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UNITED STATES OF AMERICA  
BEFORE THE ENVIRONMENTAL PROTECTION AGENCY

In the Matter of Title V Operating Permit  
Number 9-1464-00031/00292 Issued to

E.I. Du PONT De NEMOURS and COMPANY

E.I. Du PONT YERKES PLANT

By New York State Department of  
Environmental Conservation

EX-101  
SCHEDULE II  
EXHIBIT 1  
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PETITION REQUESTING THAT THE ADMINISTRATOR  
OBJECT TO ISSUANCE OF THE TITLE V OPERATING PERMIT  
FOR THE E.I. DU PONT YERKES PLANT

INTRODUCTION

Pursuant to Section 505 (b)(2) of the Clean Air Act (CAA or the Act) and 40 C.F.R. 70.8 (d), Clean Air: Organizing for Health and Justice (Clean Air) and the Western New York Council on Occupational Safety and Health (WYNCOSH) petition the Administrator to object to the New York State Department of Environmental Conservation's issuance of a Title V operating permit for the E.I. Du Pont Yerkes Plant, located at 3115 River Road, Buffalo, New York.<sup>1</sup>

Procedural History

On June 11, 2014, the New York State Department of Environmental Conservation (DEC) issued for public comment a draft renewal of the Yerkes Title V permit.<sup>2</sup> Petitioners jointly

<sup>1</sup> The mailing address of the plant is Buffalo, New York, but the plant is situated in the Town of Tonawanda, just north of the City of Buffalo.

<sup>2</sup> Exhibit 1

submitted comments to the DEC on the permit draft.<sup>3</sup> On December 1, 2014, DEC responded to the comments submitted by Petitioners.<sup>4</sup> On the same date, the Title V permit at issue here was submitted to the Environmental Protection Agency, (EPA or the Agency) by DEC, commencing the Agency's 45-day review period.<sup>5</sup> The Agency's review period ended on January 15, 2015, without objections by the Administrator to the proposed permit. Under CAA Sec. 505 (b) (2), "any person" may petition the Administrator to object within 60 days of the expiration of the Agency's 45-day review period, in this case on or before March 16, 2015. This petition is, therefore, timely submitted.

Petitioners

Clean Air is a membership-based nonprofit organization whose members live and work primarily in the Town and City of Tonawanda, Grand Island and the City of Buffalo. Clean Air works to pass and enforce policies that protect public health and the environment in our region.

WYNCOSH is a nonprofit organization dedicated to defending workers' rights to a safe and healthy work environment and improving the working conditions of all workers through outreach, advocacy and education.

The Yerkes Plant

The Yerkes plant manufactures two products: Corian, a solid surface material used in countertops, and Tedlar, a film used on solar panels and aircraft.

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<sup>3</sup> Exhibit 2.

<sup>4</sup> Exhibit 3.

<sup>5</sup> Exhibit 4.

Methyl methacrylate, (MMA), which is classified as a Hazardous Air Pollutant (HAP) and a Volatile Organic Compound (VOC), is emitted in the production of Corian. According to the Agency's Toxic Transfer Network, breathing MMA emissions, even for short periods of time, irritates the nose and throat and can cause headaches and fatigue. Greater exposure to MMA can cause damage to a developing fetus, pulmonary edema, and may damage the nervous system, causing numbness and/or weakness in the hands and/or feet. There is some evidence that MMA is harmful to the liver and the kidneys. MMA is flammable and reactive; in the event of a fire, poisonous gases are produced and containers may explode.<sup>6</sup> According to the most recent data on the Agency's Toxic Release Inventory, the Yerkes plant emitted 201,239 pounds of MMA in 2013.

Vinyl Fluoride, (VF), is a colorless gas used mainly in the production of polyvinyl fluoride and other fluoropolymers. At Yerkes, VF is emitted in the course of producing Tedlar. VF is regulated by the Agency under the CAA to prevent accidental releases. It has a threshold reporting quantity of 1,000 pounds. According to the most recent data on the Agency's Toxic Release Inventory, the Yerkes plant emitted more than 36 times the threshold reporting quantity (36,400 pounds). The Agency also has authority to regulate VF under the Toxic Substances Control Act, which requires health and safety studies to determine the risk of injury to human health or the environment. The National Toxicology Program has classified VF as an IARC Group 2A carcinogen (reasonably anticipated to be a human carcinogen). VF will form an

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<sup>6</sup> <http://www.epa.gov/airtoxics/hlthef/methylme.html>.

explosive mixture in air.<sup>7</sup> VF was involved in a 2010 explosion at the Yerkes plant that killed one person and injured another.<sup>8</sup>

Dimethyl acetamide (DMAC), is another VOC emitted by the Yerkes plant, in the production of Tedlar. At temperatures above 70 degrees Centigrade, explosive vapor/air mixtures of DMAC may be formed. DMAC is classified by the American Conference of Governmental Industrial Hygienists as a human carcinogen. Exposure to DMAC may also cause damage to the liver and central nervous system.<sup>9</sup> Based on potential to emit, it appears that DMAC is one of the highest volume pollutants, with potential to emit between 100 and 250 tons per year.<sup>10</sup>

### Background

Tonawanda is home to the highest concentration of major industrial facilities in New York State, with over 50 air-permitted facilities inside a two-mile radius. DuPont's Yerkes facility accounts for 26% of TRI (Toxic Release Inventory) emissions in Erie County, where the facility is situated.

In 2007, DEC, with support from the Agency undertook an extensive air monitoring project that revealed elevated levels of six hazardous air pollutants in the neighborhoods surrounding the Yerkes plant. DEC continues to monitor air at the request of residents.

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<sup>7</sup> Exhibit 5.

<sup>8</sup> <http://www.csb.gov/e-i-dupont-de-nemours-co-fatal-hotwork-explosion>. Petitioners recognize that the Title V permit process does not regulate worker safety. Nevertheless, this incident suggests that the proposed permit for the Yerkes plant should be carefully reviewed by the Agency.

<sup>9</sup> [http://www.osha.gov/dts/chemical\\_sampling/data/CH\\_235600.html](http://www.osha.gov/dts/chemical_sampling/data/CH_235600.html).

<sup>10</sup> See DEC's Permit Review Report, page 12.

In 2013, the New York State Department of Health (DOH) released the Tonawanda Community Health Study.<sup>11</sup> The DOH study found elevated levels of certain cancers, pre-term births and heart defects in newborn children in the neighborhoods surrounding the Yerkes plant.

During the recent past, there have been periods of noncompliance with the Clean Air Act at the Yerkes plant. The Agency conducted an inspection of the Yerkes facility in June 2010. The Agency found several violations of the CAA, the regulations promulgated under the Act, the Title 6 of the New York Code of Rules and Regulations and the Title V operating permit then in effect, relating to leak detection and reporting.<sup>12</sup> The company paid a civil penalty of \$165,000.<sup>13</sup>

In 2013, the U.S. Department of Justice, on behalf of the Agency, filed a civil action against DuPont in the U.S. District Court for the Western District of New York.<sup>14</sup> The Complaint, filed concurrently with a Consent Decree, alleged that the company failed to submit complete and accurate emission statements for the Yerkes plant, in violation of the CAA, and that the company failed to submit accurate Toxic Chemical Inventory Form R reports for MMA for the reporting years 2003 to 2005 and a timely Form R report for certain glycol ethers for the reporting year 2008, in violation of Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA).<sup>15</sup> The litigation was settled by DuPont's agreement to pay a civil

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<sup>11</sup> Exhibit 6.

<sup>12</sup> Exhibit 7, pp. 16 – 18, paragraphs 88 – 93.

<sup>13</sup> Exhibit 7, p. 18, paragraph 94.

<sup>14</sup> Exhibit 8.

<sup>15</sup> Exhibit 9, p. 1.

penalty of \$440,000 and to undertake certain compliance actions.<sup>16</sup> The Consent Decree was filed on July 17, 2014.

#### APPLICABLE LAW

The Clean Air Act requires states to develop and submit to the Agency an operating permit program. CAA Sec. 502 (d) (1). All major stationary sources of air pollution are required to apply to their state permitting authorities for an operating permit under Title V of the Act. CAA Secs. 502(a), 504(a).

Title V permits do not impose substantive air quality requirements. Rather, they impose monitoring, record keeping and other requirements to assure compliance by the source and to enable the source, the states, the Agency and the public to understand the requirements and to know whether the requirements are being met by the source.

State permitting authorities, such as the DEC, submit Title V permits to the Agency, which has 45 days to object if it determines that the permit is not in compliance with the Act. CAA Sec. 505 (b) (1). DEC submitted the proposed permit in this matter on December 1, 2014. The Agency did not object to the proposed permit during the 45-day review period, which ended on January 15, 2015. The burden of demonstrating that a permit fails to comply with the Clean Air Act rests with a petitioner. If the petitioner demonstrates noncompliance, the Administrator is required to object to the permit. NYPIRG v. Whitman, 321 F.3d 316, 333, n.11 (2d Cir. 2003).

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<sup>16</sup> Exhibit 9, pp. 4 – 7.

## BASES FOR OBJECTION

1. A Variance From Reasonably Available Control Technology (RACT) Should Not Have Been Granted (Condition 29)

The applicable requirements are found in Title 6 Part 212.10 of the New York Code of Rules and Regulations. Owners or operators of facilities located outside the lower Orange County or New York City metropolitan area and having an annual potential to emit 50 tons or more of VOCs (such as MMA and VF) must submit a compliance plan to the DEC. 6 NYCRR 212.10 (a), (b). Compliance plans must include either a RACT analysis (i.e., analysis of the technological and/or economic feasibility of achieving the regulatory target for capture and removal) or a plan to limit the annual potential to emit below the applicability levels in 6 NYCRR 212.10 (a), in this case, 50 tons. The most recent compliance plan for the Yerkes plant was submitted in December 2011.<sup>17</sup>

Under 6 NYCRR 212.10 (c) (4) (i), VOC emission points that are equipped with a capture system and a control device with an overall efficiency of at least 81 percent are deemed to be equipped with "reasonably available control technology." However, where the operator can show to the satisfaction of the DEC that an emission point cannot achieve an overall removal efficiency of at least 81 percent for reasons of technological or economic infeasibility, DEC may accept a lesser degree of control. 6 NYCRR 212.10 (c) (4) (iii). Economic feasibility is determined by a cost threshold established by DEC's Division of Air Resources (DAR). The cost

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<sup>17</sup> See Exhibit 4, Condition 29.2, page 32.

threshold for a “Severe Ozone Non-Attainment Area,” the applicable threshold here, is \$5,000 per ton of emissions reduced.<sup>18</sup>

The December 2011 compliance plan contained a RACT analysis.<sup>19</sup> DEC’s proposed permit states, in part, that: “The 2011 compliance plan identified eight (8) emissions points with (VOC) emissions greater than 3.0 pounds per hour. The RACT analyses demonstrated that it was not economically feasible to install control equipment and no modifications are required [...] This permit condition shall document the Department’s acceptance and approval of a RACT variance.”

Petitioners commented to the DEC that the RACT variance should not be approved because: (1) the company’s RACT analysis was heavily redacted, due to its claim that information was “confidential” or “trade secret”<sup>20</sup> and (2) the company has a recent history of noncompliance. One of the emission points identified by the company in its RACT analysis, vent 55, (which emits MMA), was at the heart of the above-referenced federal civil action.<sup>21</sup> DEC responded to Petitioners’ comments regarding noncompliance, stating that: “Facilities are always listed in noncompliance until the consent order is complete.”<sup>22</sup>

The company’s recent history of noncompliance was also pointed out in a January 8, 2015 letter from Clean Air to the Administrator.<sup>23</sup> By letter dated February 18, 2015, the Agency responded that DuPont’s violations are not ongoing, and the Yerkes facility “is now in

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<sup>18</sup> Exhibit 10.

<sup>19</sup> The RACT analysis is attached as Exhibit 11.

<sup>20</sup> DEC objected to the redaction, and DuPont ultimately provided DEC with a less redacted, revised RACT analysis. DEC in turn provided the revised analysis to Clean Air, in response to Clean Air’s Freedom of Information request. Petitioners do not ask the Administrator to object on the basis of the redaction, because the revised analysis was sufficient to allow Petitioners to evaluate the merits of a RACT variance.

<sup>21</sup> Exhibit 8, pp. 15 – 16; Exhibit 9, pp. 5 – 7.

<sup>22</sup> Exhibit 3, p. 3.

<sup>23</sup> Exhibit 12.

compliance with the applicable requirements.”<sup>24</sup> While this may be so, it bears mention that, as of March 11, 2015, the Agency’s public web site lists the Yerkes facility as noncompliant with the CAA, with the last day of inspection listed on August 27, 2014.<sup>25</sup>

The variance granted by DEC was based on a RACT analysis containing data that was three years old. Emissions data, for example, are from 2010.<sup>26</sup> There has been a significant increase in total emissions from the Yerkes facility since 2010. TRI data states that in 2010 the facility emitted a total of 219,665 pounds of air pollutants; in 2013, the facility emitted 237,686 pounds.

Moreover, the annual costs of electricity and natural gas dictate the calculation of cost per ton, and are important factors in the conclusion that operating control equipment is not economically feasible. Energy costs are not static however, and prices fluctuate over time. Certainly, the cost of natural gas in New York State has dropped significantly since Du Pont completed the RACT analysis. For example, the average price per thousand cubic feet for industrial customers in New York dropped from \$8.55 in 2011 to \$8.05 in 2014.<sup>27</sup> According to National Grid, a supplier of electricity and natural gas in New York, the total effective monthly cost of natural gas in New York averaged \$0.4244 per therm, down from the 2011 average of \$0.6280.<sup>28</sup>

Du Pont also has received low cost power from the New York Power Authority (NYPA). NYPA, one of the largest public power organizations in the United States, is a provider of wholesale and low cost power. NYPA provides discounted power to New York businesses for

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<sup>24</sup> Exhibit 13.

<sup>25</sup> Exhibit 18 pp. 2

<sup>26</sup> Exhibit 11, Table 2.

<sup>27</sup> Exhibit 14.

<sup>28</sup> Exhibit 15.

the purpose of mitigating energy costs and supporting the State's economic development goals.

As reported in the December 22, 2010 edition of *Buffalo Business First*, Du Pont was one of approximately 100 companies in Western New York that have benefitted from low-cost hydropower under long term contracts. Under the most recent contract with the New York Power Authority, Du Pont will continue to purchase electric power at lowered rates through 2020.<sup>29</sup> According to DuPont's NYPA allocations in January 2015, the Yerkes facility was allocated 4,275Kw<sup>30</sup>. It is not clear whether the electric energy costs set forth in the RACT analysis reflect these discounted rates.

If the cost of emission control equipment remained constant,<sup>31</sup> or even if the cost were to increase slightly, both the increased tonnage of MMA emitted and the lower utility costs would result in a lowered cost per ton. At least with respect to vents 7 and 221, where the company's RACT analysis resulted in a cost per ton of \$7,650 -- \$2,650 per ton above the cost threshold -- a new RACT analysis, based on more recent data, could produce a different result. The Administrator should object to the permit on this basis, and require a new RACT analysis.

#### Verification of Submerged Fill Line Pipe Function

##### Should Be More Frequent Than Once Per Permit Term (Condition 30)

Condition 30 of the proposed permit involves aboveground storage tanks having capacities of between 10,000 and 20,000 gallons. These tanks have submerged fill lines, which

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<sup>29</sup> Exhibit 16.

<sup>30</sup> Exhibit 17 pp2, lines 52-55

<sup>31</sup> Which, Petitioners recognize, is by no means certain.

are required for storage tanks having this capacity.<sup>32</sup> The tanks are located in emission unit 0-0005 (Corian raw materials) and emission unit 0-0009 (Tedlar oriented line # 1). MMA and VF are emitted in the processes occurring at these emission units.

The draft permit required verification that "The fill line must be verified to be in functioning condition once every 5 years during internal tank (CBS) inspection."<sup>33</sup> Petitioners commented that the frequency of inspection should be semi-annually.<sup>34</sup> In its response to Petitioners' comments, DEC stated that: "Verification of the submerged fill line pipe to prevent splashing once every 5 years is appropriate and coincides with the Chemical Bulk Storage (CBS) regulatory requirement to do an internal inspection and integrity check once every 5 years."<sup>35</sup> The proposed permit also requires verification every 5 years.<sup>36</sup>

By "CBS regulatory requirement," DEC apparently refers to 6 NYCRR Part 598, (Holding and Storage of Hazardous Substances), specifically Part 598.7 (Aboveground Storage Tank Systems – Inspection). DEC apparently relies on Section (d) of Part 598.7, which sets forth the requirement that aboveground piping systems and aboveground tanks must be inspected no later than 5 years from the date of the initial inspection or regulatory deadline, whichever occurs first. Petitioner submits, however, that Section (c) of Part 598.7 (Annual Inspections) should apply. Section (c), subsection (2) requires "comprehensive annual inspections" of aboveground storage tank systems. As DEC's response to Petitioners' comments stated, verification that the submerged fill is functioning is "to prevent splashing." The annual inspection required by Part 598.7 (c) (2) (iii) includes "checking on the adequacy of [...] spill

<sup>32</sup> 6 NYCRR Part 229.3 (e) (2) (iv).

<sup>33</sup> Exhibit 1, p. 36.

<sup>34</sup> Exhibit 2, pp. 3 - 4.

<sup>35</sup> Exhibit 3, p. 2.

<sup>36</sup> Exhibit 4, pp. 33 – 34.

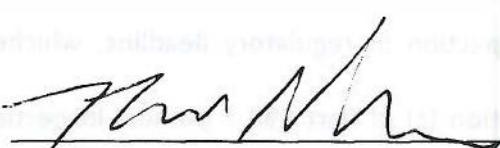
control equipment [...]"'. Petitioner therefore asks the Administrator to object to the proposed permit, to the extent that it does not require annual inspection of the submerged fill.

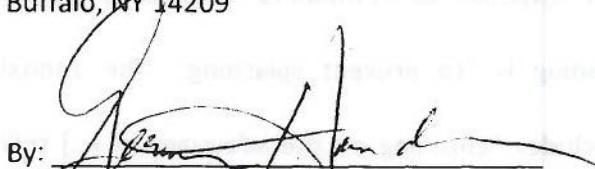
## CONCLUSION

The Yerkes facility is located in an environmental justice area. The health impact of hazardous air pollutants emitted in this area, not only by the Yerkes facility, but others in the area, are documented. The fact that Yerkes is located in an area where sources of air pollutants are so highly concentrated warrants a closer look at the permit, as does the fact that there have been periods of noncompliance by the Yerkes facility. As Petitioners have shown, the inadequacy of the company's RACT analysis and the DEC's misapplication of 6 NYCRR Part 598, warrants objection by the Administrator to Conditions 29 and 30 of the proposed permit.

Buffalo, New York  
March 12, 2015

Respectfully submitted,

By:   
Rebecca Newberry  
Clean Air: Organizing for Health and Justice  
52 Linwood  
Buffalo, NY 14209

By:   
German Harnden  
Western New York Council on Occupational Safety and Health  
2495 Main St # 438  
Buffalo, NY 14214

## EXHIBIT LIST

Petition in re Title V Operating Permit 9-1464-00031 / 00292, E.I DuPont de Nemours and Company, Tonawanda, New York Yerkes facility

1. Draft permit, June 11, 2014.
2. Petitioners' comments to DEC on draft permit.
3. DEC response to Petitioners' comments, December 1, 2014.
4. Proposed permit, submitted by DEC to the Agency.
5. DuPont Product Safety Summary Sheet.
6. New York State Department of Health, Tonawanda Community Health Study.
7. EPA Consent Agreement and Final Order, May 9, 2012.
8. Complaint in Civil Action 1:13-CV-00810-WMS.
9. Consent Decree in Civil Action 1:13-CV-00810-WMS.
10. New York State DEC, Division of Air Resources, DAR-20.
11. RACT analysis, December 2011.
12. Letter from Petitioner Clean Air to Administrator, January 8, 2015 .
13. Letter from Agency to Petitioner Clean Air, February 18, 2015.
14. Chart, U.S. Energy Information Administration.
15. Chart, National Grid.
16. Online article, Buffalo Business First, December 22, 2010.
17. New York Power Authority (NYPA) Power Allocations January 2015
18. Detailed Facility Report – E.I. Du Pont Yerkes Plant as of 3.11.2015

# **EXHIBIT 1**