



REGION 3

PHILADELPHIA, PA 19103

Report Title: Clean Air Act Inspection of EQT
Inspection Date(s): 05/21/2024-5/23/2024
Regulatory Program(s): SIP, NSPS

Company Name: EQT
Facility Name: Multiple Sites: See Attached List
Facility Location: See Attached List

Latitude: See List **Longitude:** See List
County/Parish: Greene & Washington

AFS/ICIS-Air Number: See Attached List
Permit Number: See Attached List
NAICS Code: 211111 **SIC:** 1311
DSB ID #: ECAD-66

Facility Representatives:	Point of Contact
Regina Henry, Environmental Manager, EQT	☒
Phone: 412-328-3215 Email: rhenry@eqt.com	
Julianne Baer, EHS, EQT	☐
Phone: 724-710-2416 Email: julianne.baer@eqt.com	
Matt Chiplaskey, Superintendent Maintenance, EQT	☐
Phone: 412-997-7927 Email: matthew.chiplaskey@eqt.com	

EPA Inspectors:
Bruce Augustine, Environmental Scientist, 3ED21
Phone: 215-814-2131 Email: augustine.bruce@epa.gov
Dean DeLuca, Physical Scientist, 3ED21
Phone: 304-234-0264 Email: deluca.dean@epa.gov

State/Local Inspectors:
Elizabeth Speicher, Environmental Group Manager Operations, PADEP
Phone: 412-442-5214 Email: espeicher@pa.gov

EPA Lead Inspector

Signature

Bruce Augustine

1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

Date

Supervisor

Signature

Kristen Hall

Date

Table of Contents

I. Introduction	4
A. Summary of the Facility.....	4
B. Inspection Opening Conference.....	5
II. Site Activity/Process Description	5
III. Observations	6
IV. Records Review	11
V. Closing Conference	11
VI. List of Attachments	13

I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at several EQT wellpads in Southwest Pennsylvania (EQT or Facility) to verify compliance with applicable State and Federal regulations. The Pennsylvania Department of Environmental Protection (PADEP) was notified of the inspection on May 6, 2024 via email. On May 17, 2024, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Regina Henry, prior to the inspection (see Attachment 1). These records are listed in the Records Review section of the report.

The inspection included an evaluation of the Facility's processes and its compliance with the CAA. All information included in this report is the result of statements by the Facility representatives, materials shown to the inspectors by the Facility representatives, and/or documents provided by the Facility representatives to the inspectors at the time of, or subsequent to, the inspection. In addition, information gathered prior to the inspection from a review of EPA and State records may be included in Section A. Summary of the Facility.

A. Summary of the Facility

The locations of the facilities inspected are included as Attachment 2 to this report. All of the facilities inspected are located in either Washington or Greene County, PA. EQT is "a leading independent natural gas producer" with operations in Pennsylvania, West Virginia, and Ohio. EQT is headquartered in Pittsburgh, PA and is a publicly traded company on the New York Stock Exchange (NYSE: EQT).

Each of the wellpads inspected contains equipment related to extraction and storage of natural gas and natural gas liquids (NGL) from the Marcellus Shale. The wellpads have either a single or multiple wells onsite to extract the gas and NGL. The natural gas and NGL are routed through a sand filter to remove any particulate material prior to entering either a two or three phase separator. In the separator, natural gas is separated from the NGL and sent to the sales pipeline. In a two phase separator, the NGL left after the natural gas is sent to the pipeline is sent to the tank battery for storage. In a three phase separator, the NGL left after the natural gas is sent to the pipeline is further separate to produced water and condensate. The produced water is sent to produced water tanks while the condensate is sent to the heater treat to remove any excess gas. The remaining condensate is then sent to condensate storage tanks for storage. Emissions at the sites are generated either from fugitive leaks at onsite equipment or from the enclosed combustors used to combust vapors from the tank battery. Vapors are generated in the tank battery through working, breathing, and standing losses. The vapors are routed to the combustor(s) using common header and are combusted in an enclosed combustor. EQT does not operate vapor recovery units (VRU) or thermal oxidizers at these sites.

The facilities operate under either PADEP's Exemption 38 or are permitted under General Permit 5 (GP-5), which applies to natural gas sources that do not meet the permitting exemption under Exemption 38. The permits are listed in the source list included in Attachment 2.

Each of the inspected sites is classified as minor sources of air emissions for both criteria pollutants and hazardous air pollutants. The facilities are subject to, or potentially subject to the following federal regulations:

- Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015. (NSPS OOOO)
- Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After September 18, 2015, and on or Before December 6, 2022. (NSPS OOOOa)
- Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After December 6, 2022. (NSPS OOOOb)

B. Inspection Opening Conference

At 2:00PM on May 21, 2024, EPA inspectors arrived at EQT's offices in Canonsburg, PA for an opening conference and to discuss the logistics of the inspection. EQT was represented in person by Julianne Baer, Leigh Hastings, Matt Chapliskey, and Eric Cindric. Participating by phone for EQT were Regina Henry, Morgan Beaker, Kristin Cerra, and Charity Fleener. Also, Elizabeth Speicher PADEP was present. EPA inspectors, Bruce Augustine and Dean DeLuca, presented their credentials and explained the purpose of the visit was to conduct a CAA inspection at several EQT wellpads to determine compliance with their permit and any applicable regulations. Additionally, EPA informed the facility representatives of their right to claim any confidential business information (CBI). At that time, EQT did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

As mentioned earlier in the report, EQT operates wellpads that are engaged in the extraction of natural gas and NGL from wells drilled in the Appalachian Basin. EQT sells the gas and NGL to third party operators for further processing. Within Pennsylvania, EQT operates wellpads in Washington, Greene, Fayette, and Westmoreland counties. EQT stated that they own and operate 143 wellpads in Greene County and 72 in Washington County. They also operate a natural gas compressor station Washington County. EQT does not operate any central tank batteries or natural gas processing plants in Pennsylvania. EQT stated that the majority of their wellpads in Pennsylvania operate under PADEP's permitting exemption for oil and gas sites with volatile organic compound (VOC) emissions less than 2.7ton/yr (Exemption 38). There are several iterations of Exemption 38 (Exemption 38-38c) for which the applicability depends on the construction date of the site. EQT operates four wellpads in Washington County that operate under PADEP's GP-5 permitting program: Ealy, JT Farm, Stouts, and Kuhn. In addition, these are the only four sites in Washington and Greene Counties that are "wet" gas sites; meaning they have produced natural gas, produced water, and condensate.

EQT stated that they operate wells that were drilled prior to the applicability date for NSPS OOOO and that there are wells that were drilled post applicability date for NSPS OOOO, OOOOa, and OOOOb.

EQT sends liquids from multiple wells to a single tank in the tank battery but may use multiple tanks to store NGL. Any condensate stored at wet gas wellpads is trucked offsite to other operators. Produced water that is generated at the sites is stored in storage tanks and either trucked offsite or pumped offsite to an Equitrans facility.

Each of the storage tanks used at the sites is equipped with a weighted thief hatch that is set to open at 160si. Some of the sites also are equipped with a pressure relief valve on the tanks. In addition, at least thirty of the wellpads tank batteries are equipped with tank pressure monitors that constantly measure the pressure in the tanks. EQT stated that if the pressure at the tanks exceeds 130si for 30 minutes or 160si for 30 seconds, the wellpad is automatically shut-in and all production ceases until the issue can be evaluated. Operations will not resume until an EQT operator investigates the cause of the high pressure event and pressures return to normal. Vapors from the storage tanks are routed to enclosed combustors using a common header. Each of the tanks is manifolded into the header. EQT monitors mass flow to the combustor with a meter at each of the sites. Also, there is a control valve on the vapor header upstream of the combustor that prevents constant flow of vapor to the combustor. EQT stated that the valve opens to allow the flow of vapors to the combustor when the pressure in the header reaches 60si and closes when it reaches 30si. EQT stated that the COMM4 is the most common model of combustor used at their wellpads but they do operate other models also. They also indicated that they have not conducted stack test of any combustors at any of their wellpads and believe that all combustors used at their sites are on EPA's approved list of combustors¹.

EQT conducts quarterly optical gas imaging (OGI) inspections and weekly audio, visual, olfactory inspections at their wellpads. EQT stated that by December 2022 all natural gas pneumatic controllers have been replaced by controllers that are either electric or use instrument air.

EPA and EQT agreed to meet the following morning at a location in Washington County to commence the wellpad inspections.

The opening conference concluded at 3:45PM.

III. Observations

At 8:00AM on May 22, 2024, EPA inspectors met with EQT representatives Leigh Hastings, Julianne Baer, Eric Rothermel, Kristin Cerra, and Matt Chiplaskey off of Rt 70 near Claysville, PA to discuss the sites to be inspected. Also, Elizabeth Speicher and Pam Trovato from PADEP were present. The EPA/EQT/PADEP inspection team proceeded to drive to the Kuhn Wellpad. All photographs taken during the inspection are included in Attachment 4 and a log of FLIR videos is included as Attachment 5 to the report.

¹ <https://www.epa.gov/stationary-sources-air-pollution/combustion-control-device-models-have-been-tested-manufacturer>

Kuhn Pad:

At 8:57AM, the EPA inspection team arrived at the wellpad. EPA started the FLIR GX320 camera and allowed it to cool down prior to commencing the walkthrough. In addition, EPA reiterated that photographs would be taken during the walkthrough and the FLIR camera would be used to observe emission sources at the site. The Kuhn Pad has three wells, three gas processing units (GPUs), eight storage tanks, and two enclosed combustors (also known as VCUs). EQT noted that the site was in production during the inspection. EQT stated that the typical pressure of gas coming in from the field is 480psi and the pad is producing 19-20MMscf/day of natural gas. The Kuhn Pad is a "wet" gas site in that it produces natural gas, condensate, and produced water. EPA observed the three wells and GPUs with the FLIR camera. EPA also observed the two COMM4 enclosed combustors. The combustors operate in series and the first combustor is set to commence operating when pressure in the vapor header from the tank battery reaches 60psi. EQT was not sure of the pressure settings for the second combustor. Both combustors operate with a pilot light until the pressure reaches the setpoint and flow commences to the combustor. EPA observed the temperature on VCU 1 during the inspection at 1104°F. VCU 2 turned on and the temperature reached 326°F. Both VCUs turned off while being observed. EQT constantly monitors the temperatures of the VCUs and that information is transferred offsite using the data acquisition system. EPA observed the pressure monitor on the vapor header from the tank battery to the VCUs. The pressure observed on the monitor was 0.50psi but raised to 1.47psi. Two FLIR videos were taken of the VCUs during operation (FLIR0007.mp4 and FLIR0008.mp4).

The EPA inspection team then climbed to the top of the tank battery to observe the tanks for fugitive emissions with the FLIR camera. A leak was observed at the Enardo Valve on tank CRV1-PTC01. The EPA inspection team left the wellpad and proceeded to the next site.

JT Farm Pad:

The EPA inspection team arrived at the JT Farm Pad at 11:01AM. The JT Farm Pad is a wellpad that produces NGL containing both condensate and produced water. The wellpad was in operation during the inspection. The site contains five wells, five GPUs, eight storage tanks and two VCUs. EQT indicated that the low pressure separator was out of service and only one of the GPU heaters was operating during the inspection. During the previous day, the JT Farm Pad produced 22MMscf of natural gas, 55bbl of condensate, and 265bbl of produced water. Both VCUs at the site are COMM4 models that were operating during the inspection. EPA noted that the vapor flow valve to the combustors from the tank battery closed when the header pressure reached 1.81psi. EQT indicated that the valve is designed to close when pressure reaches 3.00psi. The temperatures observed at the VCUs were 638°F at VCU 1 and 350°F at VCU 2. A FLIR video was taken of the two VCUs (FLIR00011.mp4) showing potential emissions while the VCUs were operating. The EPA inspection team went to the top of the tank battery to observe the tanks for fugitive emissions. Emissions were not observed from the tanks at this site. EPA left the wellpad at 11:55AM.

Stouts Pad:

The EPA inspection team arrived at the Stouts Pad at 12:10PM. The Stouts Pad also produced natural gas, condensate, and produced water. The Stout Pad has 6 wells, 12 GPUs, two low pressure separators, 10 storage tanks (4 condensate, 6 produced water), and four VCU. EQT stated that the 12 GPUs are because of the high gas flow at this site. The production for the site is: 44MMscf natural gas, 610bbl produced water, 0bbl condensate. The EPA inspection team proceeded to the top of the tank battery to observe emission points on the tanks. Using the FLIR camera, EPA observed a leak from the Catchco pressure relief valve on tank TKCLV6-PTC04. EPA also visibly observed material coming out of the bottom of the valve. EPA quantified the leak at 5255ppm using the FLIR camera (FLIR00015.jpg). The flow meter on the vapor header from the tank battery to the VCUs read 35MMscf/day during the inspection. Also, the tank pressure monitor in the tank battery read -0.15psi.

During the inspection, two of the four VCU's were operating. All of the VCUs were COMM4 models. Neither of the two combustors was actively in operation, only the pilot light was lit while the other two combustors were off.

EPA took a break at 1:17PM.

Bovinator Pad:

The EPA inspection team arrived at the Bovinator Pad at 2:33PM. The Bovinator Pad is a "dry" gas wellpad in that it does not produce any condensate in the NGL. This wellpad has five natural gas wells, seven GPUs (4 servicing two wells and three older two-phase separators), one VCU, five produced water tanks, and three low pressure separators. EQT indicated that the three older wells are operating while the two newly drilled wells are shut-in. The new wells were drilled in December 2023 and are subject to NSPS OOOOb, while the older wells are subject to NSPS OOOOa. The wellpad had three line heater located on a portable trailer that EQT indicated are not in service and are being stored onsite. EQT also stated that the site is operating under PADEP Exemption 38c. In addition, all pneumatic controllers are air driven.

None of the heaters on the GPUs were operating during the inspection. During the previous day, the Bovinator Pad produced 65MMscf/day of natural gas. The incoming pressure of the gas at the separator was 440psi. EPA observed the flow meter from the tank battery to the VCU at 0MMscf. EPA observed the pilot light on the VCU was lit but the VCU was not actively combusting waste gas. The combustor onsite is a Thruster Technologies V170. EPA observed sources onsite with the FLIR GF320 camera, including the tank battery and VCU. EPA left the Bovinator Pad at 3:35PM.

Trinidad/Scorpion Pad:

The EPA inspection team arrived at the Trinidad/Scorpion Pad at 3:50PM. This pad is also a dry gas wellpad that doesn't produce condensate and has 10 wells, 14 GPUs, and eight storage tanks. This wellpad does not have a VCU and all gas wells were in production during the inspection. There are 10 two phase GPUs and four (4) three phase GPUs to separate natural gas from produced water. The previous day, the site produced 25MMscf of natural gas and 62bbl of produced water. The storage

tanks at this site vent to atmosphere are equipped with Jayco thief hatches rated at 4osi. EPA observed the tank battery with the FLIR GX320 camera.

EPA left the site at 4:27PM and the inspection concluded for the day. EPA and EQT agreed to meet at the EQT office in Waynesburg, PA the following morning to resume the inspection.

May 23, 2024:

EPA arrived at the EQT field office in Waynesburg, PA at 8:30AM on May 23, 2024. Matt Chiplaskey, Leigh Hastings, Kristen Cerra, and Matt Boyer from EQT were present, as well as, Johnny Tolson and Laura Grada from PADEP. The EPA inspection team followed EQT representatives to the first wellpad to be inspected.

Pale Ale Pad:

The EPA inspection team arrived at the Pale Ale Pad at 9:29AM. This site began production in the Spring 2023 and consists of eight natural gas wells, 10 GPUs, six storage tanks, and two VCUs. The separator pressure was observed to be 1171psi and the production was 94MMscf/day of gas and 600bbl/day produced water. Because this site was constructed after December 6, 2022, the wells are subject to NSPS OOOOb. It was not clear during the inspection if an emission determination for methane had been conducted for the storage tanks under NSPS OOOOb. EPA requested a copy of that determination. The Pale Ale Pad does not produce condensate. EQT stated that the larger two phase separators can process 35MMscf/day of gas while the smaller three phase separators can process 13MMscf/day. Produced water generated at this site is pumped offsite to an Equitrans facility rather than being trucked.

EPA climbed onto the top of the tank battery to observe the emission points using a FLIR GF320 camera. Each of the tanks was equipped with an Enardo thief hatch (rated at 16osi) and an Enardo pressure relief valve (PRV). EPA observed leaks from the PRV on each tank using the FLIR camera². Tank pressure on the tank battery was observed to be 0.81osi during the inspection. EPA proceeded to the VCU's and observed the flow meter on the vapor header from the tank battery to the VCUs at 0MMscf. The pilot lights for both VCU were lit but they were not actively combusting waste gas. The temperature on each VCU was observed to be <100°F. EPA left the Facility at 10:22AM.

Barley Wine Pad:

EPA arrived at the Barley Wine Pad at 10:40AM. This pad is also a dry gas pad with no condensate and began production in mid-2023. This wellpad is operating under PADEP Exemption 38c and the wells are subject to NSPS OOOOb. Production from the Barley Wine Pad was 98MMscf/day of gas and 450bbl of produced water. The Facility consists of eight wells, 16 GPUs, six storage tanks and two COMM4 VCUs. EQT stated that all of the wells were in production at the time of the inspection. The power at the EQT

² See Attachment 5 for FLIR video log.

sites in this area is supplied by Capstone microturbines. Also, the produced water from the storage tanks is pumped to an Equitrans site and only trucked offsite when necessary.

EPA inspected the tank battery and observed the tank pressure monitor at -0.64osi. EPA also observed visible staining on Tank 2. Leaks were observed with the FLIR camera at five of the six storage tanks thief hatches (all tanks except Tank 5). EPA observed the flow meter from the tank battery to the VCUs at 5MMscf. EPA also noted that the control valves to both VCUs were open during the inspection even though the tank pressure monitor was <6osi. The VUCs were also operating at 97°F and 100°F. EQT operators were not sure why the VCU valves were open and actively sending gas to the combustors when the pressure was low. EQT closed the valve on VCU, however, the valve on the second VCU remained open. EPA left the site at 11:30AM.

Strosnider Road Pad:

The EPA inspection team arrived the site at 12:18PM. The Strosnider Pad consists of 12 wells, 13 GPUs, four storage tanks, and two COMM4 VCUs. The site also has a glycol dehydration unit used to remove water from the natural gas stream. EQT stated that the glycol dehydrator is owned and operated by Equitrans. The dehydrator is located on EQT property but is permitted as a separate source.

Of the 12 wells, six are newer wells drilled within the last year and six are older wells. The new wells are sent to the GPU and then the gas is routed to the high pressure header which is directed to the glycol dehydrator. Natural gas from the older wells is sent to the low pressure header after the GPU. All liquids from the GPUs are sent to the tank battery for storage. The Strosnider Pad is a dry gas site and no condensate is produced. This site also operates an Exemption 38c site. Production at the site was noted at 84MMscf/day natural gas and 520bbl/day produced water.

EPA observed the glycol reboiler from a distance. EQT prohibited EPA from examining the source closely because they do not own it. Three Kimray gas glycol recirculation pumps were observed on the reboiler skid. The glycol reboiler vents to a BTEX eliminator to control VOC emissions. The BTEX eliminator vents to a Envirotherm combustor. EPA was unable to determine to model or operating conditions for the combustor. EPA observed the tank battery and pressure on the tank header at 0.05psi and flow to the VCUs from the tanks was 7MMscf. The Strosnider Pad is equipped with two COMM4 VCU. EPA observed that one flow control valve to a VCU was open and sending waste gas to the VCU while the other control valve was closed. The temperature on the VCU receiving waste gas was 116°F during the inspection. EPA left the site at 1:01PM

Stattler Road Pad:

The EPA inspection team arrived at the Stattler Pad at 1:40PM. The site has 16 wells, four storage tanks, two VCUs and two glycol dehydrators. The dehydrators at this site are owned by EQT. Ten of the wells began production in 2023 while six of the wells are older. This site operates under PADEP Exemption 38c and has NSPS OOOOb affected wells. The 10 new wells are routed to a high pressure header and then the glycol dehydrators after the GPUs; while natural gas from the older wells is sent to

the low pressure header. Liquids from all wells are sent to the four storage tanks. Production at the wellpad was 106MMscf/day natural gas and 90bbl/day produced water.

The two glycol dehydrators are rated at 150MMscf/day and 100MMscf/day. EPA observed Thruster V128 combustors on both dehydrators. The gas stream from the still vent on the reboilers is routed to BTEX eliminators on both dehydrators. EPA observed a leak with the FLIR camera from the PRV on the dehydrator Train 1 BTEX eliminator. EPA also observed the combustor temperatures on the two dehydrators were 133°F and 239°F.

EPA observed the tank battery and the pressure from the tank header was 1.25osi. No leaks were observed at the top of the tanks with the FLIR camera. The Stattler Pad is equipped with two Thruster V170 combustors to control vapors from the tanks. Only one of the combustors was operating during the inspection and the temperature observed during the inspection was 258°F. EPA left the site at 2:22PM.

Mac Pad:

EPA arrived at the Mac Pad at 2:33PM. The site has 10 wells (6 new and 4 old), 10 GPUs, nine storage tanks, one Thruster V170 VCU, and one glycol dehydrator owned by EQT. The GPUs for the older wells vent gas to the low pressure header and then offsite to Equitrans. Meanwhile, the newer well GPUs send the gas to the dehydrators and then to the high pressure header and then offsite. The low pressure wells at this site were shut-in while the high pressure wells were in production. The site was producing 59MMscf/day natural gas and 250bbl/day of produced water.

EPA observed the tank battery with the FLIR camera and observed the tank pressure as -1.06osi. The flow meter from the tank battery to the VCU was 0MMscf. The control valve on the header from the tank battery to the VCU was closed and no gas was being combusted in the VCU.

The glycol dehydrator is equipped with electric glycol recirculation pumps. EQT stated that they don't use natural gas recirculation pumps. Also, the dehydrator has a 100bbl and 150bbl tank on the BTEX eliminator. The dehydrator is rated at 150MMscf/day.

The walkthrough concluded at 3:08PM.

IV. Records Review

The records review was conducted during the opening meeting on May 21, 2024. No record review was conducted following the onsite inspections. EPA requested additional records in an email to EQT on May 29, 2024. The original list of records requested is included in Attachment 1.

V. Closing Conference

After the onsite inspection, EPA inspectors, EQT representatives and PADEP had a brief closing conference to ask additional questions and discuss observations. The EPA inspectors noted that the

investigation is on-going, and any areas of concern identified in the final report do not necessarily reflect a violation or deviation, rather, they are areas that will require further investigation. EPA also noted that they would issue an inspection report within in 60 days, with a copy to the State. Simultaneously, EPA will perform a detailed review of records and may have additional questions. The inspection concluded at 3:14PM.

The following have been identified as potential issues during the inspection. They are issues that require either further investigation by EPA or additional information or explanation by EQT.

- EQT has drilled several wells in Washington and Greene Counties after December 6, 2022. These wells may be subject to the requirements of NSPS OOOOb because they were constructed after the applicability date in § 60.5365b. Several of the inspected sites were either constructed or had storage tanks constructed after the December 6, 2022 applicability date in NSPS OOOOb. 40 C.F.R. § 60.5365b(e)(2) requires a facility to determine the potential emissions for VOC and methane from a tank battery within the first 30 days of production to determine if the storage tanks are affected sources under NSPS OOOOb. EPA requested copies of the emission determinations for the sites inspected.
- During the inspection, EPA observed visual leaks and leaks detected with the FLIR camera at multiple sites including:
 - Kuhn Pad
 - Stouts Pad
 - Pale Ale
 - Barley Wine
 - Stattler Road Pad

The leaks could be indicative of design issues with the vapor control system. EQT noted that each of the sites is operated with a control valve that restricts the flow of gas from the tanks to the combustors until pressure reaches a setpoint. The valve closes to restrict flow once the pressure reaches a low setpoint. EPA noted that no tank pressure monitors observed were above 20psi even though multiple sites had VCUs with an open control valve allowing gas to flow.

- The operating temperature of the COMM4 and Thruster VCUs observed at all but the Kuhn Pad was <400°F. EQT noted that both models of combustor were on EPA's approved list of combustors. It is not clear if those models were tested and demonstrated destruction efficiencies at those operating temperatures. EPA will follow-up with the manufacturers to determine if the destruction efficiency claimed can be demonstrated at such low temperatures.
- The control valves at the Barley Wine Pad were observed to be open during the inspection allowing the flow of vapors from the tanks to enter the combustor. The VCU temperatures were 97°F and 100°F during the inspection. Operators indicated that the valves should not be open and manually closed one of the valves.
- EPA observed the COMM4 combustors at the Kuhn pad and acquired FLIR video of both combustors using the FLIR GX320 camera. It appears there may be uncombusted hydrocarbon from at least one of the combustors.

VI. List of Attachments

- Attachment 1: Email correspondence to Regina Henry of records requested to review during inspection
- Attachment 2: List of Facilities
- Attachment 3: List of Attendees for Opening Conference
- Attachment 4: Photograph Log
- Attachment 5: FLIR Video Log