



## Air Program Structure



Operations

- Manage daily air permitting and compliance tasks

Corporate Air Group

- Manage program and conduct regulatory analysis

Engineering & Design

- Provide design standards

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## Regulated Emissions



- **Currently regulated emissions include:**

- Oxides of Nitrogen (NO<sub>x</sub>)
- Carbon Monoxide (CO)
- Volatile Organic Compounds (VOCs)
  - Propane, Butane, Pentanes+

**Nox + VOC + Sunlight = Ozone**

- **State regulations require authorization for construction and operation of equipment that produces emissions**

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## Potential Regulated Emissions



- **Greenhouse Gases (GHG)**

- Include methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>)
- Expect to be included under Cap & Trade
  - A “Carbon price” will be placed on emissions of methane and carbon dioxide

- **Methane has a global warming potential twenty-three (23) times that of carbon dioxide**

- Results:
  - One (1) ton of methane emitted is equivalent to twenty-three (23) tons of carbon dioxide emitted
  - Places a premium on methane emissions

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## Natural Gas Components



### Natural Gas Components

- Methane (CH<sub>4</sub>)
- Ethane (C<sub>2</sub>H<sub>6</sub>)
- Propane (C<sub>3</sub>H<sub>8</sub>)
- Butane, (C<sub>4</sub>H<sub>10</sub>)
- Pentane + (C<sub>5</sub>H<sub>12</sub>)

## Emission Strategies



### Current emission strategy

- Capture flash emissions
  - Comply with volatile organic compound regulations
  - Cost recovery
- Reduce Fugitive natural gas emissions
  - Cost recovery

### Anticipate Cap & Trade

- Reduce fugitive natural gas emissions
  - Monetary value of methane
  - Monetary value of carbon

## Emission Reductions



### Control Options

- Vapor Recovery Units
- Flash Gas Compression
- Directed Inspection and Maintenance Programs

## New Legislation in the News



### Mandatory Reporting Rule

- Emission Inventory versus Carbon Footprint

### Cap and Trade

- 25,000 metric ton threshold and 10,000 metric ton threshold

### EPA Proposed Endangerment Finding

- Clean Air Act Amendments would result in regulation of GHGS under the Clean Air Act

Note: 1 metric ton = 2,205 pounds



## Questions & Answers

