



FACT SHEET

March 30, 2018

Competitive Power Ventures, Waywayanda, New York

Addressing Air Quality Concerns

The New York State Department of Environmental Conservation's (DEC) Division of Air Resources prepared this fact sheet to inform the public about ambient air samples collected near the Competitive Power Ventures (CPV) Valley Energy Center. The new 680-megawatt electric generation facility is permitted to burn natural gas primarily, as well as a limited amount of ultra-low sulfur diesel (ULSD).

DEC's analysis of the air samples collected did not find a threat to public health or the environment. In response to community concerns about odors and visible plumes from the facility during its initial testing period, DEC collected three, one-hour air samples on Monday, March 5. The results were typical of similar, non-urban areas in New York State. Table 1 below shows data from 32 compounds that were detected in one or more samples. All chemical concentrations were below DEC's short-term health-based comparison values that were developed to be protective of health outcomes from one-hour exposures.

About the Sampling

Each of the air samples were collected for one hour using a six-liter canister. Samples were analyzed by DEC's laboratory using the U.S. Environmental Protection Agency's (EPA) TO-15 method for air analysis of volatile organic compounds (VOCs). The method identifies a suite of 44 VOCs.

One sample was collected north of the facility (upwind) in the Pine Hill Cemetery and two were collected south of the facility (downwind) along DeBlock Road. The third DeBlock Road sample was collected away from homes and 400 feet northeast of the second sample. During sampling, the winds were from the North. The facility was burning ULSD during sample collection.

Of the 32 compounds found in one or more samples, as shown in Table 1, 14 have been identified as products from the burning of ULSD. All concentrations were below respective health-based comparison values.

The remaining 18 compounds are unlikely to be related to the burning of ULSD and are routinely found in communities across the state, because they are related to traffic emissions or refrigerants with long atmospheric half-lives. The concentrations for all 18 compounds were also below respective health-based comparison values.

Lastly, although not shown here, the data from all 32 compounds were compared with concentrations found in DEC's ambient air toxics monitoring network. Many of the

compounds found in this assessment are frequently detected at other locations in the state. This comparison showed that the concentrations of all 32 compounds were within the same range as concentrations found in the rest of the DEC's monitoring network. Therefore, the measured levels in the neighborhoods surrounding the CPV facility were not unusual.

Table 1. Chemicals Identified

Chemical	Upwind (Pine Hill Cemetery) 3/5/2018 5:49 PM (ppb)	Downwind DeBlock Rd 3/5/2018 6:07 PM (ppb)	Downwind DeBlock Rd 3/5/2018 6:26 PM (ppb)	Short-Term (1-hour) Health-Based Air Concentration Values (ppb)
Burning of ULSD fuel could be a source				
1,3-Butadiene	0.013	0.020	0.020	--
Acrolein ^a	0.084	0.15	0.15	1.1
Benzene	0.15	0.15	0.15	400
Cyclohexane ^a	0.0083	0.042	0.034	--
Ethylbenzene	0.0078	0.015	0.014	12,000
Heptane ^a	0.027	0.43	0.37	51,000
Hexane ^a	0.048	0.63	0.64	--
Methyl ethyl ketone ^a	0.12	0.14	0.24	44,000
<i>m,p</i> -Xylene	0.015	0.027	0.019	5,100
Naphthalene ^a	0.012	0.0072	0.0060	1,500
<i>o</i> -Xylene	0.0068	0.052	0.025	5,100
<i>p</i> -Ethyltoluene ^a	0.0024	0.0044	0.0038	--
Propene ^a	0.081	0.15	0.20	--
Toluene	0.048	0.098	0.089	9800
Unlikely to be related to burning of ULSD fuel				
1,2,4-Trimethylbenzene	0.0063	0.0094	0.0065	--
1,2-Dichloroethane	0.017	0.018	0.018	--
1,2-Dichloroethylene	0.015	0.0020	0.0031	--
1,2-Dichloropropane	0.0056	0.0056	0.0053	--
1,3,5-Trimethylbenzene	0.0016	0.0029	0.0019	--
Bromomethane	0.0071	0.0070	0.0073	1000
Carbon Disulfide	0.0060	0.0054	0.0043	2000
Carbon Tetrachloride	0.080	0.077	0.085	300
Chloroethane	nd	nd	0.0094	--
Chloroform	0.016	0.017	0.020	31
Chloromethane	0.49	0.49	0.53	11000
Dichlorodifluoromethane	0.45	0.45	0.46	--
Dichloromethane	0.058	0.059	0.068	4000

Chemical	Upwind (Pine Hill Cemetery) 3/5/2018 5:49 PM (ppb)	Downwind DeBlock Rd 3/5/2018 6:07 PM (ppb)	Downwind DeBlock Rd 3/5/2018 6:26 PM (ppb)	Short-Term (1-hour) Health-Based Air Concentration Values (ppb)
Dichlorotetrafluoroethane	0.018	0.017	0.018	--
Styrene	0.0050	0.0054	0.0053	4000
Tetrachloroethylene	0.0039	0.0038	0.0040	44
Trichloroethylene	0.0011	0.0014	0.0013	4
Trichlorofluoromethane	0.19	0.18	0.19	1600
Trichlorotrifluoroethane	0.058	0.058	0.065	130000

^a DEC laboratory estimated concentrations, not part of the usual suite of TO-15 compounds

"- -" Indicates no short-term health-based air concentration value has been derived for this chemical. Short-term exposures to these chemicals are generally not toxic at common ambient levels such as those found in this assessment.

nd – not detected

For More Information

Please contact: Steven Flint
 Phone: 518-402-8452
 Email: steven.flint@dec.ny.gov