Iroquois
GAS TRANSMISSION SYSTEM
IROQUOIS PIPELINE OPERATING COMPANY, OPERATOR

ONE CORPORATE DRIVE, SUITE 600
SHELTON, CT 06484-6211
TEL: (203) 925-7200
FAX: (203) 929-9501
www.iroquois.com

November 07, 2022

New York State Department of Environmental Conservation
Division of Environmental Permits
625 Broadway
Albany, NY 12233-1750
Attention: Karen M. Gaidasz, Chief, Offshore Wind & Hydroelectric Section, Bureau of Energy Project Management karen.gaidasz@dec.ny.gov

Re: Iroquois Gas Transmission System, LP
Enhancement By Compression (ExC) Project
Air State Facility Permit ID Nos. 3-1326-00211 and 4-1922-00049

Dear Ms. Gaidasz:

Enclosed please find the Disadvantaged Community ("DAC") Evaluation report prepared by Mott MacDonald on behalf of Iroquois Gas Transmission System, L.P. ("Iroquois") for the Enhancement by Compression ("ExC") Project. The DAC Evaluation has been prepared to provide further information responsive to the New York State Department of Environmental Conservation's September 15, 2022, Third Request for Additional Information related to the above-referenced Air State Facility permit modification applications. Specifically, the DAC Evaluation has been revised to include additional information regarding ExC Project controlled and anticipated hazardous air pollutant ("HAP") emissions and the measures proposed to be implemented by Iroquois to reduce HAP emissions.

Feel free to contact me if you have any questions or require additional information.

IROQUOIS GAS TRANSMISSION SYSTEM, L.P.
By its Agent
Iroquois Pipeline Operating Company

By: Michael Kinik
Name: Michael Kinik
Title: Director, Engineering Services

MOTT MACDONALD

Iroquois
GAS TRANSMISSION SYSTEM
IROQUOIS PIPELINE OPERATING COMPANY, OPERATOR

Disadvantaged Communities (DAC) Evaluation

Iroquois Gas Transmission System, LP, Enhancement by Compression (ExC) Project

November 2022

Permit IDs: 3-1326-00211 & 4-1922-00049

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Mott MacDonald
6975 South Union Park Center
Suite 600
Midvale
UT 84047-4187
United States of America

T +1 (801) 571 6522
mottmac.com

Prepared for:
Iroquois Gas Transmission System, L.P.
One Corporate Drive, Suite 600
Shelton, CT 06484

Disadvantaged Communities (DAC) Evaluation

Iroquois Gas Transmission System, LP, Enhancement by Compression (ExC) Project

November 2022

Permit IDs: 3-1326-00211 & 4-1922-00049

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Acronym List

Applications	Iroquois' applications for minor modifications to the Air State Facility Permits (DEC ID No. 4-1922-00049 and DEC ID No. 3-1326-00211)
APU	auxiliary power unit
CAS	Chemical Abstracts Service
CT	Connecticut
DAC	Disadvantaged Community
dBA	A-weighted decibels (loudness as perceived by the human ear)
FERC	Federal Energy Regulatory Commission
GHG	greenhouse gas
HAP	hazardous air pollutant
HHRA	Health and Human Risk Assessment
HI	Hazard Index
hp	horsepower
Iroquois	Iroquois Gas Transmission System, L.P.
LDC	local distribution company
MMBTU	Million British Thermal Units
MMSCF	Million Standard Cubic Feet
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NY	New York
NYDEC	New York State Department of Environmental Conservation
NYSERDA	New York State Energy Research and Development Authority
PPM	parts per million
Project	Expansion by Compression Project
PSC	New York Public Service Commission
PTE	potential to emit
RFAI	Request for Additional Information
RME	Reasonable Maximum Exposure

TPY	tons per year
VRS	vent recovery system

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1 Introduction

This Disadvantaged Community ("DAC") Evaluation provides Iroquois Gas Transmission System, L.P.'s ("Iroquois") response to the New York State Department of Environmental Conservation's ("NYDEC") September 15, 2022, Third Request for Additional Information ("RFAI") associated with Iroquois' applications for minor modifications to the Air State Facility Permits (the "Applications") for Iroquois' Athens Compressor Station (DEC ID No. 4-1922-00049) and Dover Compressor Station (DEC ID No. 3-1326-00211) related to the proposed Enhancement by Compression Project (the "ExC Project" or the "Project")[1].

The RFAI requests an evaluation of DACs using Draft DAC mapping developed by the New York State Climate Justice Working Group, which was issued in March 2022. Iroquois' April 29, 2022, RFAI response ("April 2022 RFAI Response") included a DAC evaluation using the interim DAC mapping following New York State Energy Research and Development Authority ("NYSERDA") guidance which indicates that interim mapping should be used until the final DAC criteria is established. To be responsive to the RFAI, the Draft DAC mapping is included with this submission as Appendix A and this report provides a further evaluation of DACs using the Draft DAC mapping.

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[1] The Applications, as supplemented, and this RFAI response have been filed with NYDEC without prejudice to any rights that Iroquois now has, may have, or which it seeks to assert in the future under the Natural Gas Act (15 U.S.C. §§ 717–717z) or any other federal or state law or regulation, all of which are hereby expressly reserved

2 Project Information

The ExC Project consists of the integration of four new approximately 12,000 horsepower ("hp")[2] turbines with associated cooling, filter separators, and other ancillary facilities. The new turbines will be integrated at the Athens Compressor Station in the Town of Athens, Greene County, New York ("NY"), the Dover Compressor Station in Town of Dover, Dutchess County, NY, and the Brookfield Compressor Station in the Town of Brookfield, Fairfield County, Connecticut ("CT"). Gas cooling and associated piping will be added to Iroquois' Milford Compressor Station in the City of Milford, New Haven County, CT.

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[2] The hp rating is quoted at sea level elevation and 0 degrees Fahrenheit.

3 DAC Locations

3.1 Athens Compressor Station

The Athens Compressor Station is located within Census Tract 36039080900 (e.g., Athens Village), which has a population of 3,949 (see Figure 1 of 2 in Appendix A). This Census Tract is designated as a Draft DAC. DAC criteria scoring for the "Environmental Burden and Climate Change Risk" and "Population Characteristics and Health Vulnerabilities" factors for the Athens Village Census Tract are included in Appendix B. As explained further below, the Project will not disproportionately burden the Athens Village DAC.

3.2 Dover Compressor Station

The Dover Compressor Station is located within Census Tract 36027040001 (e.g., Dover Plains), which has a population of 4,492 (see Figure 2 of 2 in Appendix A). This Census Tract is not designated as Draft DAC.

The nearest Draft DAC to the Dover Compressor Station is Census Tract 36027040003 (e.g., Wingdale) which is located approximately 0.13 miles west of the fence line of the Dover Compressor Station. Draft DAC criteria scoring for the "Environmental Burden and Climate Change Risk" and "Population Characteristics and Health Vulnerabilities" factors for this Wingdale Census Tract are included in Appendix B. As explained further below, the Project will not disproportionately burden the nearby Wingdale DAC.

3.3 Other Project Components

In addition to the New York-based project components, Iroquois is proposing to install two new turbines at the Brookfield Compressor Station in the Town of Brookfield, Fairfield County, CT; gas cooling and associated piping will be added to the Milford Compressor Station in the City of Milford, New Haven County, CT. The Brookfield and Milford Compressor Stations are in Connecticut and, as such, the New York DAC designations are not applicable.

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4 Direct and Indirect Effect to DACs

The ExC Project will not disproportionately burden DACs. Only one of the four ExC Project compressor stations (i.e., Athens) is within a DAC. As such, a majority of the ExC Project construction and operational activities will occur outside of DACs. Additionally, all Project components are proposed to be sited within the existing property boundaries of Iroquois' existing compressor stations such that the Project compressor station footprints will not be expanded within a DAC or closer to a DAC.

Project operational air emissions were considered by the Federal Energy Regulatory Commission ("FERC") as part of the Project's National Environmental Policy Act ("NEPA") review. The NEPA review determined that Project emissions, when considered with existing and background concentrations, would not cause or contribute to an exceedance of the National Ambient Air Quality Standards ("NAAQS"), which are designed to be protective of human health and welfare[3]. FERC also concluded that the Project would result in a net reduction of greenhouse gas ("GHG") emissions and, therefore, would not disproportionately impact DACs from a climate change or GHG emissions perspective[4].

4.1 Project Mitigation

Iroquois has proposed mitigation measures to reduce potential Project construction and operational impacts to neighboring communities, including DACs.

As discussed in Iroquois' April 2022 RFAI Response, Iroquois will implement mitigation measures to reduce traffic impacts to nearby communities such as avoiding peak commute times and periods associated with school traffic, as well as coordinating its construction with local transportation authorities[5]. Regarding noise, construction noise would be temporary, and Iroquois has committed to implementing mitigation during operations such that noise levels at both the Dover and Athens Compressor Stations would not exceed day-night noise levels of 55 dBA (A-weighted decibels) at the nearest noise sensitive receptors[6]. Visual impacts will be mitigated since Project facilities will either not be visible or only partially visible from surrounding areas and would be partially obscured by existing compressor station facilities, landform, or surrounding vegetation[7]. During construction, Iroquois would mitigate potential dust by implementing the Project's Dust Control Plan which requires the use of dust suppressants (water), reducing vehicle speeds on unpaved roadways, removing debris from paved roads, and complying with federal, State and local standards[8].

Iroquois also proposes the installation of vent recovery systems ("VRS") at the Project compressor stations. The VRS will capture and reinject into the pipeline natural gas emissions from planned blowdowns and dry compressor seal gas leakage. At the Athens Compressor Station, the VRS is expected to result in a reduction of calculated actual emissions by 4,327 tons per year CO2e, reflecting an approximately 90% reduction in natural gas emissions at that station as compared with uncontrolled levels based on historic operating conditions. At the Dover Compressor Station, the VRS is expected to result in a reduction of calculated actual emissions by 3,907 tons per year CO2e, reflecting an approximately 90% reduction in natural gas emissions at that station as compared with uncontrolled levels based on historic operating

[3] Order Issuing Certificate, 178 FERC ¶ 61,200 at PP 78 and 83.
[4] *Id.* at P 86.
[5] Id. at PP 75 and 80.
[6] *Id.* at PP 76 and 81.
[7] *Id.* at PP 77 and 82.
[8] *Id.* at PP 78 and 83.

conditions. The implementation of the VRS system is anticipated to reduce total NY Project compressor station actual CO2e emissions by an estimated 8,234 metric tons per year compared to historic operating levels, which equates to an approximately ninety percent (90%) reduction as compared to uncontrolled levels. Additional activities such as quarterly fugitive leak detection surveys will further reduce potential natural gas emissions by allowing operations staff to detect and repair any leaks at an increased frequency.

In addition to GHG emission reductions that would result from the installation of VRS, the ExC Project was designed to minimize potential co-pollutant emissions. The hazardous air pollutant ("HAP") uncontrolled potential to emit ("PTE") emissions at the NY facilities are included in Tables C.1-1 and C.1-2 in Appendix C. As noted in Iroquois' May 13, 2021 RFAI response to the NYDEC[9] the Athens and Dover Compressor Stations total HAPs PTE would be well below the Major Source Threshold following the development of the Project. Total HAPs PTE at the Athens Compressor Station and Dover Compressor Station would be 0.88 tons per year ("TPY") and 1.2 TPY, respectively, representing 3.5% and 4.8% of the Major Source Threshold at those stations, respectively. Iroquois has committed to installing oxidation catalysts ("OC") on the proposed combustion turbines and emergency generator engines. The catalysts reduce CO and VOCs, including HAPs that also happen to be VOCs ("VOC-HAPs"). CO, VOC, and VOC-HAPs emissions are expected to be reduced by 90%. Iroquois has also committed to purchasing and installing more expensive "advanced" SoLoNOx turbines for the Project instead of conventional SoLoNOx, which reduce potential NOx emissions from 25 parts per million by volume ("PPM") to only nine PPM (a 64% reduction).

For comparison with the uncontrolled HAP PTE values, the Appendix C tables also show controlled and anticipated HAP values at the Athens and Dover Compressor Stations. The reductions from the OC apply to the proposed Athens and Dover ExC Project turbines and to both stations' auxiliary power units ("APUs"). The uncontrolled PTE HAPs emissions would be reduced by 44% at the Athens Compressor Station, which is located in a Disadvantaged Community (DAC), and by 34% at the Dover Compressor Station, which is located outside and approximately 0.13 miles east of a DAC, due to the installations of the OCs. The difference in the reduction values between Athens and Dover is due to the difference in equipment configurations at the sites.

In addition to the mitigation measures proposed by Iroquois as part of the Project, in the April 2022 RFAI Response Iroquois committed to implementing additional mitigation if NYDEC found the Project to be inconsistent with the Climate Leadership and Community Protection Act ("CLCPA"). Specifically, Iroquois proposed a 91.5% maximum annual fuel use limit for the Project's turbines at Dover and Athens and proposed to install VRS at its three other compressor stations (Boonville, Croghan, and Wright) following a feasibility study. In addition to the GHG emissions benefits, these additional proposed mitigation measures would reduce overall potential emissions at Iroquois' compressor stations, including co-pollutant emissions.

4.2 Human Health Risk Assessment

Iroquois commissioned a Human Health Risk Assessment ("HHRA") for the ExC Project. A copy of the HHRA was included as Attachment N to the April 2022 RFAI Response and is incorporated herein by reference.

The HHRA evaluated potential exposures and human health risks associated with current and future operational emissions at each of the Project's compressor stations. The HHRA estimated

[9] Iroquois Gas Transmission System, LP Response to NYDEC March 5, 2021 RFAI dated May 13, 2021, Attachment Appendix A – Athens Compressor Station, Table 1 Potential to Emit – Tons Per Year and Appendix B – Dover Compressor Station, Table 1 Potential to Emit – Tons Per Year.

impacts of every speciated HAP compound associated with the proposed emissions sources. Due to the volatile nature of these chemical compounds, the only exposure pathway of significant concern is through inhalation. The human receptors evaluated in the HHRA were hypothetical residents because residential receptors, including children, are considered the most sensitive human receptors. The methods employed to assess health risks in the HHRA explicitly consider exposure and risk to sensitive subpopulations of residents such as children.

As discussed in Iroquois' April 2022 RFAI Response, the HHRA utilized conservative assumptions to assess potential exposure to surrounding receptors. The HHRA showed that modeled HAP emissions from the Project compressor stations are well below a level of health concern. Specifically, potential total excess lifetime cancer risk and noncancer hazard indices were calculated based on a theoretical Reasonable Maximum Exposure ("RME") for adult and child receptors from long-term exposures to the highest predicted maximum five-year average HAP concentrations emitted during normal operations at the facility fence line. This is a very conservative assumption since concentrations will decrease substantially with distance from the compressor station fence lines, further reducing exposure and risk. Cumulative cancer risks were below one in one million and noncancer hazard indices were at or below the target Hazard Index ("HI") of one (e.g., the level at which sensitive individuals can be exposed without risk of chronic noncancer health effects).

The results of the HHRA indicate that there would be no significant impact on human health in the Project areas from inhalation of emissions associated with the proposed modifications to the Athens, Brookfield, and Dover compressor stations resulting from the Project. Based on the conservative findings of the HHRA, it can also be concluded that emissions resulting from the Project will not adversely affect DACs which are outside of the fence lines of the compressor stations.

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5 Project Alternatives

The RFAI requests information regarding alternatives that were considered to reduce co-pollutant emissions to adjoining properties.

Iroquois' April 2022 RFAI Response (Question No. 3) included a thorough discussion of the alternatives analyses that were performed (i) as part of the Project's NEPA review, (ii) by the Project's Anchor Shippers[10], and (iii) to assess greenhouse gas emissions alternatives. Iroquois' April 2022 RFAI Response (Question 3) is incorporated herein by reference. Those comparisons of the Project to various alternatives revealed that there is currently no viable alternative to the Project that would meet the energy supply needs of the region while minimizing environmental impacts (including co-pollutant emissions) to the extent achieved by the ExC Project.

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[10] The Project Anchor Shippers are Con Edison Company of New York, Inc. and KeySpan Gas East Corporation d/b/a National Grid.

6 DAC Benefits

Iroquois' April 2022 RFAI Response (Question 2) explained that the Project Anchor Shippers require the Project to be developed to meet their customers' increasing natural gas demand within their service territories. That response is incorporated herein by reference. In the April 2022 RFAI Response, Iroquois explained that the records before both FERC and the New York Public Service Commission ("PSC") clearly establish that the Project Anchor Shippers require the development of the ExC Project to meet their customers' demand for a safe, reliable, and affordable supply of natural gas. The urgent need for the Project has been verified by independent third parties, including PA Consulting and the independent monitor assigned to PSC Case No. 19-G-0678.

Since Iroquois' submission of the April 2022 RFAI Response to NYDEC, PSC issued an order in Case 20-G-0131[11] which requires natural gas local distribution companies ("LDC") regulated by the PSC to assess the potential and disproportionate burden from gas service moratoria that may occur to those that are low income or live within DACs. When considering service moratoria, LDCs must "ensure that impacts to these populations are appropriately addressed and they are not disproportionately burdened by either the moratorium itself, or any action taken to lift the moratorium."[12] There are approximately 1,143 Draft DAC communities[13] within the ExC Project Anchor Shipper's service territories that would be supplied by the Project. Development of the Project will help to ensure that the Anchor Shippers will have adequate supply to meet their customers forecasted natural gas demand and, thus, avoid the potential for a gas service moratorium in those areas. Moreover, the avoidance of a gas service moratorium in the Anchor Shippers' service territories is likely to result in an increase in reliability and a decrease of co-pollutant emissions that would otherwise result from the increased use of higher-pollutant-emitting fuel oil for building heating.

In light of the PSC Order discussed above, DEC should consider the Project-derived benefits to the Draft DACs within the Anchor Shippers' service territories and the potential burdens to those Draft DACs in the event that the Project is not developed.

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[11] Case 20-G-0131, Order Adopting Moratorium Management Procedures, May 12, 2022

[12] Id. at 27.

[13] Data extracted by overlaying Anchor Shipper LDC service areas from ESRI Natural Gas Local Distribution Service Territory (2005) and the New York Draft Disadvantaged Communities (2021) shapefiles.

6 Conclusion

As discussed above, the ExC Project will not disproportionately burden DACs as only one of the four Project compressor stations, the Athens Compressor Station, is within a Draft DAC (Athens Village) and modeling to support Iroquois' air permit applications demonstrates that none of the station emissions cause or contribute to criteria air quality standards exceedances. Iroquois also proposes to implement mitigation measures to reduce Project emissions and potential impacts to neighboring communities, including DACs. Additionally, Iroquois commissioned a HHRA to assess potential health risks associated with hazardous co-pollutants to the communities surrounding the Project, which concluded that the Project would not negatively impact human health. The implementation of the ExC Project will also meet increasing demand of customers within the Anchor Shippers' service territories avoiding economic hardship on low-income residents and those within DACs located in those service areas. The Project is also likely to enhance reliability while reducing the use of greater-pollutant-emitting fuel oil for heating and thus result in relatively lower co-pollutant emissions within the DACs located in the Anchor Shippers' service territories. As such, the Project, as proposed, will not disproportionately burden Draft DACs.

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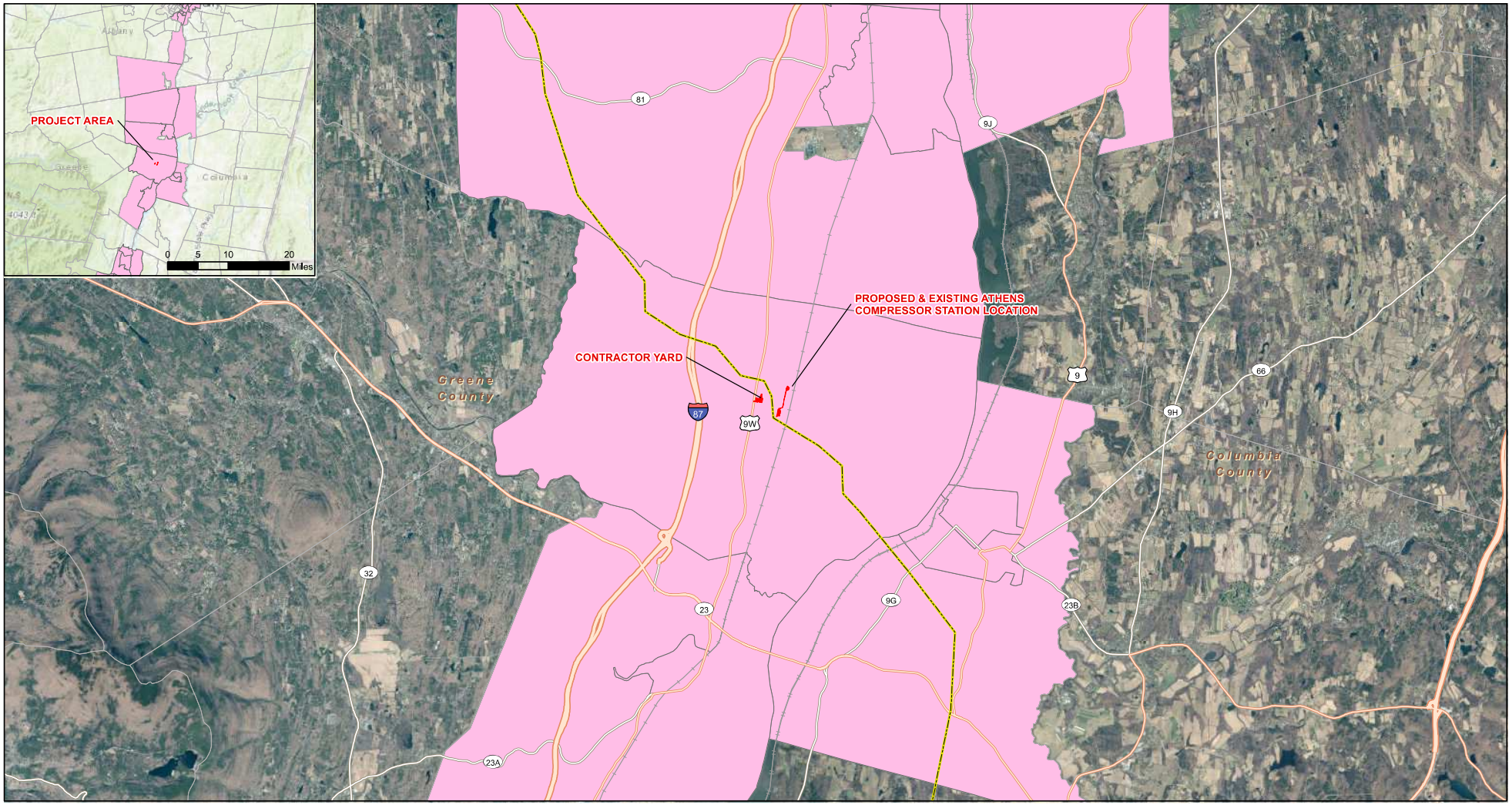
7 Appendices

Appendix A: Figures



2022 DRAFT DISADVANTAGED COMMUNITIES

- Designated as a Draft DAC
- Not Designated as a Draft DAC
- PROJECT LIMIT OF DISTURBANCE
- IROQUOIS PIPELINE MAINLINE
- MAJOR HIGHWAY
- HIGHWAY
- MAJOR ROAD

IROQUOIS GAS TRANSMISSION SYSTEM, LP

ENHANCEMENT BY COMPRESSION PROJECT

ATHENS COMPRESSOR STATION
DRAFT DISADVANTAGED COMMUNITIES

GREENE COUNTY, NEW YORK

0 1 2 4 Miles

N W E S

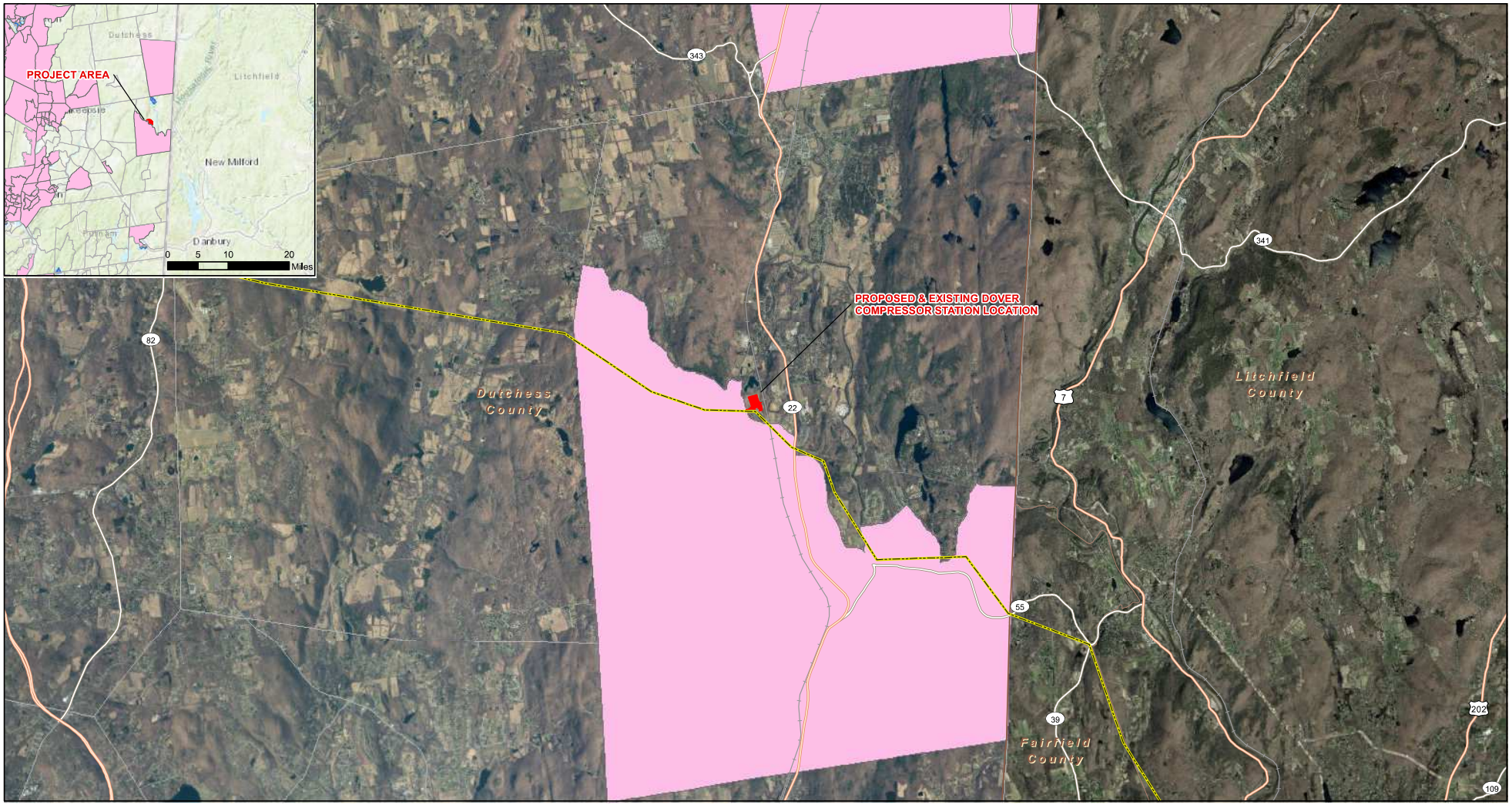
ABSOLUTE SCALE: 1:100,000

REFERENCE SCALE: 1 inch = 8,333.33 feet

Iroquois

MOTT MACDONALD
5295 S. Commerce Dr., Ste. 500
Salt Lake City, UT 84107

DRAWN BY:	JLM
CHECKED BY:	DRG
APPROVED BY:	DRG
REV. DATE:	3/10/2022
REVISION:	C
DESC:	IFP
DWG. NO.	1 OF 3



2022 DRAFT DISADVANTAGED COMMUNITIES

- Designated as a Draft DAC
- Not Designated as a Draft DAC
- PROJECT LIMIT OF DISTURBANCE
- IROQUOIS PIPELINE MAINLINE
- MAJOR HIGHWAY
- HIGHWAY
- MAJOR ROAD

IROQUOIS GAS TRANSMISSION SYSTEM, LP

ENHANCEMENT BY COMPRESSION PROJECT

DOVER COMPRESSOR STATION
DRAFT DISADVANTAGED COMMUNITIES

DUTCHESS COUNTY, NEW YORK

0 1 2 4 Miles

N W E S

ABSOLUTE SCALE: 1:84,000

REFERENCE SCALE: 1 inch = 7,000 feet

Iroquois

MOTT MACDONALD
5295 S. Commerce Dr., Ste. 500
Salt Lake City, UT 84107

DRAWN BY:	JLM
CHECKED BY:	DRG
APPROVED BY:	DRG
REV. DATE:	3/10/2022
REVISION:	C
DESC:	IFP
DWG. NO.	1 OF 3

Appendix B: Draft DAC Scores

Table B.1-1. Draft DAC Scores for Athens Village

Population Characteristics and Vulnerability		
Health Impacts and Burdens	Asthma ED Visits	31%
	COPD ED Visits	59%
	Heart Attack (MI) Hospitalizations	63%
	Low Birthweight	35%
	Adults Age 65+	94%
	Disabilities	75%
	Health Insurance	52%
	Premature Deaths	67%
Housing, Mobility, Communications	Energy Poverty/Cost Burden	94%
	Homes Built Before 1960	23%
	Housing Cost Burden (Rental Costs)	53%
	Manufactured Homes	67%
	Renter-Occupied Homes	30%
	Without Internet (Home or Cellular)	65%
Income	<100% of Federal Poverty Line	53%
	<80% Area Median Income	29%
	Single-Parent Households	47%
	Without Bachelor's Degrees	76%
	Unemployment Rate	11%
Race/Ethnicity	Limited English Proficiency	20%
	Asian	39%
	Black or African American	37%
	Latino/a or Hispanic	35%
	Native American or Indigenous	5%

Environmental Burden and Climate Change Risk		
Land Use & Historic Discrimination	Active Landfills	0%
	Housing Vacancy Rate	95%
	Industrial/Manufacturing/Mining Land Use (Zoning)	47%
	Major Oil Storage Facilities	31%
	Municipal Waste Combustors	0%
	Power Generation Facilities	22%
	Regulated Management Plan (Chemical) Sites	2%
	Remediation Sites	87%
	Scrap Metal Processing	75%
Potential Climate Change Risk	Agricultural Land Use	66%
	Coastal Flooding and Storm Risk Area	32%
	Driving Time to Urgent/Critical Care	83%
	Extreme Heat Projections (>90^0 days in 2050)	51%
	Inland Flooding Risk Areas	75%
	Low Vegetative Land Cover	14%
Potential Pollution Exposure	Benzene Concentration (Modeled)	25%
	Particulate Matter (PM2.5)	15%
	Traffic: Diesel Trucks	86%
	Traffic: Number of Vehicles	12%
	Wastewater Discharge	62%

Table B.1-2. Draft DAC Scores for Wingdale

Population Characteristics and Vulnerability		
Health Impacts and Burdens	Asthma ED Visits	5%
	COPD ED Visits	4%
	Heart Attack (MI) Hospitalizations	3%
	Low Birthweight	64%
	Adults Age 65+	25%
	Disabilities	60%
	Health Insurance	83%
	Premature Deaths	56%
Housing, Mobility, Communications	Energy Poverty/Cost Burden	83%
	Homes Built Before 1960	11%
	Housing Cost Burden (Rental Costs)	67%
	Manufactured Homes	95%
	Renter-Occupied Homes	36%
	Without Internet (Home or Cellular)	51%
Income	<100% of Federal Poverty Line	78%
	<80% Area Median Income	26%
	Single-Parent Households	73%
	Without Bachelor's Degrees	82%
	Unemployment Rate	73%
Race/Ethnicity	Limited English Proficiency	43%
	Asian	27%
	Black or African American	54%
	Latino/a or Hispanic	76%
	Native American or Indigenous	49%

Environmental Burden and Climate Change Risk		
Land Use & Historic Discrimination	Active Landfills	0%
	Housing Vacancy Rate	69%
	Industrial/Manufacturing/Mining Land Use (Zoning)	92%
	Major Oil Storage Facilities	0%
	Municipal Waste Combustors	0%
	Power Generation Facilities	18%
	Regulated Management Plan (Chemical) Sites	4%
	Remediation Sites	87%
	Scrap Metal Processing	75%
Potential Climate Change Risk	Agricultural Land Use	49%
	Coastal Flooding and Storm Risk Area	0%
	Driving Time to Urgent/Critical Care	96%
	Extreme Heat Projections (>90° days in 2050)	18%
	Inland Flooding Risk Areas	57%
	Low Vegetative Land Cover	15%
Potential Pollution Exposure	Benzene Concentration (Modeled)	14%
	Particulate Matter (PM2.5)	10%
	Traffic: Diesel Trucks	29%
	Traffic: Number of Vehicles	10%
	Wastewater Discharge	36%

Appendix C: Athens and Dover Compressor Stations Co-Pollutant Emissions (PTE)

Table C.1-1. Athens Compressor Station HAPs PTE

		Emission Factor	APU Engine 4-Stroke Lean Burn		Existing Turbine Unit A1	Proposed Turbine Unit A2	Proposed Turbine Unit A2	Uncontrolled Turbine Unit A1 + A2	Controlled Turbine Unit A2 + Uncontrolled A1	POTENTIAL Combined Uncontrolled Turbines and APU	POTENTIAL Combined Controlled Proposed Turbine A2 and APU Uncontrolled Existing Turbine A1	ANTICIPATED Combined Controlled Proposed Turbine A2 and APU + Uncontrolled Existing Turbine A1
CAS Registry Number	Hazardous Air Pollutants (HAPs)	#/Million British Thermal Units (“MMBTU”)	Existing APU Uncontrolled Exhaust TPY @ 500 hours/yr	Existing APU Controlled Exhaust TPY @ 500 hours/yr	Uncontrolled TPY @ 8,760 hrs/yr		Controlled TPY @ 8,760 hrs/yr	PTE TPY (short tons)		PTE TPY (short tons)		Anticipated TPY (short tons)
00079-00-5	1,1,2 - Trichloroethane	3.18E-05	4.2E-05	2.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.2E-05**	**2.1E-05**	**6.4E-06**
00079-34-5	1,1,2,2 -Tetrachloroethane	4.00E-05	5.3E-05	2.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.3E-05**	**2.7E-05**	**8.0E-06**
00106-99-0	1,3 - Butadiene	2.67E-04	3.6E-04	1.8E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.6E-04**	**1.8E-04**	**5.3E-05**
00106-99-0	1,3 - Butadiene	4.30E-07	0.0E+00	0.0E+00	1.7E-04	1.6E-04	1.6E-05	3.3E-04	1.8E-04	**3.3E-04**	**1.8E-04**	**4.6E-05**
00542-75-6	1,3 - Dichloropropene	2.64E-05	3.5E-05	1.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.5E-05**	**1.8E-05**	**5.3E-06**
	2 - Methylnaphthalene	3.32E-05	4.4E-05	2.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.4E-05**	**2.2E-05**	**6.6E-06**
	2,2,4 - Trimethylpentane	2.50E-04	3.3E-04	1.7E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.3E-04**	**1.7E-04**	**5.0E-05**
	Acenaphthene	1.25E-06	1.7E-06	8.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.7E-06**	**8.3E-07**	**2.5E-07**
00208-96-8	Acenaphthylene	5.53E-06	7.4E-06	3.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**7.4E-06**	**3.7E-06**	**1.1E-06**
00075-07-0	Acetaldhehyde	8.36E-03	1.1E-02	5.6E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.1E-02**	**5.6E-03**	**1.7E-03**
00075-07-0	Acetaldhehyde	4.00E-05	0.0E+00	0.0E+00	1.6E-02	1.5E-02	1.5E-03	3.1E-02	1.7E-02	**3.1E-02**	**1.7E-02**	**4.3E-03**
00107-02-8	Acrolein	5.14E-03	6.9E-03	3.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.9E-03**	**3.4E-03**	**1.0E-03**
00107-02-8	Acrolein	6.40E-06	0.0E+00	0.0E+00	2.5E-03	2.4E-03	2.4E-04	4.9E-03	2.7E-03	**4.9E-03**	**2.7E-03**	**6.9E-04**
00071-43-2	Benzene	4.40E-04	5.9E-04	2.9E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.9E-04**	**2.9E-04**	**8.8E-05**
00071-43-2	Benzene	1.20E-05	0.0E+00	0.0E+00	4.7E-03	4.5E-03	4.5E-04	9.2E-03	5.2E-03	**9.2E-03**	**5.2E-03**	**1.3E-03**
	Benzo(b)fluoranthene	1.66E-07	2.2E-07	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.2E-07**	**1.1E-07**	**3.3E-08**
	Benzo(e)pyrene	4.15E-07	5.5E-07	2.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.5E-07**	**2.8E-07**	**8.3E-08**
	Benzo(g,h,i)perylene	4.14E-07	5.5E-07	2.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.5E-07**	**2.8E-07**	**8.3E-08**
00092-52-4	Biphenyl	2.12E-04	2.8E-04	1.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-04**	**1.4E-04**	**4.2E-05**
00056-23-5	Carbon Tetrachloride	3.67E-05	4.9E-05	4.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.9E-05**	**4.9E-05**	**1.5E-05**
00108-90-7	Chlorobenzene	3.04E-05	4.1E-05	2.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.1E-05**	**2.0E-05**	**6.1E-06**
00067-66-3	Chloroform	2.85E-05	3.8E-05	1.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.8E-05**	**1.9E-05**	**5.7E-06**
00218-01-9	Chrysene	6.93E-07	9.2E-07	4.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**9.2E-07**	**4.6E-07**	**1.4E-07**
00100-41-4	Ethyl Benzene	3.97E-05	5.3E-05	2.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.3E-05**	**2.6E-05**	**7.9E-06**

		Emission Factor	APU Engine 4-Stroke Lean Burn		Existing Turbine Unit A1	Proposed Turbine Unit A2	Proposed Turbine Unit A2	Uncontrolled Turbine Unit A1 + A2	Controlled Turbine Unit A2 + Uncontrolled A1	POTENTIAL Combined Uncontrolled Turbines and APU	POTENTIAL Combined Controlled Proposed Turbine A2 and APU Uncontrolled Existing Turbine A1	ANTICIPATED Combined Controlled Proposed Turbine A2 and APU + Uncontrolled Existing Turbine A1
CAS Registry Number	Hazardous Air Pollutants (HAPs)	#/Million British Thermal Units (“MMBTU”)	Existing APU Uncontrolled Exhaust TPY @ 500 hours/yr	Existing APU Controlled Exhaust TPY @ 500 hours/yr	Uncontrolled TPY @ 8,760 hrs/yr		Controlled TPY @ 8,760 hrs/yr	PTE TPY (short tons)		PTE TPY (short tons)		Anticipated TPY (short tons)
00100-41-4	Ethyl Benzene	3.20E-05	0.0E+00	0.0E+00	1.3E-02	1.2E-02	1.2E-03	2.4E-02	1.4E-02	**2.4E-02**	**1.4E-02**	**3.4E-03**
00106-93-4	Ethylene Dibromide	4.43E-05	5.9E-05	3.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.9E-05**	**3.0E-05**	**8.9E-06**
	Fluorene	5.67E-06	7.6E-06	3.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**7.6E-06**	**3.8E-06**	**1.1E-06**
	Fluroanthene	1.11E-06	1.5E-06	7.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.5E-06**	**7.4E-07**	**2.2E-07**
00050-00-0	Formaleldehyde	5.28E-02	7.0E-02	3.5E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**7.0E-02**	**3.5E-02**	**1.1E-02**
00050-00-0	Formaleldehyde	7.10E-04	0.0E+00	0.0E+00	2.8E-01	2.6E-01	2.6E-02	5.4E-01	3.0E-01	**5.4E-01**	**3.0E-01**	**7.6E-02**
00067-56-1	Methanol	2.50E-03	3.3E-03	1.7E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.3E-03**	**1.7E-03**	**5.0E-04**
00075-09-2	Methylene Chloride	2.00E-05	2.7E-05	1.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.7E-05**	**1.3E-05**	**4.0E-06**
	Napthalene	7.44E-05	9.9E-05	5.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**9.9E-05**	**5.0E-05**	**1.5E-05**
	Napthalene	1.30E-06	0.0E+00	0.0E+00	5.1E-04	4.8E-04	4.8E-05	9.9E-04	5.6E-04	**9.9E-04**	**5.6E-04**	**1.4E-04**
00091-20-3	n-Hexane	1.11E-03	1.5E-03	7.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.5E-03**	**7.4E-04**	**2.2E-04**
00108-95-2	PAH	2.69E-05	3.6E-05	3.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.6E-05**	**3.6E-05**	**1.1E-05**
00108-95-2	PAH	2.20E-06	0.0E+00	0.0E+00	8.6E-04	8.2E-04	8.2E-04	1.7E-03	1.7E-03	**1.7E-03**	**1.7E-03**	**4.2E-04**
	Phenanthrene	1.04E-05	1.4E-05	6.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.4E-05**	**6.9E-06**	**2.1E-06**
00075-56-9	Phenol	2.40E-05	3.2E-05	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.2E-05**	**1.6E-05**	**4.8E-06**
	Propylene Oxide	2.90E-05	0.0E+00	0.0E+00	1.1E-02	1.1E-02	1.1E-03	2.2E-02	1.2E-02	**2.2E-02**	**1.2E-02**	**3.1E-03**
00100-42-5	Pyrene	1.36E-06	1.8E-06	9.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.8E-06**	**9.1E-07**	**2.7E-07**
	Styrene	2.36E-05	3.1E-05	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.1E-05**	**1.6E-05**	**4.7E-06**
	Tetrachloroethane	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**0.0E+00**	**0.0E+00**	**0.0E+00**
00108-88-3	Toluene	4.08E-04	5.4E-04	2.7E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.4E-04**	**2.7E-04**	**8.2E-05**
00108-88-3	Toluene	1.30E-04	0.0E+00	0.0E+00	5.1E-02	4.8E-02	4.8E-03	9.9E-02	5.6E-02	**9.9E-02**	**5.6E-02**	**1.4E-02**
00075-01-4	Vinyl Chloride	1.49E-05	2.0E-05	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.0E-05**	**9.9E-06**	**3.0E-06**
01330-20-7	Xylene	1.84E-04	2.5E-04	1.2E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.5E-04**	**1.2E-04**	**3.7E-05**
01330-20-7	Xylene	6.40E-05	0.0E+00	0.0E+00	2.5E-02	2.4E-02	2.4E-03	4.9E-02	2.7E-02	**4.9E-02**	**2.7E-02**	**6.9E-03**
	TOTAL TONS/YEAR		**9.6E-02**	**4.8E-02**	**4.0E-01**	**3.8E-01**	**3.9E-02**	**7.9E-01**	**4.4E-01**	**8.8E-01**	**4.9E-01**	**1.2E-01**

General Notes:

- CAS Registry Number is a unique identifier designated by the Chemical Abstracts Service (CAS) to each chemical substance described in open scientific literature. TPY values in this table represent short tons per year.
- All the PTE controlled and uncontrolled gas turbine HAP emissions values are based on full-time operation and 8,760 operating hours per 12-month rolling period at peak load.
- APU PTE controlled and uncontrolled HAP values are based on the proposed operating limit of 500 hours per 12-month rolling period, and they are based on peak load operation.
- Anticipated (versus PTE) gas turbine HAP emissions values are based on 25 percent of 8,760 operating hours (2,190) per 12-month rolling period at peak load.
- Anticipated APU HAP emissions values are based on 150 operating hours per 12-month rolling period at peak load, which represents the maximum actual APU operating hours at either station over the five-calendar year period ending with 2021.

Table C.1-2. Dover Compressor Station HAPs PTE

		Emission Factor		APU Engine 4-Stroke Lean Burn		Existing Turbine Unit A1	Proposed Turbine Unit A2	Proposed Turbine Unit A2	Uncontrolled Turbine Unit A1 + A2	Controlled Turbine Unit A2 + Uncontrolled A1	POTENTIAL Combined Uncontrolled Turbines and APU[1]	POTENTIAL Combined Controlled Proposed Turbine A2 and APU Uncontrolled Existing Turbine A1[1]	ANTICIPATED Combined Controlled Proposed Turbine A2 and APU + Uncontrolled Existing Turbine A1[1]
CAS Registry Number	Hazardous Air Pollutants (HAPs)	#/Million Standard Cubic Feet ("MMSCF")	#/Million British Thermal Units ("MMBTU")	Existing APU Uncontrolled Exhaust TPY @ 500 hours/yr	Existing APU Controlled Exhaust TPY @ 500 hours/yr	Uncontrolled TPY @ 8,760 hrs/yr		Controlled TPY @ 8,760 hrs/yr	PTE TPY (short tons)		PTE TPY (short tons)		Anticipated TPY (short tons)
00079-00-5	1,1,2 - Trichloroethane	-	3.18E-05	7.9E-05	3.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**7.9E-05**	**3.9E-05**	**1.2E-05**
00079-34-5	1,1,2,2 -Tetrachloroethane	-	4.00E-05	9.9E-05	4.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**9.9E-05**	**4.9E-05**	**1.5E-05**
00106-99-0	1,3 - Butadiene	-	2.67E-04	6.6E-04	3.3E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.6E-04**	**3.3E-04**	**9.9E-05**
00106-99-0	1,3 - Butadiene	-	4.30E-07	0.0E+00	0.0E+00	2.7E-04	1.6E-04	1.6E-05	4.3E-04	2.9E-04	**4.3E-04**	**2.9E-04**	**7.2E-05**
00542-75-6	1,3 - Dichloropropene	-	2.64E-05	6.5E-05	3.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.5E-05**	**3.3E-05**	**9.8E-06**
	2 - Methylnaphthalene	2.40E-05	3.32E-05	8.2E-05	4.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**8.2E-05**	**4.1E-05**	**1.2E-05**
	2,2,4 - Trimethylpentane	-	2.50E-04	6.2E-04	3.1E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.2E-04**	**3.1E-04**	**9.3E-05**
	3 - Methylcholanthrene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
	7,12 - Dimethylbenz(a)anthracene	1.60E-05	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.5E-08**	**2.5E-08**	**2.5E-08**
	Acenaphthene	-	1.25E-06	3.1E-06	1.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.1E-06**	**1.5E-06**	**4.6E-07**
	Acenaphthene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
00208-96-8	Acenaphthylene	-	5.53E-06	1.4E-05	6.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.4E-05**	**6.8E-06**	**2.1E-06**
	Acenaphthylene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
00075-07-0	Acetaldehyde	-	8.36E-03	2.1E-02	1.0E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.1E-02**	**1.0E-02**	**3.1E-03**
00075-07-0	Acetaldehyde	-	4.00E-05	0.0E+00	0.0E+00	2.5E-02	1.5E-02	1.5E-03	4.0E-02	2.7E-02	**4.0E-02**	**2.7E-02**	**6.7E-03**
00107-02-8	Acrolein	-	5.14E-03	1.3E-02	6.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.3E-02**	**6.4E-03**	**1.9E-03**
00107-02-8	Acrolein	-	6.40E-06	0.0E+00	0.0E+00	4.1E-03	2.4E-03	2.4E-04	6.4E-03	4.3E-03	**6.4E-03**	**4.3E-03**	**1.1E-03**
	Anthracene	2.40E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.7E-09**	**3.7E-09**	**3.7E-09**
	Arsenic	2.00E-04	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.1E-07**	**3.1E-07**	**3.1E-07**
	Benz(a)anthracene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
00071-43-2	Benzene	-	4.40E-04	1.1E-03	5.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.1E-03**	**5.4E-04**	**1.6E-04**
00071-43-2	Benzene	-	1.20E-05	0.0E+00	0.0E+00	7.6E-03	4.4E-03	4.4E-04	1.2E-02	8.1E-03	**1.2E-02**	**8.1E-03**	**2.0E-03**

		Emission Factor		APU Engine 4-Stroke Lean Burn		Existing Turbine Unit A1	Proposed Turbine Unit A2	Proposed Turbine Unit A2	Uncontrolled Turbine Unit A1 + A2	Controlled Turbine Unit A2 + Uncontrolled A1	POTENTIAL Combined Uncontrolled Turbines and APU[1]	POTENTIAL Combined Controlled Proposed Turbine A2 and APU Uncontrolled Existing Turbine A1[1]	ANTICIPATED Combined Controlled Proposed Turbine A2 and APU + Uncontrolled Existing Turbine A1[1]
CAS Registry Number	Hazardous Air Pollutants (HAPs)	#/Milliion Standard Cubic Feet ("MMSCF")	#/Million British Thermal Units ("MMBTU")	Existing APU Uncontrolled Exhaust TPY @ 500 hours/yr	Existing APU Controlled Exhaust TPY @ 500 hours/yr	Uncontrolled TPY @ 8,760 hrs/yr		Controlled TPY @ 8,760 hrs/yr	PTE TPY (short tons)		PTE TPY (short tons)		Anticipated TPY (short tons)
	Benzene	2.10E-03	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.3E-06**	**3.3E-06**	**3.3E-06**
	Benzo(a)pyrene	1.20E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.9E-09**	**1.9E-09**	**1.9E-09**
	Benzo(b)fluoranthene	-	1.66E-07	4.1E-07	2.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.1E-07**	**2.1E-07**	**6.2E-08**
	Benzo(b)fluoranthene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
	Benzo(e)pyrene	-	4.15E-07	1.0E-06	5.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.0E-06**	**5.1E-07**	**1.5E-07**
	Benzo(g,h,i)perylene	-	4.14E-07	1.0E-06	5.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.0E-06**	**5.1E-07**	**1.5E-07**
	Benzo(g,h,i)perylene	1.20E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.9E-09**	**1.9E-09**	**1.9E-09**
	Benzo(k)fluoranthene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
	Beryllium	1.20E-05	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.9E-08**	**1.9E-08**	**1.9E-08**
00092-52-4	Biphenyl	-	2.12E-04	5.2E-04	2.6E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.2E-04**	**2.6E-04**	**7.9E-05**
	Cadmium	1.10E-03	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.7E-06**	**1.7E-06**	**1.7E-06**
00056-23-5	Carbon Tetrachloride	-	3.67E-05	9.1E-05	9.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**9.1E-05**	**9.1E-05**	**2.7E-05**
00108-90-7	Chlorobenzene	-	3.04E-05	7.5E-05	3.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**7.5E-05**	**3.8E-05**	**1.1E-05**
00067-66-3	Chloroform	-	2.85E-05	7.1E-05	3.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**7.1E-05**	**3.5E-05**	**1.1E-05**
	Chromium	1.40E-03	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.2E-06**	**2.2E-06**	**2.2E-06**
00218-01-9	Chrysene	-	6.93E-07	1.7E-06	8.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.7E-06**	**8.6E-07**	**2.6E-07**
	Chrysene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
	Cobalt	8.40E-05	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.3E-07**	**1.3E-07**	**1.3E-07**
	Dibenzo(a,h)anthracene	1.20E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.9E-09**	**1.9E-09**	**1.9E-09**
	Dichlorobenzene	1.20E-03	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.9E-06**	**1.9E-06**	**1.9E-06**
00100-41-4	Ethyl Benzene	-	3.97E-05	9.8E-05	4.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**9.8E-05**	**4.9E-05**	**1.5E-05**
00100-41-4	Ethyl Benzene	-	3.20E-05	0.0E+00	0.0E+00	2.0E-02	1.2E-02	1.2E-03	3.2E-02	2.2E-02	**3.2E-02**	**2.2E-02**	**5.4E-03**
00106-93-4	Ethylene Dibromide	-	4.43E-05	1.1E-04	5.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.1E-04**	**5.5E-05**	**1.6E-05**
	Fluorene	-	5.67E-06	1.4E-05	7.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.4E-05**	**7.0E-06**	**2.1E-06**

		Emission Factor		APU Engine 4-Stroke Lean Burn		Existing Turbine Unit A1	Proposed Turbine Unit A2	Proposed Turbine Unit A2	Uncontrolled Turbine Unit A1 + A2	Controlled Turbine Unit A2 + Uncontrolled A1	POTENTIAL Combined Uncontrolled Turbines and APU[1]	POTENTIAL Combined Controlled Proposed Turbine A2 and APU Uncontrolled Existing Turbine A1[1]	ANTICIPATED Combined Controlled Proposed Turbine A2 and APU + Uncontrolled Existing Turbine A1[1]
CAS Registry Number	Hazardous Air Pollutants (HAPs)	#/Milliion Standard Cubic Feet ("MMSCF")	#/Million British Thermal Units ("MMBTU")	Existing APU Uncontrolled Exhaust TPY @ 500 hours/yr	Existing APU Controlled Exhaust TPY @ 500 hours/yr	Uncontrolled TPY @ 8,760 hrs/yr		Controlled TPY @ 8,760 hrs/yr	PTE TPY (short tons)		PTE TPY (short tons)		Anticipated TPY (short tons)
	Fluorene	2.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.3E-09**	**4.3E-09**	**4.3E-09**
	Fluoranthene	-	1.11E-06	2.7E-06	1.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.7E-06**	**1.4E-06**	**4.1E-07**
	Fluoranthene	3.00E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.6E-09**	**4.6E-09**	**4.6E-09**
00050-00-0	Formaldehyde	-	5.28E-02	1.3E-01	6.5E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.3E-01**	**6.5E-02**	**2.0E-02**
00050-00-0	Formaldehyde	-	7.10E-04	0.0E+00	0.0E+00	4.5E-01	2.6E-01	2.6E-02	7.1E-01	4.8E-01	**7.1E-01**	**4.8E-01**	**1.2E-01**
	Formaldehyde	7.50E-02	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.2E-04**	**1.2E-04**	**1.2E-04**
	Hexane	1.80E+00	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-03**	**2.8E-03**	**2.8E-03**
	Indeno(1,2,3-cd)pyrene	1.80E-06	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.8E-09**	**2.8E-09**	**2.8E-09**
	Manganese	3.80E-04	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.9E-07**	**5.9E-07**	**5.9E-07**
	Mercury	2.60E-04	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.0E-07**	**4.0E-07**	**4.0E-07**
00067-56-1	Methanol	-	2.50E-03	6.2E-03	3.1E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.2E-03**	**3.1E-03**	**9.3E-04**
00075-09-2	Methylene Chloride	-	2.00E-05	4.9E-05	2.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.9E-05**	**2.5E-05**	**7.4E-06**
	Naphthalene	-	1.30E-06	0.0E+00	0.0E+00	8.3E-04	4.8E-04	4.8E-05	1.3E-03	8.8E-04	**1.3E-03**	**8.8E-04**	**2.2E-04**
	Naphthalene	-	7.44E-05	1.8E-04	9.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.8E-04**	**9.2E-05**	**2.8E-05**
	Naphthalene	6.10E-04	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**9.5E-07**	**9.5E-07**	**9.5E-07**
00091-20-3	n-Hexane	-	1.11E-03	2.7E-03	1.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.7E-03**	**1.4E-03**	**4.1E-04**
	Nickel	2.10E-03	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.3E-06**	**3.3E-06**	**3.3E-06**
00108-95-2	PAH	-	2.69E-05	6.7E-05	6.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.7E-05**	**6.7E-05**	**2.0E-05**
00108-95-2	PAH	-	2.20E-06	0.0E+00	0.0E+00	1.4E-03	8.1E-04	8.1E-04	2.2E-03	2.2E-03	**2.2E-03**	**2.2E-03**	**5.5E-04**
	Phenanthrene	-	1.04E-05	2.6E-05	1.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.6E-05**	**1.3E-05**	**3.9E-06**
	Phenanthrene	1.70E-05	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**2.6E-08**	**2.6E-08**	**2.6E-08**
00075-56-9	Phenol	-	2.40E-05	5.9E-05	3.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.9E-05**	**3.0E-05**	**8.9E-06**
	Propylene Oxide	-	2.90E-05	0.0E+00	0.0E+00	1.8E-02	1.1E-02	1.1E-03	2.9E-02	2.0E-02	**2.9E-02**	**2.0E-02**	**4.9E-03**
00100-42-5	Pyrene	-	1.36E-06	3.4E-06	1.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.4E-06**	**1.7E-06**	**5.0E-07**

		Emission Factor		APU Engine 4-Stroke Lean Burn		Existing Turbine Unit A1	Proposed Turbine Unit A2	Proposed Turbine Unit A2	Uncontrolled Turbine Unit A1 + A2	Controlled Turbine Unit A2 + Uncontrolled A1	POTENTIAL Combined Uncontrolled Turbines and APU[1]	POTENTIAL Combined Controlled Proposed Turbine A2 and APU Uncontrolled Existing Turbine A1[1]	ANTICIPATED Combined Controlled Proposed Turbine A2 and APU + Uncontrolled Existing Turbine A1[1]
CAS Registry Number	Hazardous Air Pollutants (HAPs)	#/Milliion Standard Cubic Feet ("MMSCF")	#/Million British Thermal Units ("MMBTU")	Existing APU Uncontrolled Exhaust TPY @ 500 hours/yr	Existing APU Controlled Exhaust TPY @ 500 hours/yr	Uncontrolled TPY @ 8,760 hrs/yr		Controlled TPY @ 8,760 hrs/yr	PTE TPY (short tons)		PTE TPY (short tons)		Anticipated TPY (short tons)
	Selenium	2.40E-05	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.7E-08**	**3.7E-08**	**3.7E-08**
	Styrene	-	2.36E-05	5.8E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**5.8E-05**	**2.9E-05**	**8.8E-06**
	Tetrachloroethane	-	2.48E-06	6.1E-06	3.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**6.1E-06**	**3.1E-06**	**9.2E-07**
00108-88-3	Toluene	-	4.08E-04	1.0E-03	5.0E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**1.0E-03**	**5.0E-04**	**1.5E-04**
00108-88-3	Toluene	-	1.30E-04	0.0E+00	0.0E+00	8.3E-02	4.8E-02	4.8E-03	1.3E-01	8.8E-02	**1.3E-01**	**8.8E-02**	**2.2E-02**
00075-01-4	Vinyl Chloride	-	1.49E-05	3.7E-05	1.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**3.7E-05**	**1.8E-05**	**5.5E-06**
01330-20-7	Xylene	-	1.84E-04	4.6E-04	2.3E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	**4.6E-04**	**2.3E-04**	**6.8E-05**
01330-20-7	Xylene	-	6.40E-05	0.0E+00	0.0E+00	4.1E-02	2.4E-02	2.4E-03	6.4E-02	4.3E-02	**6.4E-02**	**4.3E-02**	**1.1E-02**
TOTAL TONS/YEAR				**1.8E-01**	**8.9E-02**	**6.5E-01**	**3.8E-01**	**3.9E-02**	**1.03E+00**	**6.9E-01**	**1.2E+00**	**7.9E-01**	**2.0E-01**

General Notes:

- CAS Registry Number is a unique identifier designated by the Chemical Abstracts Service (CAS) to each chemical substance described in open scientific literature. TPY values in this table represent short tons per year.
- All the PTE controlled and uncontrolled gas turbine HAP emissions values are based on full-time operation and 8,760 operating hours per 12-month rolling period at peak load.
- APU PTE controlled and uncontrolled HAP values are based on the proposed operating limit of 500 hours per 12-month rolling period, and they are based on peak load operation.
- Anticipated (versus PTE) gas turbine HAP emissions values are based on 25 percent of 8,760 operating hours (2,190) per 12-month rolling period at peak load.
- Anticipated APU HAP emissions values are based on 150 operating hours per 12-month rolling period at peak load, which represents the maximum actual APU operating hours at either station over the five calendar-year period ending with 2021.

Note 1: Included in the totals are HAP emissions from two small permit-exempt appliances (i.e., control room space heat and domestic hot water) located on-site that were included in the original Dover A1 Air Permit application. These account for only 0.003 TPY of potential and anticipated combined Dover HPA emissions.

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