



TOWN OF DRYDEN – BORGER STATION OPERATIONS

June 17, 2021

2020 Review



WHO WE ARE



Eastern Gas Transmission & Storage

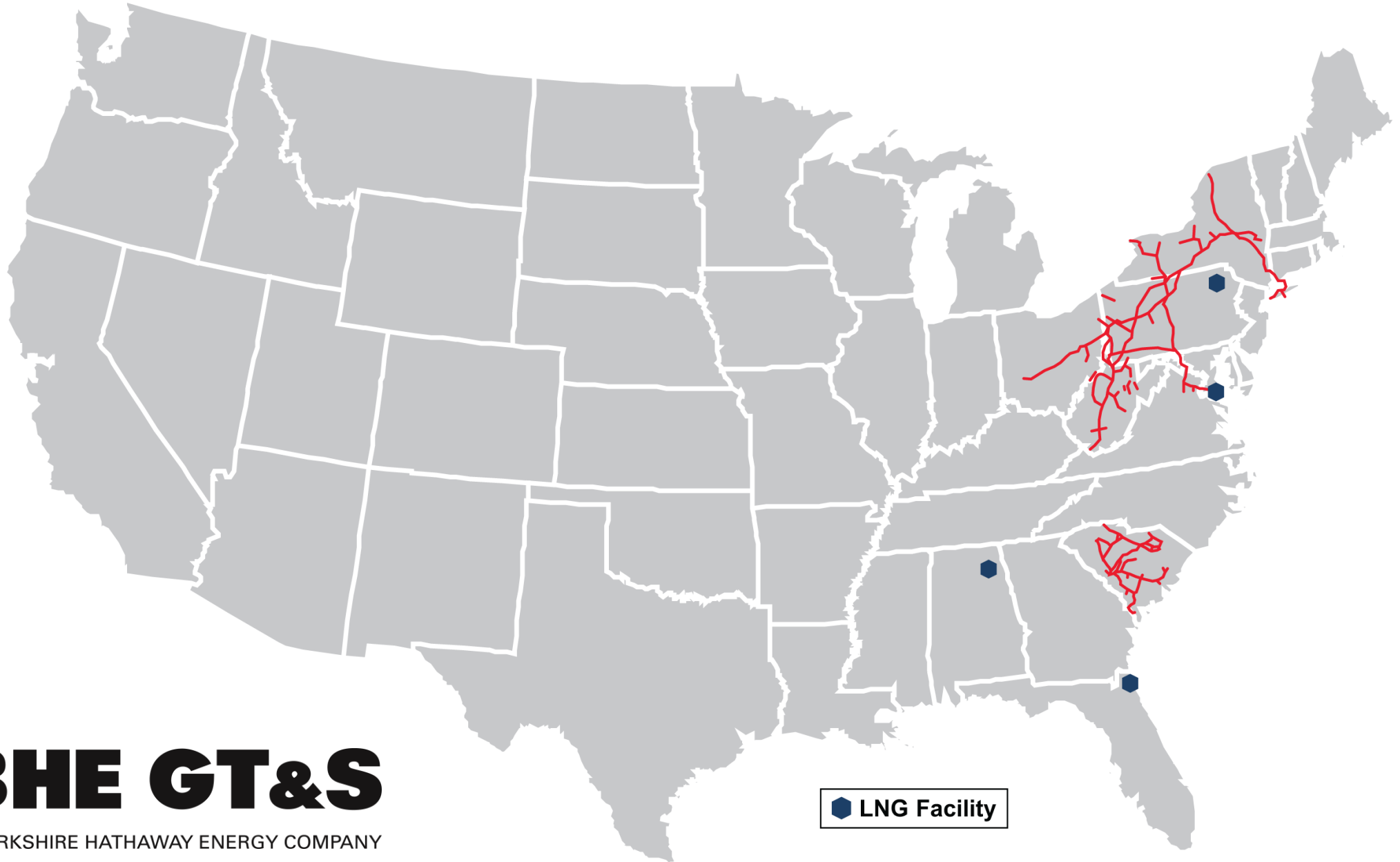
Who We Are

BHE GT&S, through its local operating company Eastern Gas Transmission and Storage (EGTS), provides gas transportation and storage services with one of the largest underground natural gas storage systems in the United States.

Headquartered in Bridgeport, West Virginia, this multi-state pipeline system links to other major pipelines and to markets in the Midwest, Mid-Atlantic and Northeast regions.

We safely maintain nearly 3,600 miles of pipeline in six states: Ohio, West Virginia, Pennsylvania, New York, Maryland and Virginia. We reliably supply natural gas for large customers, such as major utilities and power plants, and to local distribution companies to heat homes and run small businesses.





 **BHE GT&S**
A BERKSHIRE HATHAWAY ENERGY COMPANY

 LNG Facility

CORE PRINCIPLES



CUSTOMER SERVICE



EMPLOYEE COMMITMENT



ENVIRONMENTAL RESPECT



FINANCIAL STRENGTH



OPERATIONAL EXCELLENCE



REGULATORY INTEGRITY

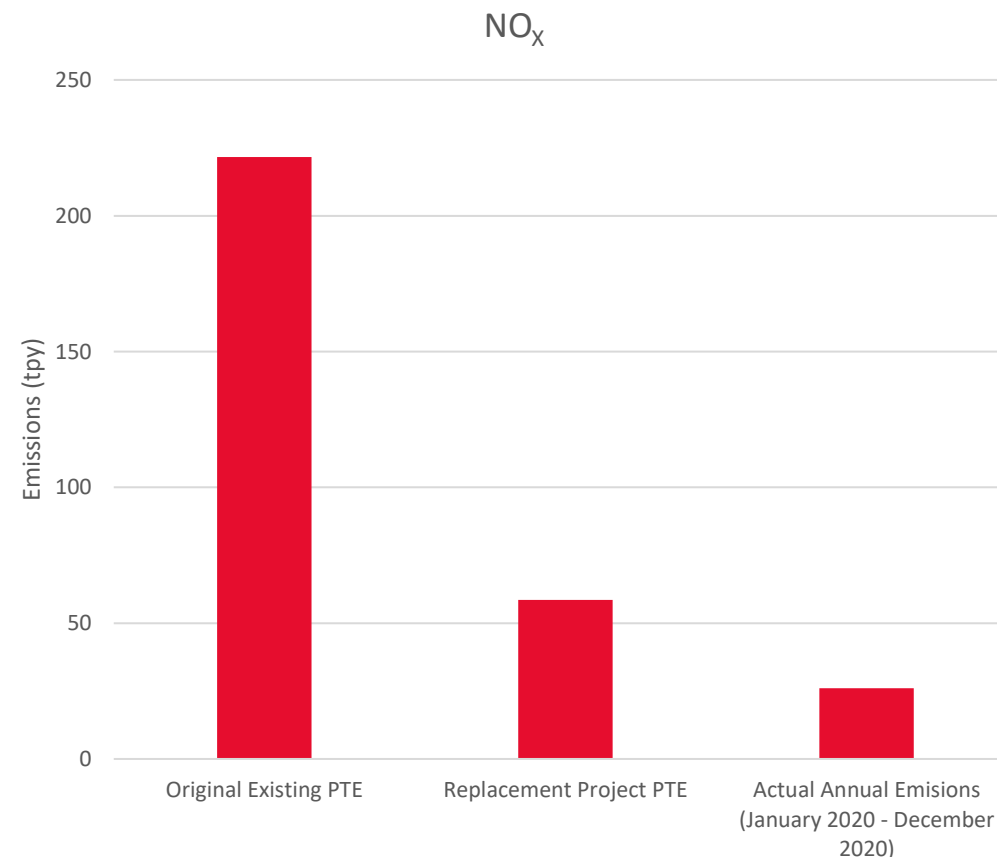


EMISSIONS DATA



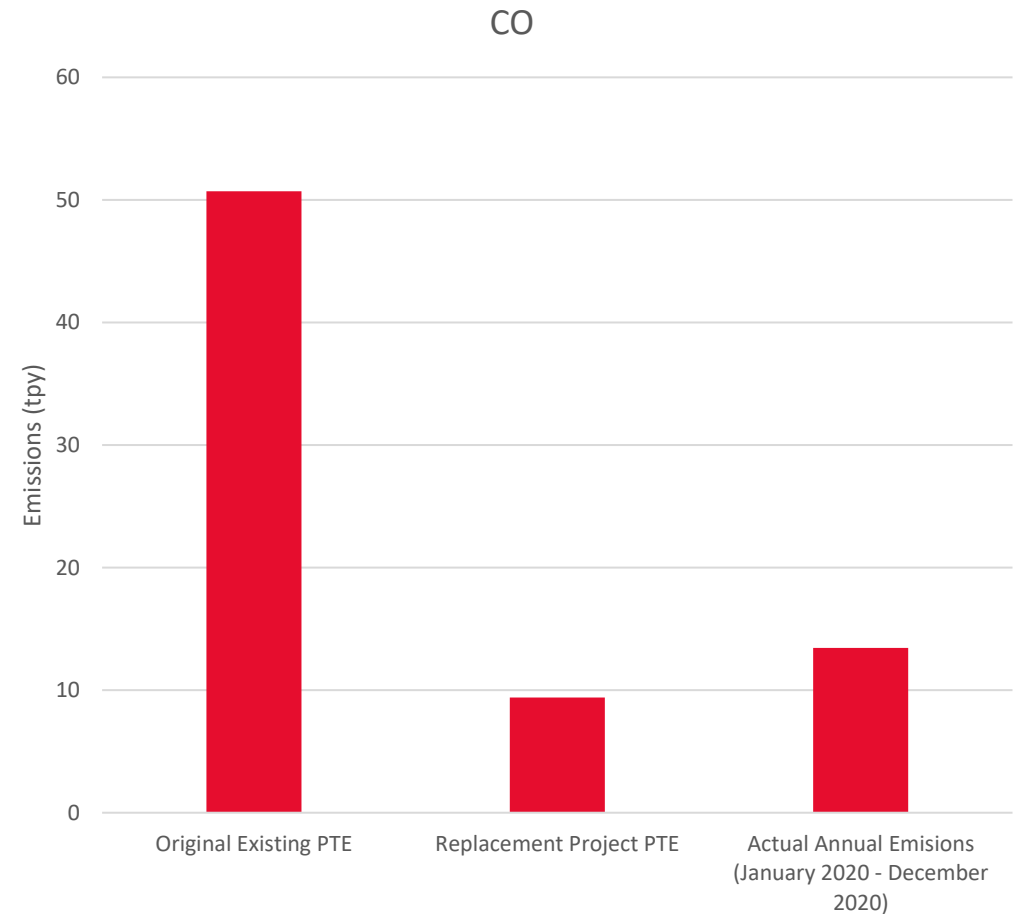
2020 Emissions - NO_x

In atmospheric chemistry, NO_x is a generic term for the nitrogen oxides that are most relevant for air pollution, namely nitric oxide (NO) and nitrogen dioxide (NO₂). These gases contribute to the formation of smog and acid rain, as well as affecting tropospheric ozone.



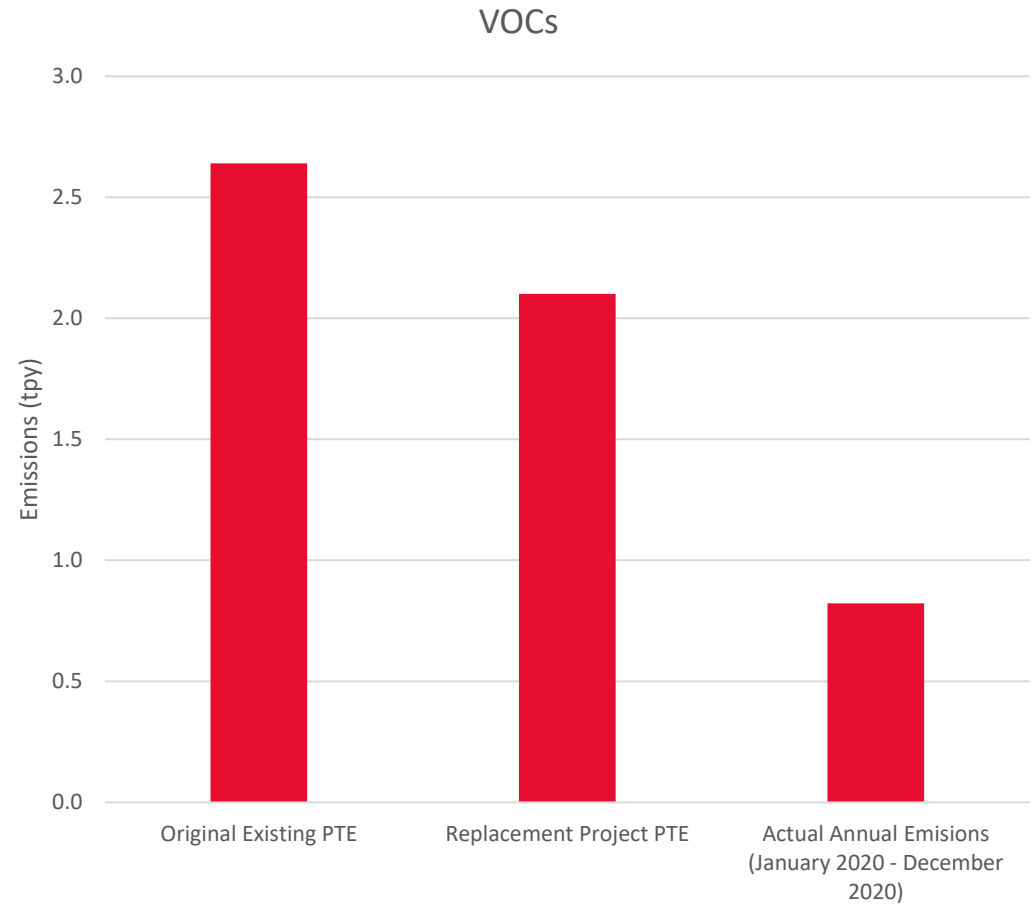
2020 Emissions - CO

CO is a colorless, odorless gas that can be harmful when inhaled in large amounts. CO is released when something is burned. The greatest sources of CO to outdoor air are cars, trucks and other vehicles or machinery that burn fossil fuels. A variety of items in your home such as unvented kerosene and gas space heaters, leaking chimneys and furnaces, and gas stoves also release CO and can affect air quality indoors.



2020 Emissions - VOCs

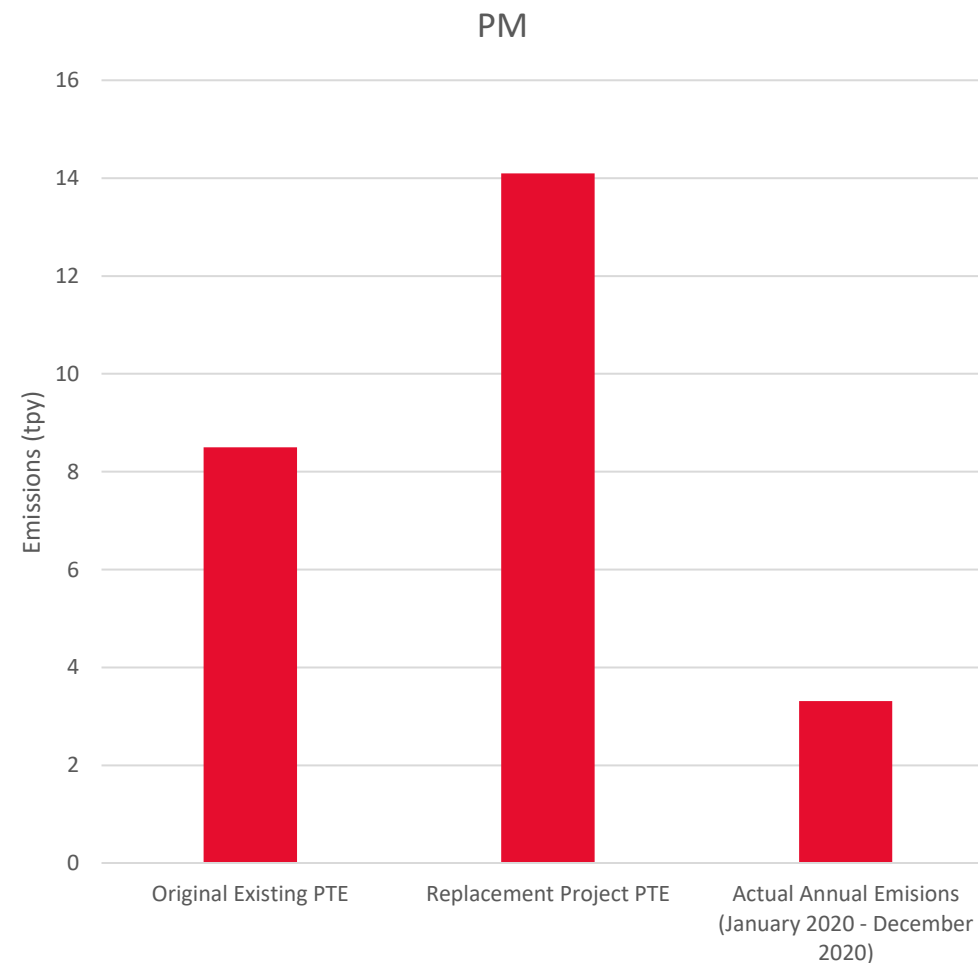
Volatile organic compounds, VOCs for short, are a common type of EPA-regulated drinking water contaminant. Even today, VOCs can be found in a number of products that are used on a daily basis, like paint thinners, pesticides and insect sprays.



2020 Emissions - PM

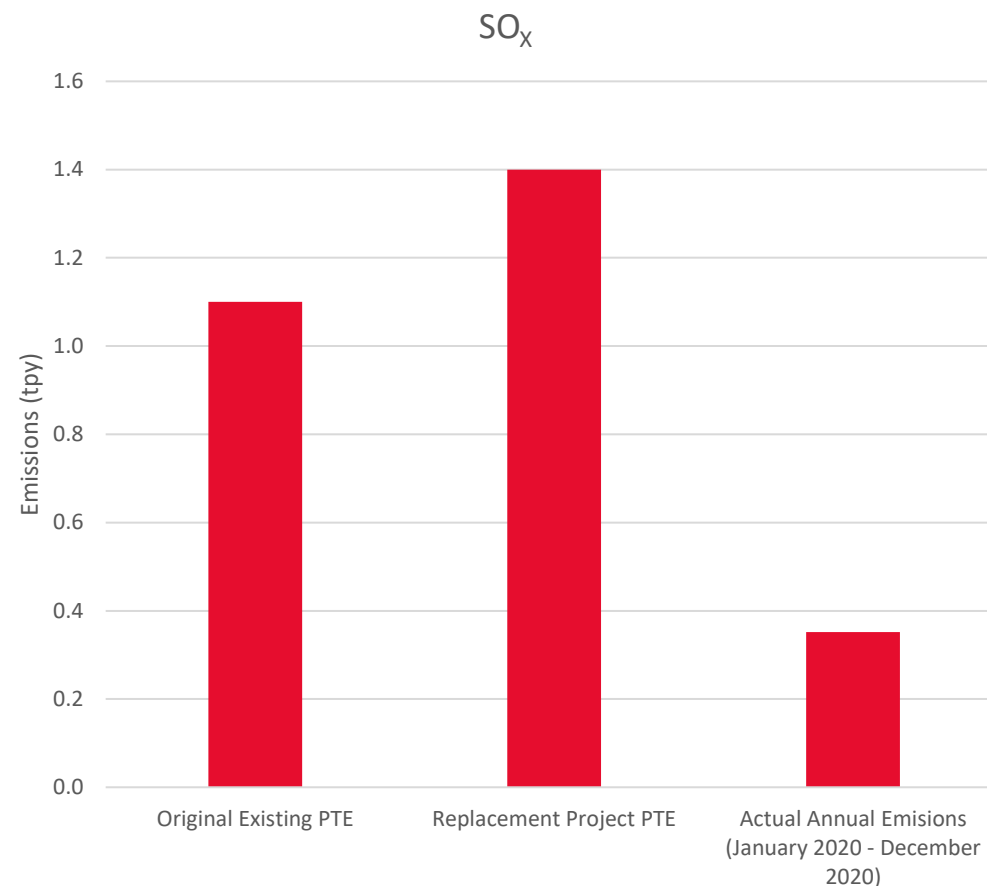
“Particulate matter” (PM) is the general term used to describe solid particles and liquid droplets found in the air. The composition and size of these airborne particles and droplets vary.

PM can be emitted directly or formed in the atmosphere. “Primary” particles are those released directly to the atmosphere. These include dust from roads and black and/or elemental carbon from combustion sources.



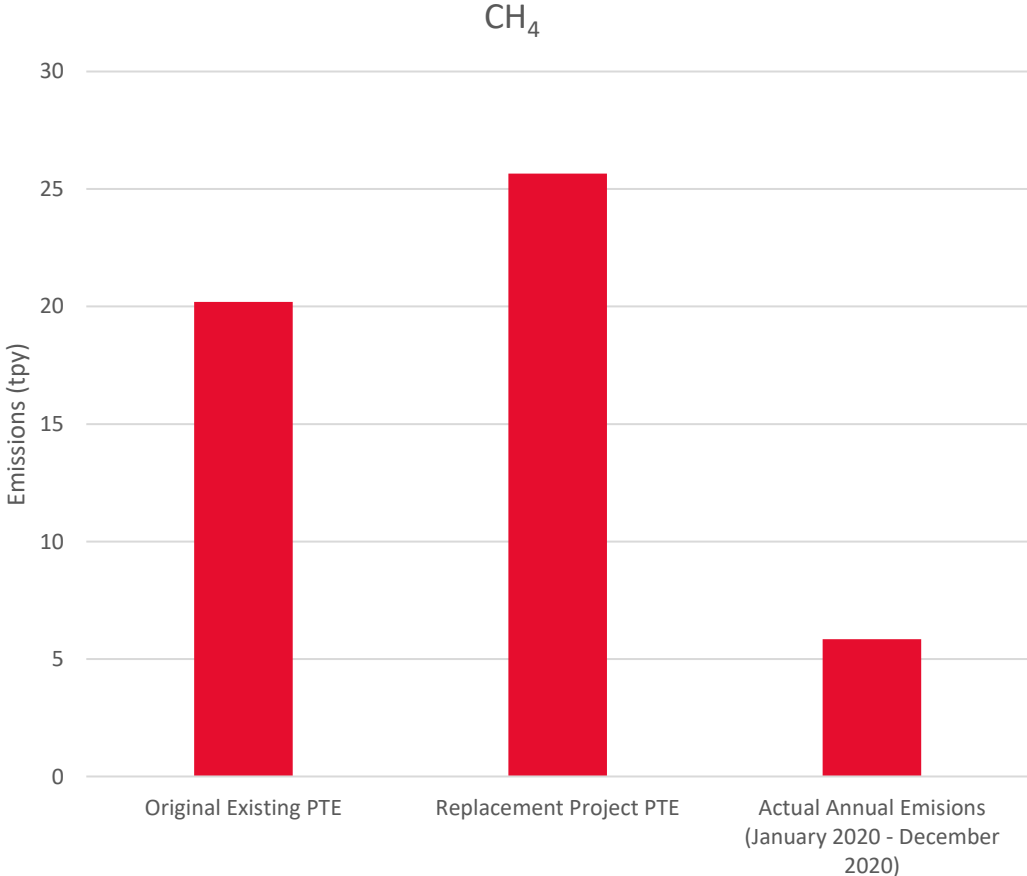
2020 Emissions – SO_x

Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. Sulfur dioxide (SO₂) is the pre-dominant form found in the lower atmosphere. It is a colorless gas that can be detected by taste and smell in the range of 1,000 to 3,000 micrograms per cubic meter (µg/m³).



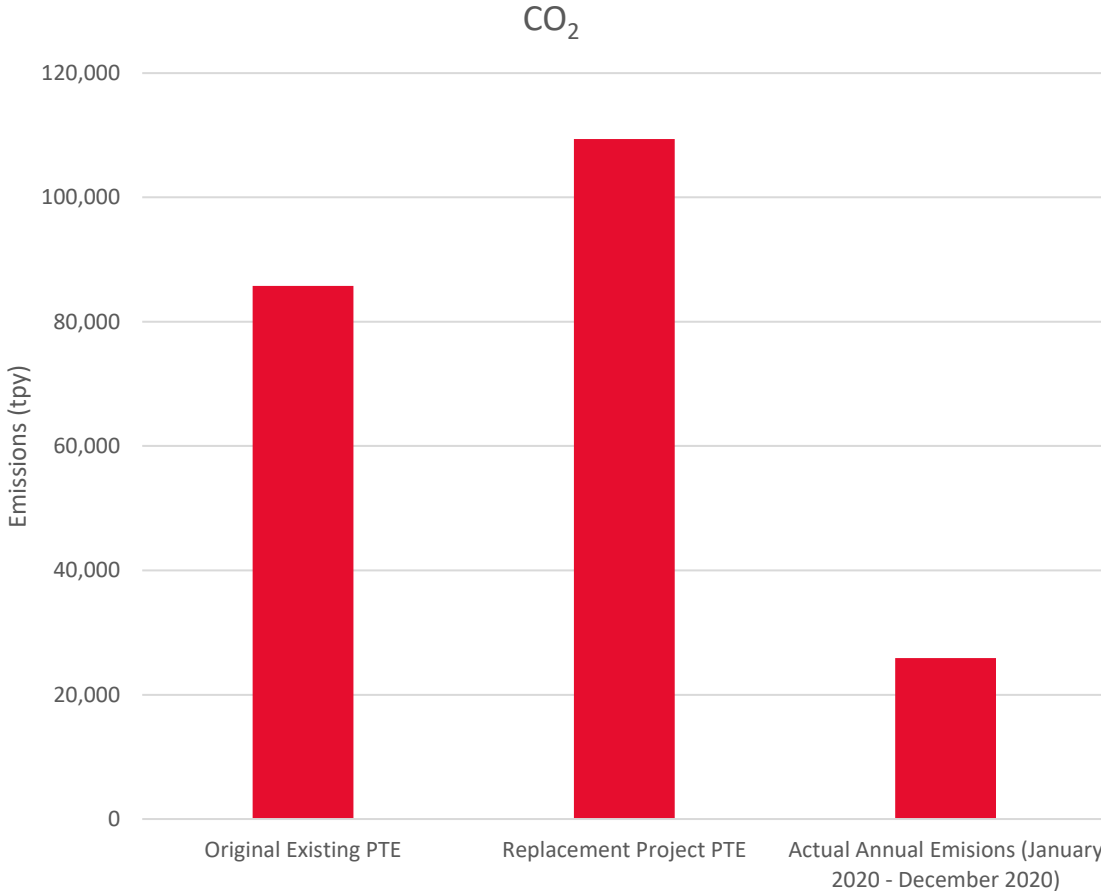
2020 Emissions – CH₄

Methane



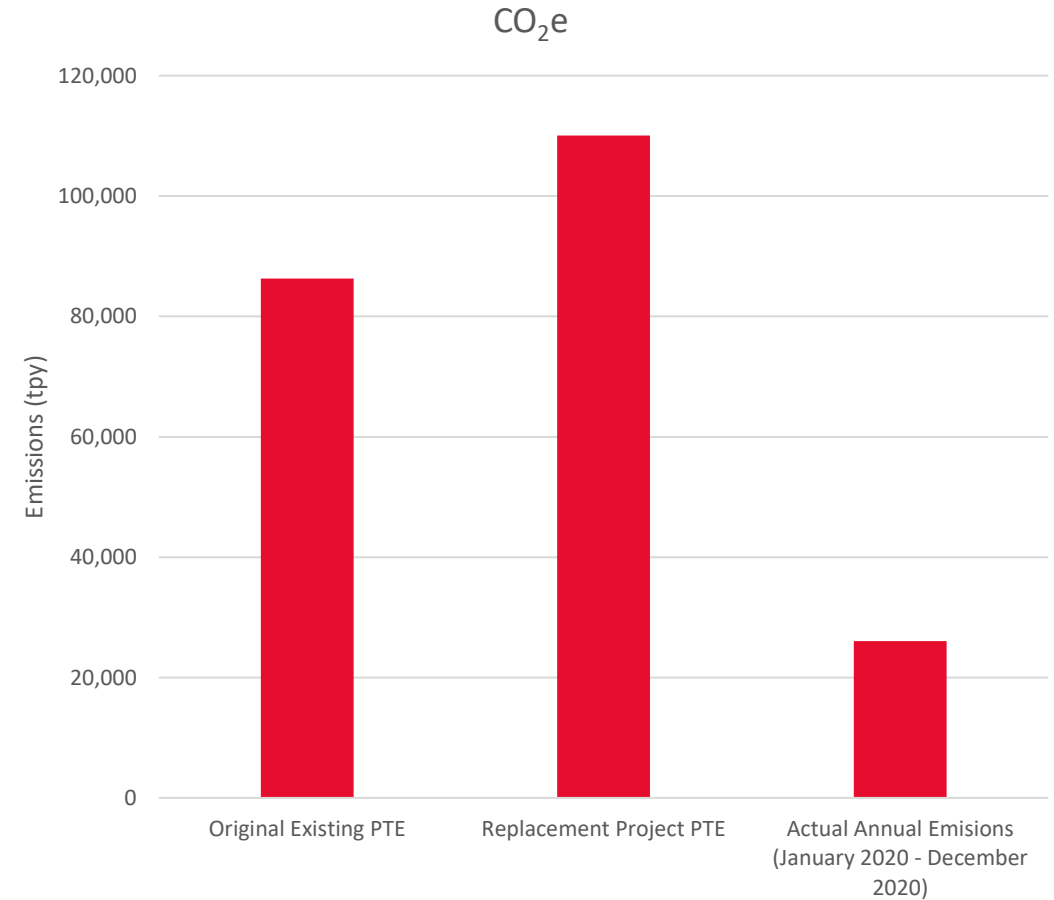
2020 Emissions – CO₂

Carbon dioxide is an acidic colorless gas with a density about 53% higher than that of dry air.



2020 Emissions – CO₂e

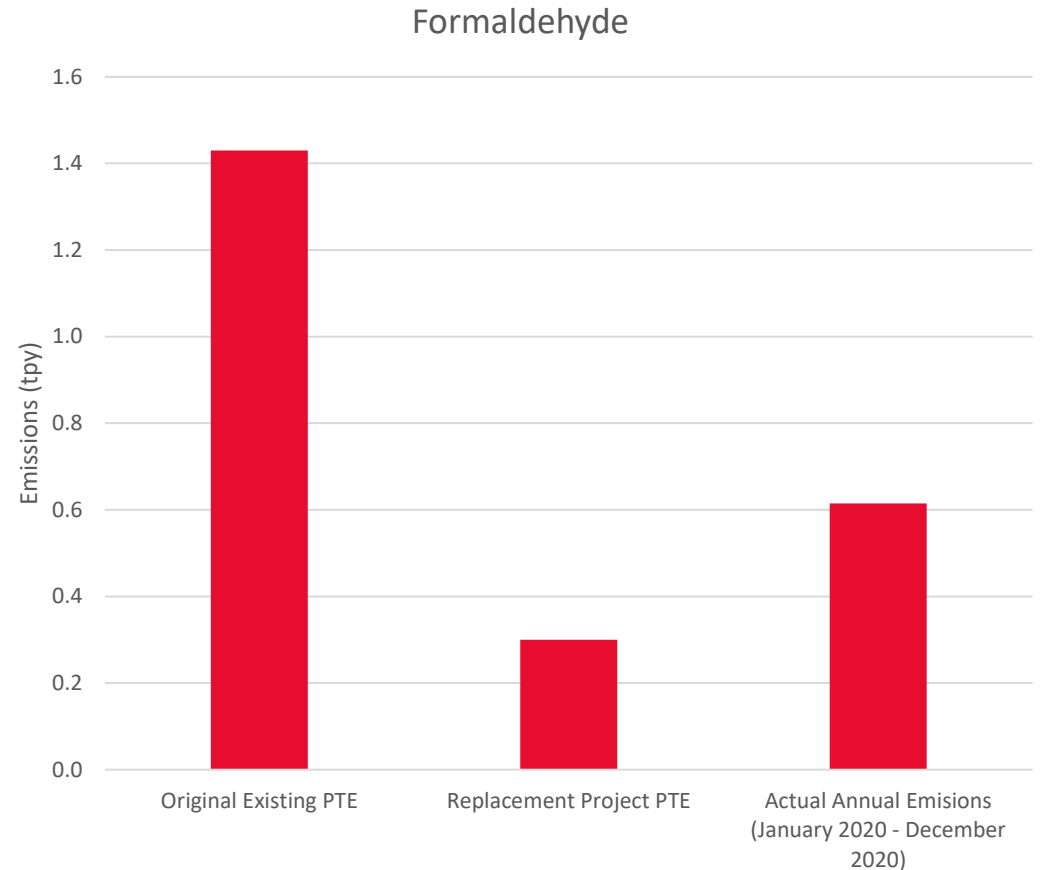
CO₂e is the shorthand for carbon dioxide equivalents. It is the standard unit in carbon accounting to quantify greenhouse gas emissions



2020 Emissions – Formaldehyde

A colorless, pungent-smelling gas; an important hazardous air pollutant.

Sources include environmental tobacco smoke and other combustion sources; pressed wood products (such as particle board); and certain textiles, foams, and glues.

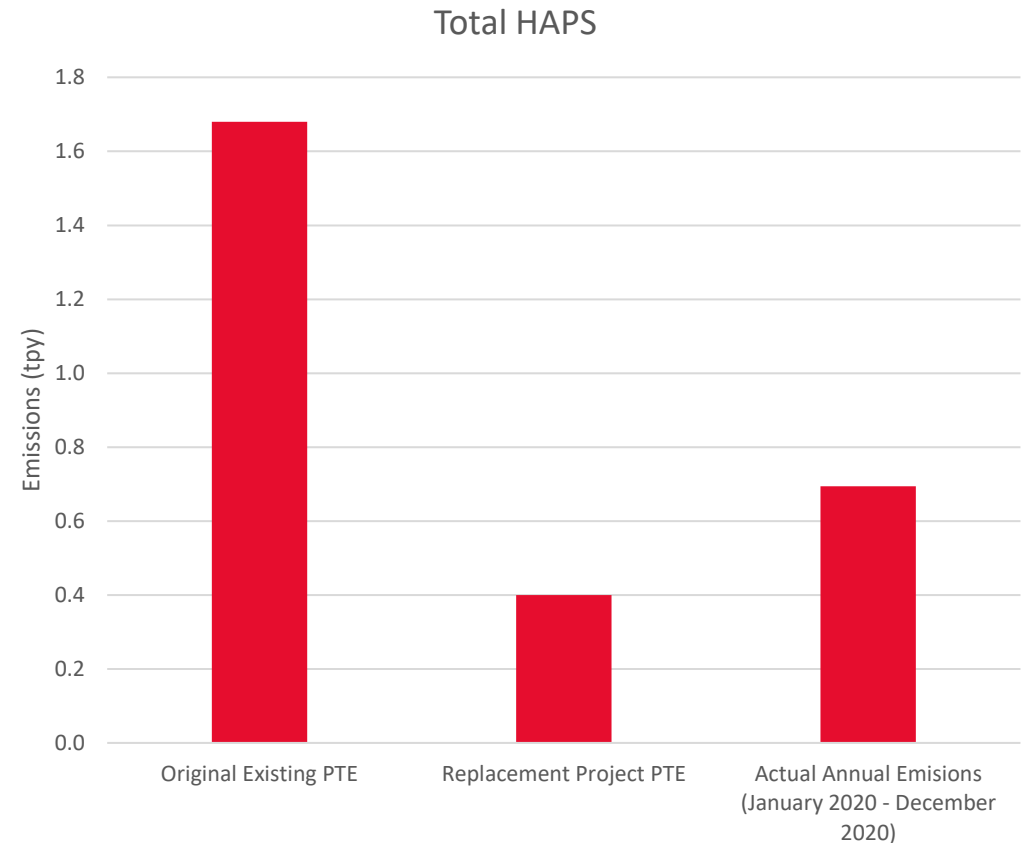


2020 Emissions – Total HAPs

Hazardous air pollutants, also known as toxic air pollutants or air toxics.

Examples of toxic air pollutants include

- **benzene, which is found in gasoline;**
- **perchloroethylene, which is emitted from some dry cleaning facilities; and**
- **methylene chloride, which is used as a solvent and paint stripper by a number of industries.**



HOW MUCH GAS?



How Much Gas is Flowing Through the Station?

Total Gas Pumped Through Borger Station in 2020

139,436,204.19 mcf of natural gas through the station in 2020.

Highest months of operation:

January

February

March

December

REDUCE METHANE



Borger Station Methane Reduction

Proactive Controls

The company purchased a seal gas boost system for Borger Unit #4 in 2020 which allows the unit to remain in pressurized hold (minimizing the frequency of unit blowdowns). Although purchased in 2020, installation of the system was completed in 2021 due to operating conditions.

STATION UPGRADES



Borger Replacement Project

Borger 2/3 Replacement Project

- **Replace two (2) existing turbines with more efficient new units that will reduce air emissions.**
- **Install an oxidation catalyst on an existing turbine to further reduce air emissions.**
- **Install three (3) new microturbines.**
- **Replace blowdown silencers/vents to allow for capped emergency shutdowns to further reduce air emissions.**
- **Replace an aging boiler system, and install other minor station piping and updates, including replacing the existing fencing with a new dark-green vinyl-coated chain link fence and upgrade landscaping.**

Thank you

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