively calm atmospheric conditions. The vapor cloud is initially heavier than air since it is so cold, but as it absorbs more heat, it becomes lighter than air, rises, and can be carried away by the wind. An LNG vapor cloud cannot explode in the open atmosphere, but it could burn.

## Safety Concerns

LNG is considered a hazardous material.<sup>1</sup> The primary safety concerns are the potential consequences of an LNG spill. LNG hazards result from three of its properties:

- Cryogenic temperatures
- Dispersion characteristics
- Flammability characteristics

The extreme cold of LNG can directly cause injury or damage. Although momentary contact on the skin can be harmless, extended contact will cause severe freeze burns. On contact with certain metals, such as ship decks, LNG can cause immediate cracking. Although not poisonous, exposure to the center of a vapor cloud could cause asphyxiation due to the absence of oxygen.

LNG vapor clouds can ignite within the portion of the cloud where the concentration of natural gas is between a five and a 15 percent (by volume) mixture with air.<sup>2</sup> To catch fire, however, this portion of the vapor cloud must encounter an ignition source. Otherwise, the LNG vapor cloud will simply dissipate into the atmosphere.

**An ignited LNG vapor cloud is very dangerous, because of its tremendous radiant heat output.** Furthermore, as a vapor cloud continues to burn, the flame could burn back toward the evaporating pool of spilled liquid, ultimately burning the quickly evaporating natural gas immediately above the pool, giving the appearance of a "burning pool" or "pool fire." An ignited vapor cloud or a large LNG pool fire can cause extensive damage to life and property.<sup>3</sup> Spilled LNG would disperse faster on the ocean than on land, because water spills provide very limited opportunity for containment. Furthermore, LNG vaporizes more quickly on water, because the ocean provides an enormous heat source. For these reasons, most analysts

conclude that the risks associated with shipping, loading, and off-loading LNG are much greater than those associated with land-based storage facilities.

.....>

LNG is normally held on land in one or more specially designed storage tanks while it awaits regasification. The failure of one or more tanks could release an enormous volume of LNG (e.g., 100,000 cubic meters) with potentially disastrous consequences due to the size of the resulting vapor cloud. However, the design of modern storage facilities has improved from earlier designs. "The design practices and metallurgy that caused earlier accidents are totally unacceptable by today's standards."<sup>5</sup>

In addition, if a "pool fire" develops at an LNG facility, foam provides some control over the rate of burning. Essentially, the foam blankets the liquid surface to limit heat transfer from the air to the liquid, thereby reducing the rate of vaporization. Consequently, the rate of burn is limited since only the vapor will burn after it mixes with adequate oxygen. Foam will be applied repeatedly until all LNG has been burned in a controlled manner.

Water is ineffective in fighting LNG fires because it provides a heat source for vaporization. Instead, firefighters apply dry powder (e.g., sodium bicarbonate or potassium bicarbonate) to extinguish LNG fires in the open air. However, water sprinklers are used to cool building surfaces and protect fire-fighting and other equipment from **thermal-radiation damage**. Fireproofing of structures and equipment are additional mandatory safety features within LNG facilities.

.....>

LNG facilities must have exclusion zones — the area surrounding an LNG facility in which an operator legally controls all activities. These zones assure that public activities and structures outside the immediate LNG facility boundary are not at risk in the event of an on-site LNG fire or a release of a flammable vapor cloud. Federal regulations identify two types of exclusion zones: **thermal-radiation protection**

(from LNG fires) and **flammable vapor-dispersion protection** (from LNG clouds that have not ignited but could migrate to an ignition source). Thermal-radiation exclusion distances are determined by using the National Fire Protection Association (NFPA) standard for the production, storage, and handling of LNG, or by using a computer model that accounts for facility-specific and site-specific factors, including wind speeds, ambient temperature, and relative humidity. For example, the thermal-exclusion zone around the **Cove Point LNG facility in Maryland is 1,600 feet.**<sup>8</sup> The required distances assure that heat from an LNG fire inside the dikes, for example, would not be severe enough at the property line to cause death or third degree burns. Safe distances from dispersing LNG vapor clouds are determined by the same NFPA standards or by a computer model that considers average gas concentration in air, weather conditions, and terrain roughness. The **exclusion zones for the LNG facility in Cove Point cover 1,017 acres**, and the exclusion zones for the Elba Island, Georgia facility cover 840 acres.<sup>9</sup> The permitting authority, in cooperation with the DOT-Office of Pipeline Safety and the Coast Guard, would determine the exclusion zones for LNG tankers and port facilities.

.....>

These proposed facilities are comparable in size to existing LNG facilities in the U.S., as indicated in the table below. Owners of the Everett and Lake Charles facilities plan to expand output capacities to 1 Bcf per day.

**Facility Owner Location Capacity (MMcfd)**

Distrigas of Massachusetts Everett, Massachusetts 435 (expanding to 1,000)

Southern Energy Company Elba Island, Georgia 430 (expanding to 806)

CMS Energy/ Trunkline Lake Charles, Louisiana 600 (expanding to 1,200)

**Dominion Resources Cove Point, Maryland 750 (expanding to 1,000) (MMcfd)**

.....>

Developers of the **Cove Point, Maryland LNG terminal** had to secure more than 140 permits or approvals from federal, state, and local agencies.<sup>27</sup> (editorial note: **Since reactivation in**

**August 2003, 104 ships have been received and more than 287 Bcf of natural gas has moved through Cove Point and into the mid-Atlantic market)**

.....>

Coast Guard regulations, however, require that LNG ships generate their own electric power when in port. For this reason, docked LNG ships will emit air pollution from their diesel generators. In addition to these diesel emission sources, the tug boats which must escort LNG tankers into port are typically equipped with diesel-fired engines. The air quality analysis conducted for the proposed Bechtel/Shell LNG facility found that tug boats were the largest source of air pollution associated with the proposed facility.<sup>33</sup> Although LNG facilities do not consume significant amounts of water or produce significant amounts of waste, cold-water discharges associated with the heat-exchanger regasification systems could adversely affect aquatic environments if the discharge plume were significantly colder than the ocean water into which the discharge was flowing.<sup>34</sup>

....>

FERC has indicated that it will continue to grant approvals for importation under Section 3 of the Natural Gas Act unless importation is not consistent with the public interest, but will not require approvals under Section 7 of the Natural Gas Act.<sup>39</sup> Section 7 requires project proponents to obtain certificates of public convenience and necessity before constructing new *interstate* natural gas facilities, but does not expressly grant FERC authority over LNG terminal facilities. FERC has indicated that it will not require approval under Section 7 for terminal facilities in order to put LNG on the same competitive position as other sources of natural gas. It is not yet clear what the impact of FERC's new position regarding required approvals will be. On one hand, it has been argued that the new position will encourage development of LNG supplies since facilities approved under Section 7 must meet open season and open access requirements that do not give developers assured access to terminal facilities. But, on the other hand, without a Section 7 certificate of public convenience and necessity, applicants would not be entitled to assert eminent domain to build the facilities.<sup>40</sup>

.....>

Section 7 requires approval for *interstate* pipelines.

.....>

(editorial note: The Hackberry Project is a victory for the LNG Industry.)

On May 30, 2002, Dynegy, Inc. announced that one of its subsidiaries had filed an application with FERC for a permit to construct and operate an LNG terminal in Hackberry, Louisiana, with a production capacity of 1.5 Bcf per day (in comparison, all of California's natural gas wells produce about 1.0 Bcf per day). Dynegy sold its interest in the project to Sempra Energy LNG Corporation in April, 2003. If the project receives all required approvals, it could begin commercial operation in late 2006, making the Hackberry facility the first new LNG import terminal to commence operation in the U.S. since 1982. This project is one of many onshore and offshore LNG proposals along the eastern seaboard.

(Editorial Note: FERC's Hackberry decision seems to be result of strong lobbying by the LNG and gas producers) The Center for LNG wants CONGRESS and the National Commission on Energy Policy to:

**Codify the FERC "Hackberry" policy that allows owners and operators of LNG import terminals to determine the most viable commercial arrangements for their own facilities, whether they are new facilities or expansions of existing facilities, and treat onshore LNG terminals in the same manner as offshore LNG terminals**

**The following is an excerpt from SENATE ENERGY and NATURAL RESOURCES COMMITTEE CONFERENCE (excerpt on Q2)**

The National Commission on Energy Policy is pleased to respond to a request by the Senate Energy & Natural Resources Committee for proposals concerning natural gas supply and demand to be considered at a conference scheduled for January 24, 2005. The Commission, which was launched in 2002 by several foundations<sup>1</sup> with the aim of developing bipartisan recommendations for national energy policy, devoted considerable attention to natural gas issues. the Commission's priority recommendations are to

encourage construction of a gas pipeline from Alaska and to facilitate a significant expansion of infrastructure for importing liquefied natural gas (LNG) from overseas.

LNG developers also need economic certainty. This certainty was provided by FERC in an opinion known as the "Hackberry decision." Hackberry LNG Terminal, L.L.C. petitioned FERC for authorization to construct and operate an LNG import terminal near Hackberry, Louisiana, FERC determined that the traditional open-access requirements imposed on import terminals were deterring investment in new LNG facilities in the United States. For example, the vagaries of capacity auctions are an impractical means of awarding regasification capacity to suppliers that must match their import opportunities with substantial investments in production and liquefaction facilities near the LNG source. To help remedy this problem, FERC approved Hackberry's facility without requiring that the terminal be "open access," that is, open on a nondiscriminatory basis to customers – creating a comparable structure to the one Congress created for offshore facilities in the Deepwater Port Act of 2002. The Commission decided that decreased commercial regulation of LNG import facilities, such as rates, tariffs, or terms and conditions of service, would stimulate the development of more LNG terminals and encourage expansion of existing facilities. The *Hackberry* policy effectively lifted all commercial regulation of new LNG terminals or expansions of existing facilities and paved the way for proprietary facilities, which has been a tremendous factor in stimulating investment in LNG facilities.

#### END NOTES:

<sup>2</sup> Vapor clouds are not flammable at the edge of the cloud, where the greatest mixing with ambient air occurs, because the concentration of gas is too low at the outer border. Conversely, the interior of the LNG vapor cloud will not ignite due to the lack of oxygen.

<sup>3</sup> Delayed ignition will in general have greater consequences than immediate ignition because the vapor cloud increases in size as it travels downwind, according to *Risk Analysis and Decision Processes*, by Howard C. Kunreuther and Joanne Linnerooth et. al., page 162.

<sup>4</sup> "LNG Frequently Asked Questions," Dominion Cove Point LNG, LP, <http://www.dom.com/about/gastransmission/covepoint/faq.jsp>

<sup>16</sup> Williams sold this facility to Dominion Resources on September 15, 2002. Energy Commission natural gas expert, Bill Wood, believes Williams sold the facility to improve its financial standing, and not because the facility is losing money or is a bad investment.

<sup>17</sup> "FERC gives Cove Point LNG terminal green light to reopen", *Oil & Gas Journal*, December 20, 2001

<sup>18</sup> "FERC Affirms Decision to Reactivate Cove Point LNG Facility," FERC News Release, December 19, 2001.

<sup>19</sup> Personal conversation with Dan Donovan, Manager of Media Relations, Dominion Gas Companies, on May 19, 2003.

<sup>27</sup> "Implications of the U.S. – Algerian Liquefied Natural Gas Price Dispute and LNG Imports," Report by the Comptroller General of the United States, Report No. EMD-81-34, December 16, 1980, Appendix II, page 15.

<sup>32</sup> *Draft Environmental Impact Statement: Hackberry LNG Project*, Federal Energy Regulatory Commission, Office of Energy Project, March, 2003, pages 4-80 – 4-81.

<sup>44</sup> The LNG Terminal Act of 1977 required the one certified LNG terminal be located at a site remote from human population and prescribed the following population densities: for the zone one mile from the offloading, regasification and storage facilities – no more than 10 people per square mile; for the zone four miles from these facilities – no more than 60 people per square mile.

March 1, 2007

June R. Sevilla  
P.O. Box 354  
Solomons MD 20688

Maryland Dept. of the Environment  
Ms. Shannon Heafey, Air Quality Permits Program  
Air and Radiation Management Administration  
1800 Washington Blvd, Suite 720  
Baltimore MD 2123-01720

Dear Ms. Heafey,

KIDS and COMMUNITIES in the neighborhood of Dominion Cove Point LNG ARE BREATHING SIGNIFICANT TOXIC AIR POLLUTANTS because there are NO ACTIVE CONTROLS for Toxic Air Pollution at the LNG facility! We need to TAKE ACTION NOW and not wait for time to prove what DEVASTATING HEALTH EFFECTS this has on our children, elderly and the general public. I am certain MDE has done their due diligence on Cove Point LNG and are now asking for input from concerned citizens. I have reviewed Part 70 and the other documents MDE previously released for public review. Based on my findings and concerns expressed by residents of Calvert County and especially those of us who live in AT RISK COMMUNITIES where I reside, we appeal to MDE for their assistance in RESOLVING these issues for the HEALTH and well being of Southern Calvert County residents.

A. This letter of appeal REQUESTS A PUBLIC HEARING and requests MDE and other appropriate Agencies to instruct Dominion Cove Point LNG to take action on the following:

- **INSTALL ADDITIONAL POLLUTION CONTROLS** for high emitting equipment (existing and proposed) at the LNG facility to reduce criteria pollutants specifically NOx, (Nitrogen Oxides) VOC (Volatile Organic Compounds), CO (Carbon Monoxide) and PM (Particulate Matter). Pollution Controls for total LNG project insufficient as currently represented. **PM compounds** formed from Ozone interaction with **Toxic Air Pollutants** appear not to have been previously addressed.
- **INSTALL AMBIENT AIR MONITORING EQUIPMENT** at strategic areas in **HIGH RISK COMMUNITIES** (Hot Spots) to collect Criteria Air Pollutants and Toxic Air Pollutants.
  - Data collected from Ambient Air Monitoring will create baseline pollution emissions and monitor going-forward COMPLIANCE readings for the AT RISK communities of Cove Point Beach, Cove of Calvert, Chesapeake Ranch Estates, and other residences in Lusby located in close proximity to Cove Point LNG. Regional Air Quality Collection and Monitoring not sufficient for the amount of Pollution emitted at Cove Point LNG and Dominion is asked to shoulder the expense of installation and maintenance as a responsible business and good neighbor. This is a reasonable request to Prevent Significant Deterioration of Air Quality in our communities.
  - Monitoring results will help determine if other additional Pollution equipment need to be installed to prevent **further** significant deterioration of Air Quality.

- **EXPLAIN** why **Criteria Pollutants in TONS PER YEAR** for EXISTING EQUIPMENT were not provided in the PTC (Permit To Construct) and why these values appear NOT to have been USED for NNSR and PSD determinations.
  - **Explain Part 70 NOx for VOC** trade between Dominion Cove Point LNG and Dominion Energies and how this trade affects computation of Summary of Emissions (TONS per YEAR), NNSR, PSD, and how this benefits Calvert County. Trade is normally “like for like” pollutant with a ratio greater than 1:1. What is the justification for this NOx for VOC trade?
  - The statement “**Dominion Cove Point LNG escaped** the Non-Attainment New Source Review (NNSR) as stated in Table 2, page 10 of the Expansion Project (Supplement to Docket # 23-05 issued Feb 14, 2006), is VERY DISTURBING, considering the potential to emit pollution by the 3 existing old GE Frame3 CT’s and 10 Vaporizers are extremely high. Dominion also discounted 17 TONS PER YEAR of VOC from Vaporizers which I believe should have been included in their Potential To Emit value of 45.8 TONS per YEAR instead of 28.8 TONS per YEAR. Furthermore, VOC emission controls are passive for vaporizers.
  - GROSS DISCREPANCIES stood out when I examined data details between Part 70 (Appendix B) and data submitted for computing AIR QUALITY for the LNG EXPANSION (PTC, Appendix B-2) . Potential to Emit HAZARDOUS AIR POLLUTANTS for EXISTING EQUIPMENT were GROSSLY UNDERSTATED in the Permit To Construct when compared to the SAME EXISTING EQUIPMENT reported in PART 70. See **Exhibit A** for details. Please explain.
  - Another consideration is **DOMINION’s HISTORY of CLEAN AIR ACT VIOLATIONS and SKIMPING on AIR POLLUTION CONTROLS** seem to be “standard practice” for Dominion and its subsidiaries.
  - **Settlement on EPA LAWSUITS for Dominion’s Clean Air Act Violations and NON-COMPLIANCE in AIR QUALITY** has resulted in enforcement settlements with the government amounting to **BILLIONS of DOLLARS in substantial fines.**
  - Had these BILLIONS in fines been utilized for AIR POLLUTION CONTROLS, the cost to Dominion would have been substantially less and the air we breathe would have been cleaner. **DO NOT LET THIS HAPPEN at COVE POINT!!**
- **Provide RAW DATA** on Criteria Pollutants and Hazardous Air Pollutants used to determine Summary of Emissions for the years 2001 through 2006 which were not provided for public review (only 2001 data for Criteria Pollutants was shared). Exhibit B is partial information as provided by Dominion Cove Point LNG. Exhibit C-1 and Exhibit C-2 demonstrate Potential to EMIT Pollutants from EXISTING and NEW EQUIPMENT at Cove Point.
- **Conduct new AMBIENT AIR MODELING** focusing on impact to **COMMUNITIES-AT-RISK (Hot Spots):** Cove Point Beach, Cove of Calvert, Chesapeake Ranch Estates, and other residences in Lusby located in close proximity to Cove Point LNG.
  - Air Modeling should include most current data PLUS total Potential to Emit POLLUTANTS from Existing Equipment and PROPOSED New Equipment from the LNG Expansion.
  - Air Modeling should also include POLLUTANT emissions from operation of LNG tankers and related marine activity as well as mobile sources since these directly affect AT-RISK COMMUNITIES and will continue to increase.

The above recommendations are based upon findings and FACTS reflected in Part 70, PTC, NNSR and PSD documentation shared for Public Review. Additional concerns, findings and substantiation are demonstrated by narratives and by charts, graphs and tables included herewith.

Based on these findings and other factors, a PUBLIC HEARING is requested to further discuss our concerns. Names and contact information of concerned citizens requesting this petition may be found at the end of this letter. I, June Sevilla, Board Member of the Cove Point Beach Association will be acting as spokesperson on these issues for residents of Cove Point Beach and for the individuals whose names and contact information are included in this document. However, these individuals also have the right to speak and petition on their own for a public hearing.

The AIR QUALITY at Cove Point Beach and other neighboring communities have DRASTICALLY DETERIORATED since the Cove Point LNG facility began importing activities in 2003, the same year Calvert County became a NON-ATTAINMENT AREA for OZONE. The RISING TREND of Ozone is demonstrated by the **drastic** rise in **NOx** (Nitrogen Oxides) reported emissions from the LNG facility which is a MAJOR SOURCE of this pollutant. Also **CO** (Carbon Monoxide) emissions from existing and new equipment are very high at 1,649 TONS per YEAR. While Air Modeling for Ambient Air was done to determine Air Quality Compliance, the available readings used were so **old** (1997, 1999 in most cases) that the conclusions drawn were for "no adverse effects" to the Eastern Shore of Maryland ONLY. A qualifying statement indicated that the greatest impact and "Areas of Concern" are those in close proximity to the source. Neither Air Modeling nor analysis was done to determine how Criteria Pollutants and Toxic Air would affect the neighborhood adjoining the LNG. When Cove Point residents asked for **monitoring of Air Quality in our community**, the request was ignored stating that there was already monitoring done at the LNG and that there is no nothing to worry about. **The fact remains that the only equipment being actively monitored with CEM (Continuous Emissions Monitoring) are the Combustion Turbines.** The rest of the major pollution emitters are records only, reported once a year for the previous year.

#### **B. TOXIC AIR POLLUTION FINDINGS AND CONCERNS:**

- o **Ammonia and Ethylene Glycol**, stored in large capacity tanks and used extensively in LNG operational processing are on the Maryland Toxic Air List. No pollution emissions from these were made available to determine Compliance to EPA standards and to the Maryland "Plant/Facility Level Thresholds" of 1 TON PER YEAR for each. No controls were found to reduce emissions. Additionally, what are the OSHA regulations for these?
- o In addition to Ammonia and Ethylene Glycol, **SIX** out of 10 TOXIC AIR POLLUTANTS are SIGNIFICANTLY ABOVE the Maryland Toxic Air List "Plant/Facility Level Thresholds" **including Lead** which is both a Criteria Pollutant and a Toxic Air Pollutant. No emissions controls were found. Additionally, what are the OSHA regulations for these?
- o **EPA LIMITS** for Hazardous Air Pollutants are more lenient than Maryland's, so ambient air impact for Hazardous Air Pollutants was dismissed since collectively and individually, they were below EPA limits. Acetaldehyde and Formaldehyde far exceeded Maryland thresholds with each TOXIC AIR Pollutant reaching nearly 7 TONS per YEAR. Acetaldehyde limit is 0.1 and Formaldehyde, a malodorous pollutant also used as an embalming fluid, its limit is more stringent at 0.01 TONS per YEAR. See **Exhibit D-1** and **Exhibit D-2** for details.

#### **C. AIR QUALITY COMPLIANCE and PREVENTION OF SIGNIFICANT DETERIORATION:**

- o ADEQUATE REDUCTION of POLLUTION EMISSIONS at the SOURCE is requested through the use of MACT (Maximum Achievable Control Technology) as mandated by EPA standards, and/or BACT (Best Available Control Technology), particularly for older equipment; i.e., VAPORIZERS and GE Frame 3 Combustion Turbines.

- **Use of MACT** suggested for more effective control of NO<sub>x</sub> to minimize pollution of the CHESAPEAKE BAY since NO<sub>x</sub> control will reduce Nitrates. EPA has MACT requirement for the Great Waters such as the Chesapeake Bay.
- **Vaporizers** (10 existing and 7 proposed) **DO NOT HAVE ACTIVE POLLUTION REDUCTION** and these vaporizers are very high emitters of NO<sub>x</sub>, VOC, and CO.
- Install appropriate **MAJOR EQUIPMENT MONITORING DEVICES** especially for **high emitting LNG VAPORIZERS** (existing and proposed) which currently have NO CEM to continually monitor emissions for COMPLIANCE.
- NO<sub>x</sub> react with VOC in sunlight to produce Ozone. While not all of the Ozone forms at ground level (**SMOG**), Ozone (O<sub>3</sub>) which is **very unstable**, seeks to form compounds with other Air Pollutants which usually end up as **Particulate Matter**.
- **Particulate Matter** (PM) is often dismissed as "Fugitive Dust". Compounds formed from Ozone interaction with TOXIC AIR POLLUTANTS become TOXIC PM. This is the rationale for effective control and monitoring of NO<sub>x</sub>, VOC, and PM including Toxic Air Pollutants. Coal miners inhale coal dust (PM) and end up with black lung disease. Imagine the effect of **TOXIC PM** on the residents and visitors to **AT RISK COMMUNITIES** in Calvert County!

#### **D. WATER QUALITY DETERIORATION CAUSED BY AIR POLLUTION:**

***In addition*** to deteriorating Air Quality, continued impact to **AQUATIC ORGANISMS** from LNG operations also **NEGATIVELY AFFECT** the **MARINE FOOD CHAIN**. These issues were not addressed in previous analyses for Air Quality, Water Quality, and Impact to Marine Life.

- 348 TONS per YEAR of NO<sub>x</sub> becoming NITRATES (fertilizer) WILL POLLUTE THE CHESAPEAKE BAY, where the level of Nitrates is already high and a very big concern.
- Nitrates from NO<sub>x</sub> also pollute tidal and non-tidal wetlands and end up in the soil. **Excess amounts of Nitrates change the soil composition** and thus lead to vegetation growth that best thrive in high nitrate content soil. This snowballs into the food chain as the balance of Nature is changed by effects of air pollution. This aspect of **AIR QUALITY AFFECTING WETLANDS AND SOIL** appears not to have been addressed in previous analyses.
- **REMOVAL OF 66 BILLION GALLONS of SEA WATER per YEAR** from the Chesapeake Bay due to LNG tanker activity equate to threat of **increased salinity** during the dry season.
- **Increased water salinity plus hundreds of tons of NITRATES of Chesapeake Bay pollution will have an ADVERSE EFFECT on oysters and other MARINE LIFE.** This deadly combination **SIGNIFICANTLY INCREASES and PROMOTES the occurrence of RED ALGAE BLOOMS** which impact commercial and recreational resources. Risk analysis from this perspective has NOT been addressed.
- On dry months, this enormous loss of water per year on top of natural evaporation could also contribute to lowering Bay water depth further and more so during low tide. Many areas within a 3-5 mile distance from the LNG pier are already shallow.
- Each LNG tanker carries an average of 33 MILLION GALLONS of LNG which must be replaced by SEA WATER (66 BILLION GALLONS per year from 200 LNG tankers). Water ballasts fill at the rate of about 50,000 GALLONS SEA WATER PER MINUTE, siphoning aquatic organisms smaller than their filter mesh size, along with the extracted sea water.
- LNG tankers are foreign flag bearers and therefore difficult to enforce regulations to have filters of a particular mesh size so as to prevent over- "harvesting" and impingement of aquatic organisms. Coast Guard engineering assessments in the EIS (Environmental Impact Statement) appear to have addressed mainly vessel engineering for safety, security and spills.

- Even if we had regulation on water ballast filter mesh size, what would the Coast Guard enforcement course of action be if upon inspection, their water ballast filter does not meet our specifications? Will these tankers be turned away until they are in compliance?

**E. Other QUESTIONS and CONCERNS:**

- Any LNG spill in water will cause death to aquatic organisms due to LNG's cryogenic nature. Although **spills and terrorist actions** have been addressed previously, what **Emergency Plan** has been established to assure that the INTENSE RADIANT HEAT that may occur from such incident does not jeopardize the functionality of the **COOLING TOWERS** of Calvert Cliffs Nuclear Power Plant? This is a major concern for AT-RISK COMMUNITIES with such a potential for radiation catastrophe!
- The **2005 Sandia Laboratories Independent Risk Assessment for a major LNG spill** determined that flammable liquefied natural gas (LNG) vapor cloud could extend 7.3 miles. If such incident occurred close to the LNG facility and since a major spill which is rapid in unconfined waters and with Calvert Cliffs acting as a natural fire fence, a more intense radiant heat will be produced from igniting such vapor cloud. How quickly can the effect of this magnitude cause the Nuclear Power Plant Cooling Towers to fail? Is there a plan of evacuation for the COMMUNITIES AT RISK? Since evacuation by water is not an option, a single lane road 3 miles long is the only way out for COMMUNITIES AT RISK. What Emergency Evacuation Plan for Calvert County has been formulated for a disaster of such magnitude?
- Dominion purchased **Air Credits to offset excess emissions for NOx and CO**. How do these offsets affect NNSR and PSD for the LNG expansion? Do they also affect the reporting of pollution emissions? If so, how?
- Was the LNG facility ever involved in the SELLING of AIR CREDITS to another company? If so, was this company external or internal to Dominion? If so, what effect does this have on the total LNG project?
- Cove Point Beach is in the 100-year Flood Plain. What is the impact to Cove Point Beach for this proposed construction at the LNG facility and the pipelines being built?

SUPPORTING DATA for these requests and findings are included herewith in narrative form, in tables containing pollution values and comparative data, and in graphs substantiating the validity of these findings and requests. The amount of pollution emissions by Dominion Cove Point LNG is very clear. While regulation allowed Cove Point LNG to purchase air credits to offset their emissions, air credits DO ABSOLUTELY NOTHING to Air Quality. POLLUTANTS ARE STILL BEING RELEASED and WILL CONTINUE TO DEGRADE QUALITY of the AIR WE BREATHE, especially in AT-RISK COMMUNITIES.

As TAXPAYERS, we understand the economics of business, but we, the residents of COMMUNITIES AT RISK **refuse** to be **COLLATERAL DAMAGE** to a multibillion dollar industry and to a conglomerate whose track record for AIR QUALITY COMPLIANCE is fraught with EPA lawsuits and enforcement fines in BILLIONS OF DOLLARS. For these and reasons reiterated in this documentation, we believe a public hearing is in order to discuss these matters in more detail. Once again, the request is made for Dominion Cove Point LNG to be a responsible business and good neighbor through:

- **Installation of Additional Pollution Reduction Equipment** to assure **Prevention of Significant Deterioration of AIR QUALITY** and the ATTAINMENT of **TRUE HEALTHY AIR QUALITY**.

- **Installation and Maintenance of Ambient Air Quality MONITORING Equipment to collect and track Criteria Pollutants and Toxic Air Pollutant emissions for compliance in AT RISK COMMUNITIES.**
- **Re-Examine NNSR and PSD data and calculations OVERALL, with consideration for AIR QUALITY IMPACT on COMMUNITIES AT RISK** in light of these findings.
- **Provide for Public Review, RAW DATA** on Criteria Pollutants and Hazardous Air Pollutants used to determine NNSR, PSD, and Summary of Emissions for the years 2001 through 2006.
- **Assess the impact of LNG tanker activity on the Chesapeake Bay, aquatic organisms, and the impact to commercial and recreational resources as described in preceding paragraphs.**
- **Provide Impact, Risk Assessment, and Emergency Plan for COMMUNITIES AT RISK** for effect of RADIANT HEAT on COOLING TOWERS for Calvert Cliffs Nuclear Power Plant in case of large spills and terrorist attacks.
- **Conduct new AMBIENT AIR MODELING** focusing on impact to **COMMUNITIES-AT-RISK (Hot Spots).**
- **Answer all questions and provide information as requested in this appeal.**

We are certain that MDE and other Agencies have done their due diligence, but that the **AFOREMENTIONED CONCERNS did not surface previously** due to the complexity, timing, and presentation of data from Dominion and sources funded by Dominion to provide data for analyses. Attachments to this letter include substantiating illustrations of Cove Point LNG emissions expressed in **TONS PER YEAR**:

- Exhibit A Cove Point LNG Hazardous Air Pollutants Part 70 Vs. PSD/NNSR
- Exhibit B Cove Point LNG Tracking of Air Pollution Levels
- Exhibit C-1 Cove Point LNG Potential To Emit Pollutants
- Exhibit C-2 Cove Point LNG Potential To Emit Carbon Monoxide
- Exhibit D-1 Cove Point LNG Toxic Air Pollution, Exceeding Maryland TAP Limits
- Exhibit D-2 Cove Point LNG Toxic Air Pollution, Exceeding Maryland TAP Limits

Please know that the residents of Cove Point Beach in particular are composed of **SENIOR CITIZENS and FAMILIES with YOUNG CHILDREN** whose health and well being are **AT RISK** from **AIR POLLUTION** emitted at Cove Point LNG. Also attached are the names and contact information of **CONCERNED CITIZENS** who are at **HIGH RISK** who have expressed interest in this issue and who want to be in the **PERSONS of INTEREST** list to receive information regarding Cove Point LNG.

Thank you for your consideration and we look forward to discussing these issues during the public hearing.

Sincerely,

JUNE R. SEVILLA

Board Member, Cove Point Beach Association

Representing self and 130 property owners at Cove Point Beach, other citizens.

P.O. Box 354, Solomons, MD 20688

410-326-7056, 301-863-0451

Attachments:

CONTACT INFORMATION of CONCERNED CITIZENS in AT RISK COMMUNITIES who are also requesting a Public Hearing on Dominion Cove Point LNG and supporting this PETITION:

Barbara Mason, Tel: 410-326-6570  
3204 Calvert Blvd, Cove Point Beach  
Lusby, MD 20657

Owen V. Cummings and Maxine P. Cummings  
11030 Holly Drive, Cove Point Beach  
Lusby, MD 20657, Tel : (410) 326-3531

Paul Wahler and Carol Wahler  
3159 Calvert Blvd. Cove Point Beach  
Lusby, MD 20657  
410-3946526, 703-573-2190

Fay Fratz 410-326-3451  
11006 Elm Dr., Cove Point Beach  
Lusby, MD 20657

Jack Sigler and Allyson Sigler, 410-586-0402  
3610 Clover Lane  
Port Republic, MD 20676

Phyllis Johnson, 410-586-2228  
3495 Broomes Island Rd.  
Port Republic, MD 20676

Laurie Foster and Victor Foster  
3184 Calvert Blvd, Cove Point Beach  
Lusby, MD 20657  
410-326-5390

Bill Wright and Kim Sexton, 410-326-9293  
11029 Park Drive, Cove Point Beach  
Lusby, MD 20657

Mary K. Ritter, 410-326-6570  
3141 Lighthouse Blvd.  
Lusby, MD 20657

Marty Leland and Frank Leland  
11014 Beach Drive, Cove Point Beach  
Lusby, MD 20657, (410) 326-9131

Mr. and Mrs. Harold Thornburg  
3329 Lighthouse Blvd., Cove Point Beach  
Lusby, MD 20657, 301-831-7328

James Wishart, 301-863-0451  
23235 Lake Drive  
Lexington Park, MD 20653

## Exhibit A

### Cove Point LNG Facility, Potential HAP (Hazardous Air Pollutants) EMISSIONS

#### COMPARISON of HAP, Part 70 Vs. Application for PSD/NNSR Approval TONS per Year - (tpy)

Pollutants	<u>Part 70 (1)</u> (tpy)	<u>PSD/NNSR (2)</u> (tpy)	<u>Difference</u> (tpy)
Acetaldehyde	6.69	0.08	6.61
Benzene	0.20	0.04	0.16
Formaldehyde	6.75	1.31	5.44
Toluene	0.25	0.32	-0.07
Xylene	0.44	0.18	0.26
Naphthalene		0.00	
Acrolein		0.02	
Ethyl benzene		0.08	
Propylene Oxide		1.78	
Hexane		<u>0.68</u>	
<b>HAP- Existing Equipment</b>	<b>14.36</b>	<b>4.48</b>	
<b><u>Adjustments to Part 70 per PSD/NNSR:</u></b>			
Naphthalene	0.00		
Acrolein	0.02		
Ethyl benzene	0.08		
Propylene Oxide	1.78		
Hexane	<u>0.68</u>		
<b>Adjusted HAP - Existing Equipment</b>	<b>16.89</b>	<b>4.48</b>	<b>12.41</b>
<b><u>Adjustments to Part 70 per PSD/NNSR:</u></b>			
Acetaldehyde	0.11	0.11	
Benzene	0.05	0.05	
Formaldehyde	1.91	1.91	
Toluene	0.41	0.41	
Xylene	0.23	0.23	
Naphthalene	0.00	0.00	
Acrolein	0.02	0.02	
Ethyl benzene	0.10	0.10	
Propylene Oxide	1.48	1.48	
Hexane	<u>1.00</u>	<u>1.00</u>	
<b>HAP - Proposed Equipment</b>	<b>5.32</b>	<b>5.32</b>	<b>0.00</b>
<b>Total Potential HAP EMISSIONS</b>	<b>22.22</b>	<b>9.86</b>	<b>12.41</b>

- Part 70 Appendix B, existing equipment emissions for Acetaldehyde, Benzene, Formaldehyde, Toluene, Xylene. Part 70 missing HAP Emissions are adjusted from values obtained from PSD/NNSR Appendix B-2. HAP Emissions from PSD/NNSR Appendix B-2 submitted by Dominion for Permit to Construct (existing and proposed equipment).

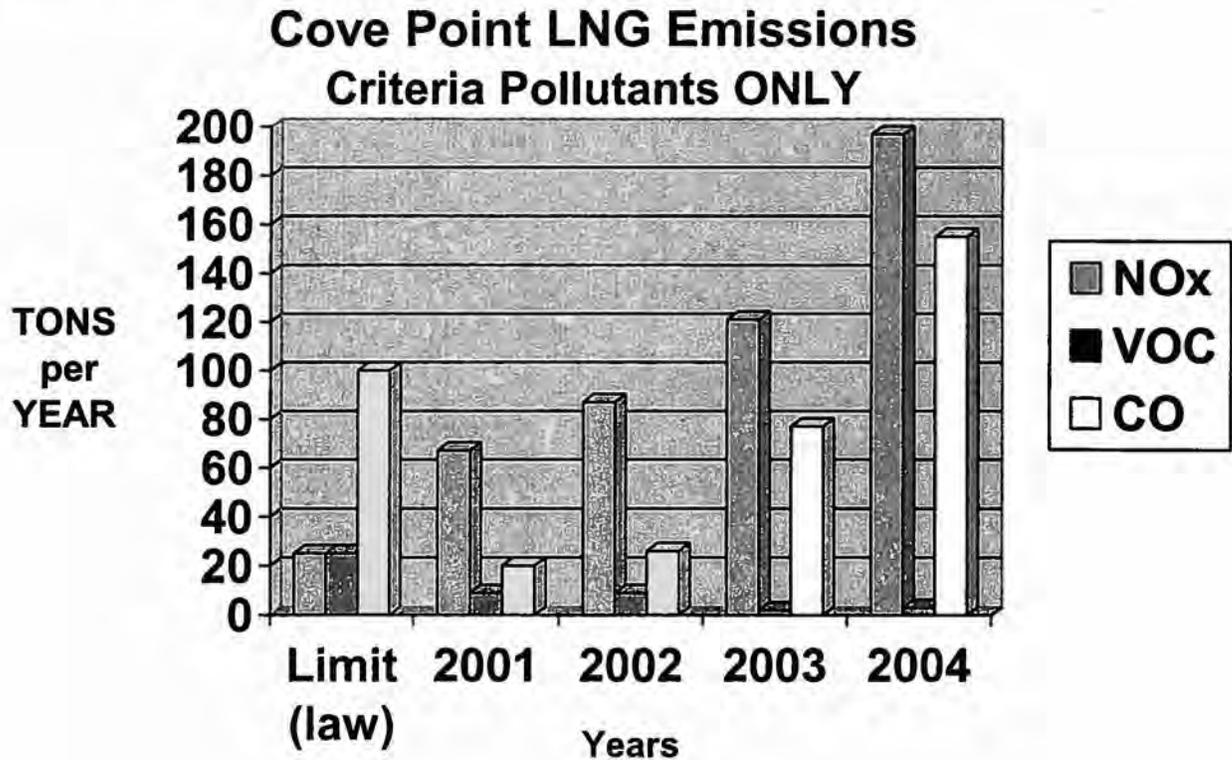
**NOTE:** Based on this COMPARISON, it appears that **GROSSLY UNDERSTATED HAP** were submitted for Part 70 renewal and an **even lesser value HAP** was submitted for the PSD/NNSR.

Highlighted in ██████ are the HAP calculations submitted by Dominion.

## Exhibit B

### Cove Point LNG Tracking of AIR Pollution Levels

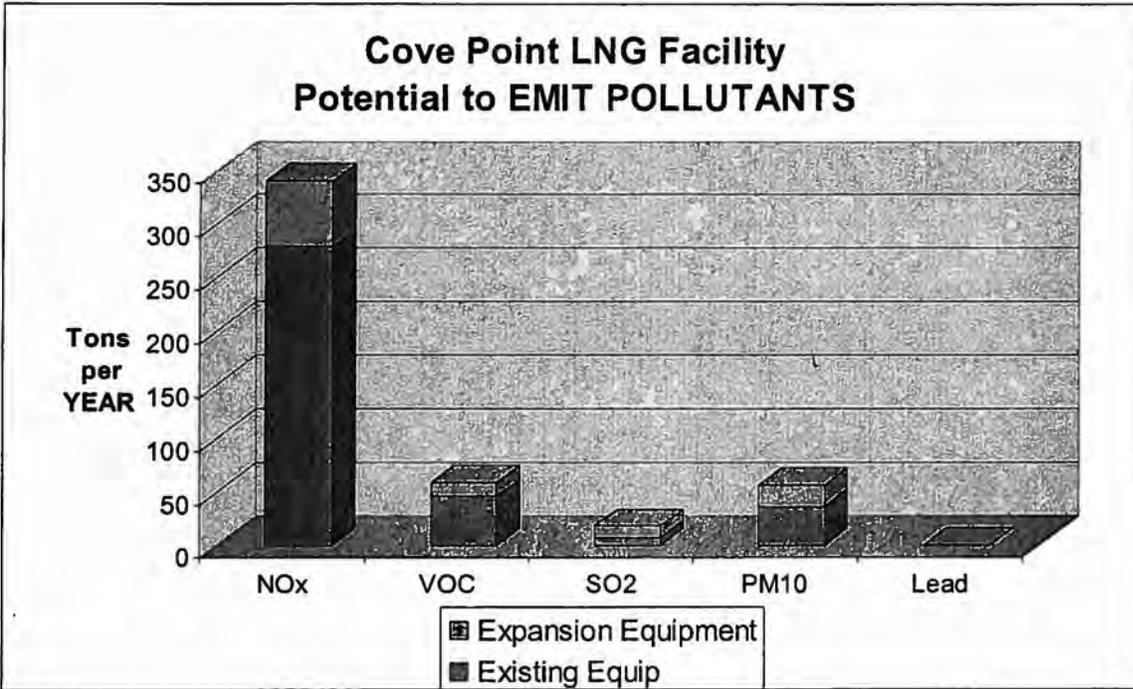
Baseline and Yearly Data from **MDE Part 70 Permit**, 2001-2004 levels as submitted by Dominion.  
(2005 and 2006 data NOT provided and NO details by Polluting Equipment was provided for public review for 2001-2004 emissions)



**BASE (Limit by Law)** = Calvert County Threshold for Obtaining Title V Permit for AIR QUALITY CRITERIA POLLUTANTS. PSD (Prevention of Serious Deterioration) Increment in TONS per YEAR (tpy) did trigger a NNSR (Non-Attainment New Source Review) for the Permit To Construct (PTC).  
PSD Increment Levels: 25 TPY for NOx and VOC, 15 tpy for PM, and 100 tpy for CO.

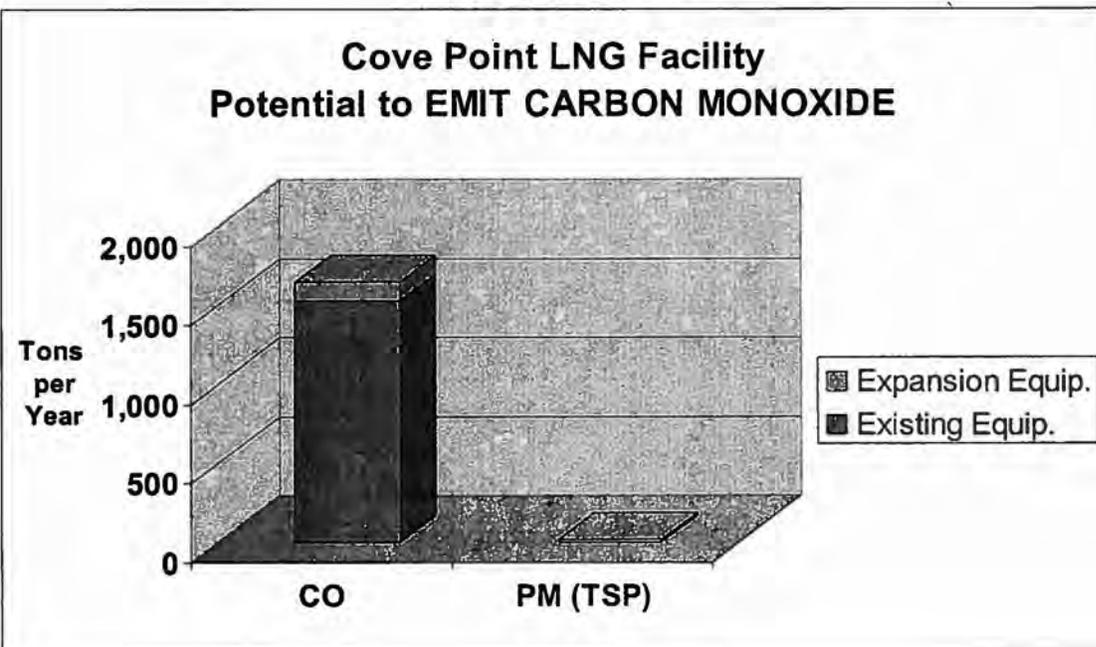
**NOx, VOC and CO** EMISSIONS are **POLLUTION TONS PER YEAR**, 2001-2004 as submitted by Dominion in Part 70 Permit Renewal. Hazardous Air Pollutants (HAP) submitted by Dominion in Part 70 and in the PTC PSD/NNSR are GROSSLY UNDERSTATED, see Exhibit A.

Exhibit C-1

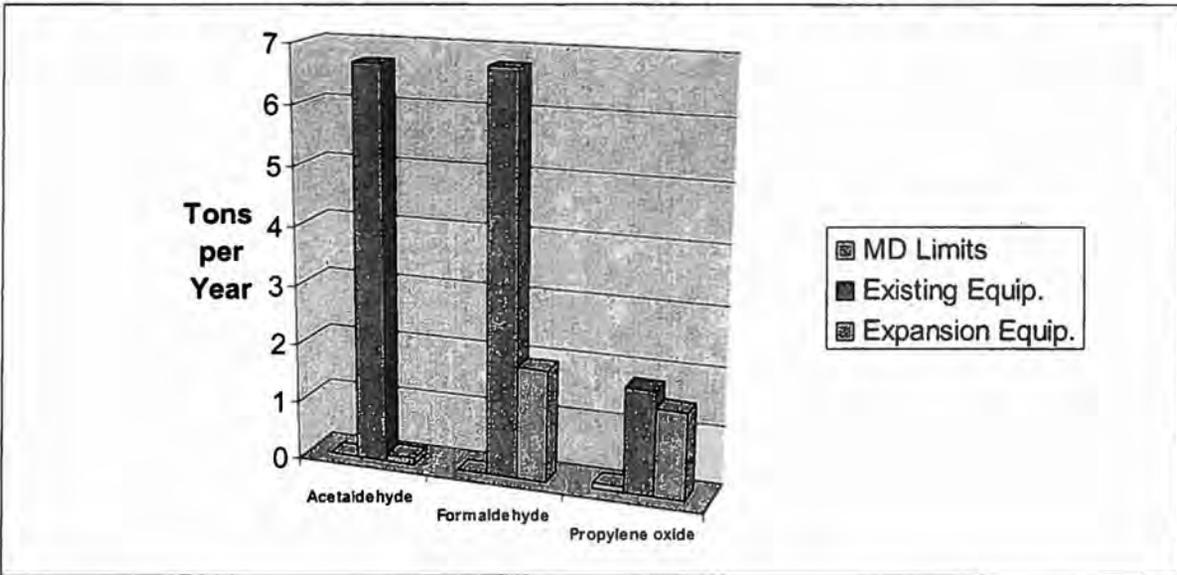


Dominion Cove Point LNG had to purchase AIR CREDITS for NOx and CO to obtain Permit To Construct. **AIR CREDITS do absolutely nothing** to control air pollutants. ONLY Best Available Control Technology (BACT) at the LNG facility will Prevent Serious Deterioration of Air Quality for AT- RISK COMMUNITIES in Calvert County. LNG Vaporizers are high emitting sources of CARBON MONOXIDE (CO), NOx and VOC, however, **NO CONTROLS** for CO and VOC, only passive control of NOx are deployed at the LNG facility. High emissions of **Toxic Air Pollutants** are not controlled (See Exhibit D)

Exhibit C-2

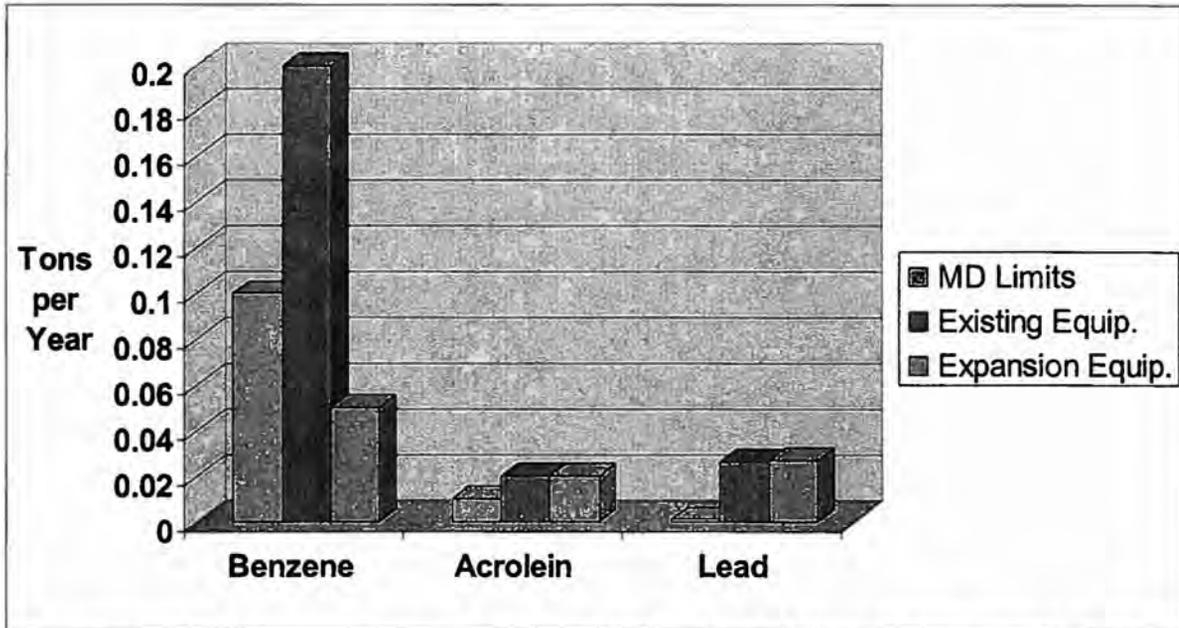


### Exhibit D-1 Cove Point LNG Facility Potential to EMIT TOXIC AIR POLLUTANTS



TOXIC AIR POLLUTION for Existing Equipment and for LNG Expansion are to be **added together** to obtain the actual deviation from the Maryland Toxic Air Pollutant (TAP) List. These TOXIC AIR Pollutants and those in Exhibit D-2 **FAR EXCEED** the Maryland Toxic Air List Plant Facility Threshold. See Exhibit D-2 for other TAPs.

### Exhibit D-2 Cove Point LNG Facility Potential to EMIT TOXIC AIR POLLUTANTS



**LEAD and Lead compounds** are CRITERIA POLLUTANTS as well as TOXIC AIR POLLUTANTS.

## Oral presentation at the MDE Public Hearing 5/15/07: June Sevilla

Includes also additions after the hearing.

(Copy submitted to MDE for inclusion in consideration, requesting this document to be added to my previously submitted documents requesting answers and implementing solutions.)

The FACTS as I discovered them:

1. Aug 2003: Cove Point LNG started importing operations. Guess what? Same year pristine Calvert County became NON-ATTAINMENT area for OZONE.
2. LAER – Lowest Achievable Emissions Rate- required for Cove Point LNG; so for high polluting equipment, we would expect pollution reduction controls and active monitoring as we were confidently assured many times by Dominion LNG, so:
  - a. why are the most polluting equipment, the vaporizers that turn LNG to gas, 10 existing and 7 additional, why do these 17 vaporizers not have active pollution controls? No active pollution monitoring either.
  - b. 10 Hazardous Air Pollutants or HAPs were reported by Dominion; 6 out of these 10 toxic air pollutants (exhibits D-1, D-2) that are in the MD Toxic Air List, MD state-enforceable..... why are there no pollution controls for these? We expect these HAPs controls to be included in the State Implementation Plan as they should be and certainly should be included in the permit process, especially this permit!
  - c. Another toxic air pollutant on the MD Toxic Air List with a limit of 1 ton per year is heavily used in vaporizing LNG to gas. Dominion LNG admits there is residual ammonia during the process. So why was ammonia not included on the HAP lists for the permits? Why no pollution controls for ammonia? Dominion keeps aqueous ammonia in large thousand gallon tanks at the facility.
3. Still speaking of these HAPs, why are there such gross discrepancies for the same existing equipment between Part 70 and Permit To Construct (Expansion Project)? (see Exhibit A) Some toxic pollutants were omitted from Part 70 and for the Expansion permit, less than 1/3 of the tonnage was reported. Ammonia was also missing from the HAP List in both permits. I found a very shocking statement in the MDE review of the Cove Point Expansion Project: Dominion LNG escaped the Non-Attainment New Source Review. How can this be when the expansion is doubling the capacity and more pollution is being emitted? How can this be when there are no pollution controls for these HAPs and for the pollution-heavy vaporizers? Even the pollution controls (SCR-Selective Catalytic Reduction) for the turbines ONLY are only 50% efficient for VOC and 90% efficient for NOx. Also for New Source Review, every pollution source must be taken into consideration and they were not. This just does not make sense. It is the existing equipment that is causing the most pollution!
4. Look at the difference between Exhibit B which is a Dominion baseline report and the Potential To Emit (PTE), Exhibit C-1, C-2. VOC is decreasing to almost zero in 2004, the LNG's 1<sup>st</sup> full year of operation.
  - a. There are no pollution controls for VOC in vaporizers so how can this be? CO (Carbon Monoxide, a deadly gas) is less than NOx in their report, yet there are no pollution controls for CO.
  - b. Take CO for 2004 about 150 tons per year, yet the PTE (potential to emit) is almost 1,500 tons per year.

- c. Why were pollution emissions for 2005 and 2006 not made available for public review? Did MDE not get the information from Dominion? We need to see all of these figures, accurately and they must be complete and understandable. So when (dates please) did MDE receive 2005 and 2006 emissions data from Dominion? When will this information be made available for public review? Were 2005 and 2006 data considered by MDE in their pre-approval process for this permit? If data is available, I am requesting a copy of 2005 and 2006 emissions for criteria pollutants and HAPs by equipment inventory, prior to any trade off and any other deductions.
5. Air Credits/tradeoff – paper transaction, does nothing to control pollution, good for business, an expedient regulatory tool, but I call this Regulation 007-license to kill, slowly. Hopefully, only a temporary expedient business solution, but not a yearly practice. One of Dominion's trade offs is NO<sub>x</sub> for VOC between itself and Dominion Energies. This is like insider trading apples for oranges. How and why were they allowed to do this? Is this legal? Were these ever traded previously? Usually air trade on pollutants are like for like with ratio greater than 1:1. This NO<sub>x</sub> for VOC does not make sense. What about the other tradeoffs? How are they affected? We request that air trade not be used as a substitute for pollution reduction controls when MACT and BACT technology are available to assure LAER.
6. Air Pollution Causing Water Pollution in the Chesapeake Bay and connecting waterways- this was not addressed in any permit. Since MDE ARMA only handles stationary equipment, air pollution by 200 LNG tankers from their diesels and from their marine escorts were not included in the air pollution calculations. They should be and Dominion should submit these figures. Why was this not done? Will it be done and when?
7. Another issue is the water runoff from vaporization (and/or the turbines) which is being dumped into Grey Creek. Only pH testing was required of Dominion. Considering that this water is coming from high polluting equipment, temperature and content analysis for pollution levels should be required before any dumping is allowed. No dumping should be done at Grey Creek unless pollution is removed from the water (ammonia, HAPs, nitrates, carbon monoxide, VOC, etc.) Will MDE require this of Dominion? We are asking for this so as not to further pollute Grey Creek, surrounding environment and all waterways connected with Grey Creek. This water pollution is caused by air pollution and was not addressed in either AIR QUALITY or WATER QUALITY permits. Not addressed in the FERC EIS (Environmental Impact Statement).
8. Air pollutants NO<sub>x</sub> and VOC when mixed with sunlight and moisture make interesting things happen. Ozone is a product of this natural reaction and Ozone is very unstable and seeks to combine with other elements in the air. NO<sub>x</sub> will become Nitrates; a fertilizer that algae love. Imagine if you see 696 fully loaded trucks dumping fertilizer into the Chesapeake Bay...you'd get mad, right? That is the "visual" equivalent of the amount of Nitrates polluting the Bay every year from Cove Point LNG, only we do not get to see it that way. Even more dangerous are VOCs and Toxic Air Pollutants or HAPs previously discussed, tons of them. Ozone and HAPs, make a deadly combination and become Toxic Particulate Matter which Dominion refers to as merely "Fugitive Dust". Well, that fugitive dust is a slow and painful killer. Coal miners have black lung from inhaling coal dust. Anyone living or visiting or fishing/boating around the Cove Point LNG plant and nearby Chesapeake Bay are sure to breathe this silent, slow and painful killer. Cancer is

one of several outcomes, assuming you live that long to even contract it before your lungs burn from breathing this deadly dust, currently not controlled by anything at the LNG facility.

9. Even more poisonous is when this toxic dust is consumed by aquatic organisms, plants, and by animals in our food chain. The toxins become even more deadly because they are absorbed in the muscle of the organism we eat. So much for tainted oysters, crabs, fish.
10. Speaking of our aquatic food chain, the 200 LNG tankers that unload at the Cove Point LNG pier will siphon from the Chesapeake Bay, 66 Billion gallons of water per year during their unloading operations. Taking that much sea water from the bay especially during dry season will increase salinity and shallow areas near the LNG pier will probably dry out. The Bay and connecting waterways will become more salty, and with the addition of 348 tons per year of nitrate fertilizers will be like handing red algae an engraved invitation to take up residence in the Chesapeake Bay. Red algae have not yet been experienced in this area, but with increased salinity and the addition of nitrates, it will not take long. Red algae or red tide causes fish kills, everyone knows that. Crabs, oysters, our great sea food industry Maryland is famous for will suffer tremendously.
  - a. Nitrate pollution can be reduced with the proper air pollution reduction equipment. Will MDE require this of Dominion? If not, why? If yes, when?
  - b. What is your recommendation for the 66 Billion gallons of sea water loss? A reduction in LNG tanker traffic will certainly reduce it. How much sea water can the Chesapeake Bay stand to lose in the dry months without adverse effects?
11. LNG water ballasts siphon sea water at the rate of 50,000 gallons per minute. Along with sea water, small aquatic organisms are also siphoned off. How much of these minute organisms will be removed by 66 Billion gallons of sea water entering the LNG water ballasts? These minute aquatic organisms start the food chain. Take them out and other species will die, a domino effect, and we are on the top of this food chain. These LNG tankers are foreign flag bearers and none of the Coast Guard reviews and the FERC Environmental Impact Statement (EIS) addressed this issue of filter mesh size so as not to kill and siphon off so much of these aquatic organisms that are food sources for Maryland's famous commercial and recreational food chain. What is MDE's recommendation on this? MDE handles both AIR and Water quality so we are asking ARMA to coordinate this with their Water Dept. Will the Chesapeake Bay Foundation be involved? What about the Cost Guard? Will FERC look into this environmental impact?
12. Impacts of Air Pollution and LNG tanker unloading operations on water, soil, and vegetation were not addressed at all in the permit process. Will MDE assure these and the points addressed in this hearing are included and accounted for in the overall picture? Especially in this permit which we were informed by Ms Heafey is supposed to be the MDE ARMA template for the LNG and other industries? How can this permit be considered the state of the art the template when it is totally inadequate as it currently stands? There are so many holes, it is leaking like a torn sieve!
13. There is so much at stake with Air Pollution and so much impact to water, soil, the food chain. The current pollution controls at Dominion Cove Point LNG are totally inadequate. Earlier, I spoke of Dominion records inconsistencies and understatement of air pollution emissions. When Air Modeling was done, the data used was so old (1997-1999 in most

cases) and did not address the real scenario. Two statements stood out in that Air Modeling document.

- a. Statement 1: Area of worst impact is close to the source facility (several thousand feet, though the distance given was in meters). Translated, these are Hot Spots like Cove Point Beach, Cove of Calvert, Chesapeake Ranch Estates, and other residences in close proximity to the LNG facility, and also include the Chesapeake Bay.
- b. No other statement or mitigation controls were mentioned for "area of worst impact". In fact, these high risk communities were not addressed at all and impact to the Chesapeake Bay was never even mentioned.
- c. Statement 2: No adverse effects on MD Eastern Shore. Last time I checked, the wind blows North, South, East, West, and places in between; other times, the wind does not blow at all and this is when Toxic Air Pollutants and Toxic "Dust" hang around to be breathed by residents and visitors in these hot spots close to Cove Point LNG. These pollutants will also be carried by the winds to other surrounding counties in the WESTERN SHORE and affect millions of residents in Maryland, perhaps even as far as Washington DC. Calvert County is the worst area to be affected, of course.
- d. All these adverse effects of AIR POLLUTION and TOXIC AIR and Toxic Particulate Matter affecting millions of MD residents, with Calvert County as the hot spot, could be greatly minimized if Dominion were required by MDE to install sufficient and state of the art pollution reduction controls as the cost of doing business. Do you plan to require Dominion to implement these active pollution reduction measures? If not, why? If yes, when?

For all these, we are requesting the following actions for Dominion Cove Point LNG. What we request is reasonable and is the cost of doing business. For Dominion, it is a drop in the bucket. We who live in these high risk communities (including those organisms that are in the Chesapeake Bay and cannot speak for themselves) refuse to be collateral damage to a multi-billion dollar industry with a track record of Air Quality violations like this lawsuit of the EPA against Dominion for which they settled with the government for \$1.2 BILLION. The following are requested to be implemented at Dominion's expense:

- o That Dominion submits all-inclusive data on emissions for a real Non-Attainment New Source Review. Consider that EXISTING EQUIPMENT have triggered this review due to high emissions, and that these emissions were understated and there were inconsistencies in the data submitted by Dominion. Take into consideration the issues expressed here today and in my documentation submitted to MDE.
- o Consider that it is the EXISTING EQUIPMENT which is currently emitting the worst pollution for which this permit Dominion has received "tentative renewal" by MDE. (It is interesting to note that Calvert County Board of Commissioners except Barbara Stinnett voted to support and endorse this permit before attending this public hearing, and without considering the issues presented.)

- Note: This permit renewal is being challenged by us, residents and supporters of high risk communities, until the issues raised here are satisfied by the implementation of pollution reduction and monitoring to achieve healthy air and healthy waterways. Halt the permit until a satisfactory plan for healthy air and waterways is made available for public review before any approvals by MDE are made.
- Provide the true Lowest Achievable Emissions Rate through the use of Most Achievable Control Technology (MACT) as mandated by the EPA so as not to pollute the Chesapeake Bay. By equipment, by pollution emissions reduced to values for healthy air and water.
- Install sufficient and active pollution reduction controls and continuous emissions monitoring (CEM which is currently for turbines only and none for vaporizers) to keep the air healthy for high risk communities (hot spots) adjacent to Cove Point LNG. Pollution reduction control levels must be true "actual", before any air trades are taken. Best practices alone are not enough considering the amount of pollution emissions from existing equipment and Dominion's track record of Air Pollution violations.
- One suggestion for pollution reduction is to install SCR's in series for the turbines and MACT for the worst polluting vaporizers for which NO CONTROLS EXIST TODAY as demonstrated in the Tables and documents made available for public review.
- Install ambient air monitoring for criteria pollutants and hazardous air pollutants (HAPs) and monitor ozone year round in strategic locations in high risk communities. This will monitor true air quality by an independent source and provide for a monitoring gap in Calvert County, especially in hot spots, which has the highest risk for Air Pollution.
- Regional monitoring alone is not sufficient considering the degree of air pollution caused by Cove Point LNG. Also, the only monitoring in Calvert County is for ozone in the summer months, nothing else.

14. LNG safety record has been touted all along, yet the last LNG death in the US occurred right at Cove Point LNG in 1979, just before the plant was closed down. It was a small, careless act that resulted in an explosion killing one operator, wounding another and caused \$3 Million in damage. The accident began when LNG leaked through an inadequately tightened electrical-penetration seal on an LNG pump. This is like the seemingly insignificant "O" ring that failed which sent our NASA astronauts into oblivion some years ago, right before our eyes. A little carelessness is all it takes.

15. There will be 200 opportunities per year of an LNG spill on water, especially during unloading operations. Since these are foreign flag LNG tankers, safety is a critical concern since LNG spill on water is uncontrolled. Let me paint this scenario: When LNG spills on water there is a thermal explosion due to the great difference in temperature between sea water and the cryogenic LNG. Anything that comes in contact with the LNG will freeze-burn...so it will kill any aquatic organism it comes in contact with. If you happen to be fishing on your boat nearby and LNG spill reaches you, your boat will most likely crack and a human exposed to LNG before it vaporizes will have freeze-burns. Assuming you survive in your cracked boat, and an LNG vapor engulfs you like a fog, you will most likely die from suffocation due to absence or lack of oxygen in the LNG vapor

cloud. Once the LNG vapor cloud becomes flammable (right mix of air and vaporized LNG) and it is ignited, a pool of burning gas so hot will create radiant heat worse than the tanker truck explosion in Oakland, CA that caused the freeway to buckle and fall. Sandia Laboratories in their 2005 Independent Risk Assessment Study said that a major LNG spill on water will spread a flammable vapor cloud as far as 7.5 miles. Calvert Cliffs, just a short distance away, will act like a fire fence increasing radiant heat. So what will Calvert Cliffs Nuclear Power Plant do to prevent their cooling towers from being compromised by this intense radiant heat so as to prevent a nuclear meltdown?

16. In the 1<sup>st</sup> Cove Point LNG hearing I attended, I expressed concern about terrorism since LNG tankers are foreign flag carriers. There was a chuckle and a joke was said that the only danger we would have would be if a plane crashed in Cove Point. Then 9/11 happened and we were caught unaware because of complacency. Is Cove Point and neighboring Calvert Cliffs in the Homeland Security Plan? If not, why? Coast Guard security was reduced in favor of local security. Will there be a change in this position? If not, why?

June Sevilla  
PO Box 354  
Solomons MD 20688  
410-326-7056

**Cove Point LNG AIR QUALITY and WATERWAYS QUALITY ISSUES  
(Summary Highlights of the letter sent to MDE Requesting Public Hearing)  
**REQUEST FOR ACTION/SUPPORT****

**Directed to:**

**Governor Martin O'Malley  
Senator Barbara Mikulski  
Congressman Steny Hoyer, MD 5<sup>th</sup> District  
Senator Roy Dyson, MD State 29<sup>th</sup> District  
Commissioner Wilson H. Parran, President Calvert County BOCC  
Hon. Joseph T. Kelliher, Chairman, FERC  
Mr. Donald S. Welsh, EPA Region 3 Regional Administrator  
Ms. Mycah Berryman, MD Office Manager, Chesapeake Bay Foundation**

**A PUBLIC HEARING on the Cove Point LNG Part 70 Operating Permit Renewal has been scheduled by the Maryland Department of the Environment. We request your support and presence on May 15, 2007 at 7PM, Holiday Inn Select, located at 155 Holiday Drive, Solomons, MD 20688.**

Details of our **concerns on AIR QUALITY as residents in HIGH RISK COMMUNITIES** and WATERWAYS QUALITY (especially Chesapeake Bay) are contained in the attached documents previously sent to MDE. Major problems and some solutions are as follows:

**A. Problems and Issues**

- 1. There are significant INCONSISTENCIES in Dominion LNG's AIR QUALITY DATA SUBMITTED for permits between the current Draft Part 70 and Permit To Construct (PTC), allowing Dominion LNG to escape Non-Attainment New Source Review (NNSR), see PTC - Table 2, Page 10, issued 2/14/06).**
  - a. Gross discrepancies; PTC for the LNG expansion submitted with LOWER HAZARDOUS AIR POLLUTION Potential To Emit than reflected in Part 70 for same equipment. See details in Item A of my letter to MDE and Exhibit A, table comparison between Part 70 and PTC on Hazardous Air Pollutant Emissions.**
  
- 2. AIR Pollution Controls for total LNG project INSUFFICIENT as currently represented. Criteria Air Pollutants NOX, VOC, and CO dramatically on the rise, since Cove Point LNG facility began importing activities in 2003, the same year Calvert County became a NON-ATTAINMENT AREA for OZONE. **Particulate Matter (PM) compounds** formed from Ozone interaction with **Toxic Air Pollutants** being emitted without controls by the LNG facility appear not to have been previously addressed. PM has been dismissed merely as "fugitive dust".**
  - a. Air Quality Modeling data used was very old (some 1997-1999) and stated no effects to the MD Eastern Shore. **Impact to AIR QUALITY of HIGH RISK COMMUNITIES such as Cove Point Beach, Chesapeake Ranch Estates, other neighboring residents, NOT ADDRESSED.****
  - b. Dominion's Part 70 baseline equipment yearly data (2001 thru 2004) for Criteria Pollutants (Exhibit B) appear understated and inconsistent with supporting documentation.**
  
- 3. NO AIR POLLUTION CONTROLS on Hazardous Air Pollutants (HAPs).**
  - a. Six (6) out of 10 TOXIC AIR POLLUTANTS (HAPs) are SIGNIFICANTLY ABOVE the Maryland Toxic Air Pollutant (TAP) list "Plant/Facility Level Thresholds" including Lead which is both a Criteria Pollutant and a Toxic Air Pollutant. OSHA**

regulations covering these? See Exhibits D-1 and D-2 for **tons per year over MD TAP list levels:** Benzene (carcinogen), formaldehyde, acetaldehyde, propylene oxide, acrolein, and lead.

4. **NOx for VOC trade** between Dominion LNG and Dominion Energies – usually air pollution credits are “like-for-like” pollutant, with a trade ratio greater than 1:1.
  - a. Rationale and legitimacy of this trade? Effects on Air Quality computations?
  - b. How does this trade affect a previous ruling that Dominion LNG purchase 223 NOx tons per year air credits from InterGen in Baltimore City, MD according to: NSR 2002-01 issued 8/06/02, Condition Number D2?
5. **Water Quality deterioration caused by Air Pollution and LNG-related activity NOT ADDRESSED in the MDE permits to Dominion LNG. Impact heavy on marine life, food chain, and commerce in Maryland.**
  - a. 348 tons per year of NOx emitted from LNG baseline equipment expected to form NITRATES continually polluting the Chesapeake Bay, where nitrate pollution is already a great concern. Air pollutants from LNG tankers, marine escorts, and traffic specifically related to LNG were not addressed since MDE jurisdiction covers only stationary equipment.
  - b. 22.22 tons per year of LNG **uncontrolled** Toxic Air Pollutants (Exhibits C-1 and C-2) are expected to form Toxic Particulate Matter hazardous to human health when inhaled and will form even more toxic when they are ingested by marine life and animals in the food chain.
  - c. 200 LNG tankers per year **will siphon 66 BILLION gallons** of sea water from the Chesapeake Bay through LNG tanker water ballast intake during unloading operations. This equates to a threat of **increased salinity** especially in dry months which will be more favorable to **red algae blooms**, currently not experienced in this area. Shallow areas close to LNG loading pier may “dry out” at low tide.
  - d. LNG tanker water ballast refill rate is about 50,000 gallons of sea water per minute, siphoning aquatic organisms smaller than their filter mesh size, along with the sea water. LNG tankers are foreign flag carriers, so enforcement of filter mesh size to prevent **over-harvesting and impingement of these aquatic organisms in the food chain** could/may be difficult to enforce. Since Coast Guard engineering assessments in the EIS (Environmental Impact Statement) only addressed vessel engineering for safety, security, and spills, this critical aquatic organisms issue was not addressed.
6. **Other Questions and concerns:**
  - a. Sandia 2005 risk assessment for major LNG spill determined flammable LNG vapor could extend 7.3 miles. Calvert Cliffs Nuclear Power Plant is within this distance from LNG and the cliffs act like a fire fence increasing heat intensity - how will radiant heat from a major LNG spill affect cooling towers?
  - b. See item E of my letter to MDE for other issues.

**B. SUGGESTED SOLUTIONS to some of the above Problems/Issues.** In some instances, solutions may require regulatory changes, and/or procedural changes and/or inter-and intra-departmental coordination. In most cases, especially in Air Pollution Reduction Control and Ambient Air Monitoring, the request for resolution will involve Cove Point LNG expense as a cost of doing business.

**1. AIR QUALITY DATA DISCREPANCIES between PTC and Part 70.**

- a. Revisit data discrepancies submitted by Dominion for Air Quality, assure that data used for computing PSD and NNSR include same values for Criteria Pollutants and HAPs for **current equipment emissions plus new equipment for expansion.**

- b. Based on these findings, **Dominion should undergo NNSR** which affects PTC requirements and considers air pollution emissions from all relevant sources necessary to Prevent Significant Deterioration (PSD) of Air Quality such as existing equipment plus proposed equipment for expansion (Potential To Emit), all LNG tanker, marine escort and LNG related vehicular traffic previously not addressed, Particulate Matter (PM) formed by interaction of Criteria Pollutants with moisture, sunlight, Ozone, and other compounds, Toxic PM from HAPs, etc. Inclusion of all pertinent factors affecting AIR QUALITY in the computations, before any air trade reductions are taken will determine the true requirements for PSD of Air Quality. These will also determine the real requirement for POLLUTION REDUCTION CONTROLS needed at the LNG facility and for all LNG-related activity.
2. **AIR POLLUTION CONTROL to Prevent Significant Deterioration of Air Quality especially to AT-RISK COMMUNITIES adjacent to Cove Point LNG.**
    - a. **Conduct new Air Modeling** with more current ambient air quality data and if not available, use more current data from Air Quality studies conducted by outside organizations to provide adjustments to emulate current air quality conditions in the tri-county area. Consider the Air Quality conditions affecting the counties of Calvert and St Mary's which are in close proximity to the Chesapeake Bay and the LNG facility. Include impact to HIGH RISK COMMUNITIES.
    - b. **Install sufficient BACT** (Best Available Control Technology) and active monitoring of emissions from major sources such as LNG baseline equipment to effectively reduce Criteria Pollutants and HAP emissions to restore AIR QUALITY to healthy levels to HIGH RISK COMMUNITIES.
    - c. **Install Ambient Air Monitoring Equipment** in strategic areas in High Risk Communities (Hot Spots such as Cove Point Beach).
  3. **AIR POLLUTION CONTROL for HAPs** – conform emissions to Maryland TAP List thresholds.
  4. **Air Trades** – Although allowed by regulation, does not resolve Pollution Controls to achieve Healthy Air Quality and should not be used as an alternative to the long term solution of installing BACT or MACT for major emissions sources.
  5. **Water Quality Deterioration** - Nitrates and Toxic PM from Air Pollution sources can be resolved through proper BACT implementation as described in items 1 thru 4, however, adverse impact to the Chesapeake Bay from LNG tanker water ballast intake volume of 66 Billion Gallons per year and the prevention of over-harvesting and impingement of aquatic organisms smaller than water ballast filter mesh size should be investigated for solutions and enforcement on foreign flag LNG tankers.

Thank you for your support and assistance in resolving these Air Quality and Water Quality issues. We look forward to meeting you at the Public Hearing on May 15<sup>th</sup> in Solomons, MD.

Prepared by:

**JUNE R. SEVILLA**

Board Member, Cove Point Beach Association

Representing self and 130 property owners at Cove Point Beach, other MD residents.

(301) 351-3161

cc:

Ben Abrams – Rep. Hoyer's Office

Brigid Kolish - Sen. Mikulski's Office

Shante Collier – FERC, Sec. to Chmn Kelliher

Janice Donlon – EPA Region 3

Laurie Kabler - EPA

# Dominion Cove Point LNG Impact to Public Health, the Environment, and Chesapeake Bay Commerce and Recreation

These HAPs are carcinogens, cause respiratory, cardiac, nerve, skin, mucous membrane damages, irreversible injury to the blood-forming organs, and death. HAPs Percentages (%) far exceed Maryland Toxic Air Pollution thresholds. No HAPs pollution reduction, no continuous equipment monitoring at Dominion Cove Point LNG

Formaldehyde	= 67,500 %
Acetaldehyde	= 6,690 %
Propylene Oxide	= 3,260 %
LEAD & compounds	= 2,656 %
Acrolein	= 400 %
Benzene	= 200 %

**OZONE**  
FOOT

Sunlight and Moisture react with Air Pollution from Dominion's processes and produce Ozone which result in **SMOG**, Nitrates (Fertilizer) and Toxic Particulate Matter (Toxic Dust) poisoning the AIR we breathe. Winds and rain wash these toxins into the Chesapeake Bay and tributaries, soils, and vegetation. Toxins ingested by animals and aquatic organisms such as crabs, oysters, mussels, become even more toxic for human consumption since the poison goes to their muscle. Therefore when we eat poisoned seafood or livestock, we ingest the poison in higher concentrations.



**HAZARDOUS AIR POLLUTION**  
By: Dominion Process



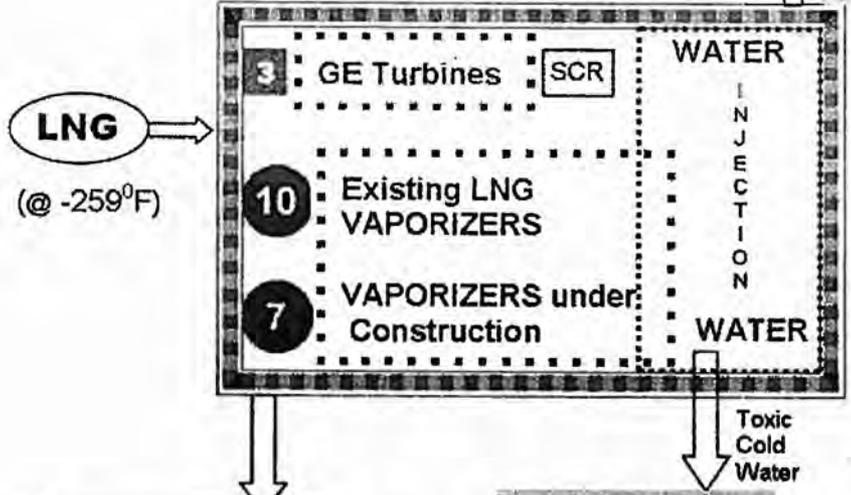
**RISK:** LNG spill probability is very high during tanker unloading operations. Major LNG spill over water cannot be contained and will immediately spread and kill anything it touches; seafood, people, etc. and any metal it comes in contact with will freeze-crack. Sea water is an LNG vaporizer and escalates danger by facilitating formation of the LNG flammable vapor cloud, spreading as far as 7.3 miles. Calvert Cliffs, only a short distance from the LNG pier will act as a fire fence and intense radiant heat from the burning LNG pool will affect Nuclear Power Plant operations and risk a meltdown.

**DANGER**

**Chesapeake Bay NITRATES**  
(from AIR pollution by Dominion LNG process)  
**PLUS**

**Increased Salinity**  
(from LNG tankers siphoning 68 Billion Gallons of Sea Water from the BAY)  
Create **FAVORABLE CONDITION FOR RED ALGAE**

**Dominion Cove Point's LNG VAPORIZATION Process**  
↑ NOx, VOC, CO, SOx, PM, HAPs



**Toxic Dust + OZONE**  
**Ground Level SMOG**

**GAS to Pipeline**  
Natural GAS to Storage or Liquefaction Process during Injection months Apr thru Dec.

**GRAYS CREEK**  
@ Calvert Cliffs State Park, feeds into Chesapeake Bay  
**POISONED WATER**  
By: Dominion Process



Grays Creek



**Chesapeake Bay POISONED WATER**  
By: Dominion Process

