## Air Pollution Control Title V Permit to Operate Statement of Basis for Permit No. V-UO-00023-2009.00 March 2011

## Chipeta Processing, LLC Chipeta Gas Plant Uintah & Ouray Indian Reservation Uintah County, Utah

#### 1. Facility Information

#### a. Location

The Chipeta Gas Plant (CGP), owned and operated by Chipeta Processing, LLC (Chipeta Processing), is located within the exterior boundaries of the Uintah and Ouray Indian Reservation, in the northeastern part of the State of Utah. The exact location is Section 15, T9S, R22E, in Uintah County, Utah. The mailing address is:

Chipeta Processing, LLC P.O. Box 173779 Denver, Colorado 80217-3779

b. Contacts

#### **Responsible Official:**

Craig Walters, Operations Manager – Midstream Northern Operations Anadarko Petroleum Corporation & Subsidiaries P.O. Box 173779 Denver, Colorado 80217-3779 720-929-6112 720-929-7112 (fax)

#### **Facility Contact:**

Don Anderson, Environmental and Regulatory Supervisor Chipeta Processing, LLC P.O. Box 173779 Denver, Colorado 80217-3779 720-929-6356 720-929-7356 (fax)

#### **Tribal Contact:**

Manuel Myore, Energy, Minerals, & Air Director Ute Indian Tribe P.O. Box 70 Fort Duchesne, Utah 84026 435-725-4950 435-725-4970 (fax)

#### c. Description of operations

CGP is a natural gas compression and hydrocarbon dew point (HCDP) control plant. The entire plant has a minimum design pressure of 700 psig and connects to interstate pipelines to transport natural gas to the market. Light natural gas liquids (NGLs) produced at the plant are sold via pipeline or truck to local liquids markets. Condensate and debutanized natural gasoline (DNG) are also sold to local markets by truck.

Natural gas enters the facility through gathering flowlines and passes through slug catcher vessels to separate hydrocarbon liquids from the gas. Hydrocarbon liquids from the slug catcher undergo condensate stabilization before storage in a 10,000 bbl floating roof tank (TK-1601). The stabilization process uses heat medium oil (HMO) to drive off the lighter hydrocarbons and produce a less volatile liquid to reduce flash emissions. The condensate is sold by truck to local markets and the captured vapors from the stabilization process are recycled to the plant inlet. The separated natural gas stream is directed to either Train 1 or Train 2 of the plant.

In Train 1, the refrigeration plant dries the natural gas to the required water dew point with a low-emission ethylene glycol dehydration system (DEHY-LO). Liquids produced by the refrigeration process are stabilized in a de-ethanizer tower with heat from the HMO system. Two plant heaters (H-781 and H-782) are used to heat the HMO supplied to the refrigeration plant and condensate stabilization process. The natural gas enters the process at pressures between 700 and 1,000 psig and is refrigerated by exchanging heat with low-pressure propane. The propane is circulated in a refrigeration loop to remove the heat from the gas. An electric sales gas compressor boosts the gas up to interstate pipeline pressure.

Extracted liquids from Train 1 are sent through a two tower stabilization system where hydrocarbon vapors, light NGLs, and DNG are produced. The vapors are compressed and recycled to the plant inlet and the NGLs are injected into an NGL pipeline or stored in a pressurized storage tank and trucked to local markets. The DNG is stored in two 10,000 bbl internal floating roof tanks (TK-1611 and TK-1621) and then trucked to local markets.

Natural gas entering Train 2 is dried to a very low water content in a molecular sieve dryer prior to being processed in a cryogenic turbo expander where NGLs are extracted from the natural gas stream. The natural gas stream then passes through electric residue compressors for compression before entering the sales pipeline. The NGLs are processed through an amine treatment system for  $CO_2$  removal and then injected into an NGL pipeline. Hydrocarbon vapors that cannot be recycled to the plant inlet are routed to a Callidus Dual Mouse tip plant flare (FL-991) emissions control device.

#### d. List of all units and emission-generating activities

In the initial part 71 operating permit application for CGP, Chipeta Processing provided the information shown in Tables 1 and 2 below. Table 1 lists emission units and emission generating activities, including any air pollution control devices. Emission units identified as "insignificant" emission units (IEUs) are listed separately in Table 2.

Emission Unit ID	Description	Control Equipment
H-781	Thomas Russell HMO Heater, 16.5 MMBtu/hr, natural gas fired:	
	serial no. H106-153 Installed 12/7/2007	None
H-782	Thomas Russell HMO Heater, 8 MMBtu/hr, natural gas fired:	
	serial no. H106-155 Installed 12/7/2007	None
H-2170	Heatech Regenerator Gas Heater, 17.38 MMBtu/hr, natural gas fired:	
	serial no. 07-0572 Installed 4/7/2009	None
E-2590	Propak Amine Reboiler, 7.5 MMBtu/hr, natural gas fired:	
	serial no. W070572 Installed 4/7/2009	None
TK-1601	CBI 10,000 bbl Condensate Storage Tank	Internal Floating Roof
TK-1611	CBI 10,000 bbl DNG Storage Tank	Internal Floating Roof
TK-1621	CBI 10,000 bbl DNG Storage Tank	Internal Floating Roof
L-2	Truck Loadout – Debutanized Natural Gasoline	None
TK-5050	CO <sub>2</sub> Vent: Installed 4/7/2009	None
FUG	Process Fugitive Emissions (equipment leaks from valves, pumps, flanges, open-ended lines, etc)	LDAR Program

Table 1 - Emission UnitsChipeta Processing, LLC – Chipeta Gas Plant

Part 71 allows sources to separately list in the permit application units or activities that qualify as "insignificant" based on potential emissions below 2 tons per year (tpy) for all regulated pollutants that are not listed as hazardous air pollutants (HAPs) under section 112(b) and below 1,000 lbs/year or the deminimis level established under section 112(g), whichever is lower, for HAPs. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement. Units that qualify as "insignificant" for the part 71 application are in no way exempt from applicable requirements or any requirements of the part 71 permit.

The emissions calculations provided by Chipeta Processing in its part 71 initial permit application indicate that the emission units in Table 2, below, are IEUs. In its application, Chipeta Processing submitted an EUD-1 form identifying emission units FL-991, L-1, and DEHY-LO as significant emission units. However, because the total PTE from these emission units is less than 2 tpy for criteria pollutants and less than 1 tpy for HAPs, the units qualify as IEUs. Chipeta Processing calculated the emissions for the condensate truck loading and flare using AP-42 emission factors. Tank emissions were calculated using EPA Tanks 4.09d. Emissions for the DEHY-LO system are based on the design specifications discussed in Appendix C of the consent decree (attached). The supporting data provided in the application justifies the source's claim that these units qualify as IEUs.

# Table 2 -- Insignificant Emission UnitsChipeta Processing, LLC, Chipeta Gas Plant

Emission Unit Description
FL-991 – Flare
L-1 – Condensate Truck Loadout
DEHY-LO – Low Emission Ethylene Glycol Dehydration Unit
(serial no. 065910)
Ethylene Glycol Storage Tank
Methanol Storage Tank
3 - Produced Water Tanks (1101, 1121, & 1111)
Heat Medium Oil Tank 1141

e. <u>Facility history and applicability analysis for Prevention of Significant Deterioration (PSD),</u> New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) requirements

Train 1 at CGP commenced operations in December of 2007 and was below major source thresholds for PSD permitting requirements. At that time, Westport Field Services, LLC (Westport) was the owner and operator of the facility. Westport was a wholly owned subsidiary of Kerr-McGee Oil & Gas Onshore LP (KMG) until August of 2007, when Anadarko purchased all of the outstanding shares of KMG. Westport changed its name to Anadarko Uintah Midstream, LLC. on April 25, 2008. Chipeta Processing was formed on June 1, 2008 as a Delaware limited liability company and is 51% owned by Western Gas Resources Operating , LP (WGR), 24% owned by Anadarko Uintah Midstream, LLC (Anadarko) and 25% owned by Ute Energy, which is partially owned by the Ute Indian Tribe. WGR is the Managing Member of Chipeta Processing and contracts operations functions of CGP to Anadarko.

On March 27, 2008, a consent decree (Civil Action No. 1:07-CV-01034) was entered into the United States District Court of Colorado between KMG, the United States of America, and the State of Colorado to address potential Clean Air Act violations voluntarily disclosed by KMG at other facilities located in Colorado and Uintah Basin in Utah. As a result of the transfer of ownership described above, Chipeta Processing is subject to relevant requirements of this consent decree through its parent company Anadarko. See Section 4 of this Statement of Basis for details.

The Environmental Protection Agency (EPA) received an initial part 71 operating permit application for CGP on November 17, 2008. EPA requested additional information from Chipeta Processing in order to complete the permit action, and received the responsive submittal on March 30, 2009. Train 2 began operating at CGP in the spring of 2009. Subsequently, EPA received an updated part 71 application on March 10, 2010.

EPA has no record of any other federal permitting activity, such as PSD or minor New Source Review (NSR), at this facility.

Table 3 below shows the construction and permitting history of CGP in the context of the promulgation of regulations that may apply. The history includes information from the 2008 initial permit application, the 2009 additional information submittal, the updated application submitted in March of 2010, and additional information received in March and October of 2010.

## Table 3 – Facility History and Applicability Analysis for PSD, NSPS and MACT Requirements Chipeta Processing, LLC – Chipeta Gas Plant

## August 7, 1980 → Prevention of Significant Deterioration Pre-Construction Permitting Program Promulgated (the 8/7/80 rules form the basis of the current regulations)

#### Applicability:

PSD is a preconstruction review requirement that applies to proposed projects that are sufficiently large (in terms of emissions) to be a "major" stationary source or "major" modification. Source size is defined in terms of "potential to emit," which is its capability at maximum design capacity to emit a pollutant, except as constrained by federally and practically enforceable conditions. A new source or a modification to an existing minor source is major if the proposed project has the potential to emit any pollutant regulated under the CAA in amounts equal to or exceeding specified major source thresholds [100 tpy for the 28 listed industrial source categories and 250 tpy for all other sources].

PSD also applies to modifications at existing major sources that cause a significant "net emissions increase" at that source. A modification is a physical change or change in the method of operation. Significance levels for each pollutant are defined in the PSD regulations at 40 CFR 52.21.

Compliance: No new source or modification of a source subject to PSD review may be constructed without a permit.

#### June 24, 1985 –NSPS for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants Promulgated at 40 CFR Part 60, Subpart KKK (NSPS KKK)

#### (the 6/24/1985 rules form the basis of the current regulations)

Affected Sources:

Affected facilities at onshore natural gas processing plants that commenced construction, reconstruction, or modification after January 20, 1984:

- Compressors in VOC service or wet gas service are affected facilities
- Equipment except compressors within a process unit is an affected facility
- Compressor stations, dehydration units, sweetening units, underground storage tanks, field gas gathering systems, or liquefied natural
- gas units located at onshore natural gas processing plants are subject to this rule

Final Compliance Date:

180 days after initial startup

Applicability to Source

Subject – CGP meets the definition of an onshore natural gas processing plant under this rule.

#### April 8, 1987 –NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 at 40 CFR Part 60, Subpart Kb (NSPS Kb) (the 4/18/87 rules form the basis of the current regulations)

Affected Sources:

Storage vessels with a capacity  $\geq$  75 m<sup>3</sup> used to store volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984.

Final Compliance Date:

Upon Startup

Limited Requirements/Exemptions

- -Storage vessels  $\ge 151 \text{ m}^3$  storing a liquid with a maximum true vapor pressure less than 3.5 kPa
- -Storage vessels  $\geq$  75 m<sup>3</sup> but < 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa

-Vessels at coke oven by-product plants

-Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to atmosphere

-Vessels permanently attached to mobile vehicles

-Vessels with a design capacity < 1,589.874 m<sup>3</sup> used for petroleum or condensate stored, processed, or treated prior to custody transfer

-Vessels located at bulk gasoline plants

-Storage vessels located at gasoline service stations

-Vessels used to store beverage alcohol

-Vessels subject to subpart GGGG of 40 CFR part 63

Applicability to Source

Subject – CGP has storage vessels > 75  $m^3$  that store volatile organic liquids.

## February 19, 1999 $\rightarrow$ Part 71 (Title V) Operating Permit Program Promulgated (the 2/19/99 rules form the basis of the current regulations)

#### Applicability:

Any major source (criteria pollutants > 100 tpy, or any single HAP > 10 tpy, or aggregated HAPS > 25 tpy);

Any source, including an area source, subject to a standard, limitations, or other requirements under 111 or 112 of the CAA promulgated on or before July 21, 1992. Non-major sources subject to 111 or 112 CAA regulation promulgated after July 21, 1992 are subject unless the rule specifies otherwise; Any Acid Rain source;

Any Solid Waste Incineration Unit;

Application Due Date: Within 12 months after commencing operation.

#### Applicability to Source

Subject – EPA received initial part 71 permit application on November 17, 2008.

## June 17, 1999 $\rightarrow$ MACT HH for Major HAP Oil and Gas Production Sources Promulgated (HAP > 10/25 tpy)

## For the purposes of the subpart, HAP PTE for an oil and gas production facility is determined by the facility-wide HAP emissions from dehydrators and storage vessels with a potential for flash emissions only.

Affected Sources:

Glycol dehydration units

Storage vessels with the potential for flash emissions

Group of ancillary equipment (pumps, valves, flanges, etc...)

Compressors intended to operate in volatile hazardous air pollutant service, located at natural gas processing plants

Final Compliance Dates

Construction or reconstruction commenced before February 6, 1998 - June 17, 2002

Construction or reconstruction commenced after February 6, 1998 – Upon startup or June 17, 2002, whichever date is later

Area  $\rightarrow$  Major HAP Source

Construction or reconstruction of the affected unit commenced before February 6, 1998, causing source to become major -3 years after becoming major Construction or reconstruction of the affected unit commenced after February 6, 1998, causing source to become major - Upon startup

Limited Requirements/Exemptions

Actual average benzene emissions from glycol dehydrators < 1 tpy

Applicability to Source

Not Subject – CGP is not a major source of HAP emissions – The potential for flash emissions on site from dehydration unit has PTE < 10/25 tpy of Single HAP/Total HAPs. According to Chipeta Processing unit DEHY-LO meets the exemption criteria for actual average benzene emissions from the glycol dehydrators < 1 tpy.

#### June 15, 2004 -> MACT ZZZZ for Reciprocating Internal Combustion Engines (RICE) Promulgated

#### Affected Sources:

Existing RICE  $\geq$  500 bhp, located at major sources of HAP emissions, constructed or reconstructed on or before 12/19/2002 New/Reconstructed RICE  $\geq$  500 bhp, located at major sources of HAP emissions, constructed or reconstructed after 12/19/2002

Final Compliance Dates

Existing lean burn RICE – Exempt

Existing rich burn RICE – June 15, 2007

New or reconstructed rich or lean burn RICE constructed on or before August 16, 2004 New or reconstructed rich or lean burn RICE constructed after August 16, 2004 – upon startup

New of reconstructed fich of lean burn RICE constructed after August 16, 2004 – upon

Applicability to Source

Not Subject – According to Chipeta Processing, there are no RICE in operation at CGP.

#### September 9, 2004 – Self Disclosure Letter Sent to EPA

Kerr-McGee disclosed to EPA, pursuant to EPA's policy titled "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations", potential Clean Air Act violations at two facilities located in the Uintah Basin of Utah.

December 2007 $\rightarrow$ Chipeta Gas Plant Commenced Operations									
	PTE (tpy)								
	NO <sub>x</sub> CO VOC HAPs CH								
H-781 – 16.5 MMBtu/hr Heat Medium Oil Heater	6.4	5.4	0.4	0.0	0.00				
H-782 – 8.0 MMBtu/hr Heat Medium Oil Heater	3.0	2.5	0.2	0.0	0.00				
TK-1601 – 10,000 bbl Condensate Storage Tank	0.0	0.0	29.2	1.5	0.0				
TK-1611 – 10,000 bbl DNG Storage Tank	0.0	0.0	11.6	3.3	0.0				
TK-1621 – 10,000 bbl DNG Storage Tank	0.0	0.0	11.6	3.3	0.0				
L-2 – DNG Truck Loadout	0.0	0.0	13.8	3.9	0.0				
FUG – Fugitive Emissions (equipment leaks from valves, seals, flanges, open- ended lines, etc)	0.0	0.0	45.2	1.0	0.00				
IEUs: EG Storage Tank, Methanol Storage Tank, 3 – Produced Water Tanks, Heat Medium Oil Tank, FL-991 Plant Flare, L-1 Truck Loadout (Condensate), DEHY LO Low Emission EG Debudgeter	0.0	0.2	4.1	0.1	0.00				
Den 1-LO Low Emission EG Denydrator December 2007 PTE Cumulative Totals	9.4	8.1	<sup>4.1</sup>	13.1	0.00				
PSD Status of Facility: Not Subject       HAP Status of Facility per Subpart HH: Area (HH Exempt: <1 tpy Benzene)       HAP Status of Facility: Subject*									
*Initial part 71 application submitted on November 17, 2008									

## January 3, 2007 $\rightarrow$ MACT HH Amendments to Include Area Sources of Oil & Gas Production Facilities Promulgated (HAP < 10/25 tpy)

#### Affected Sources:

Triethylene Glycol (TEG) dehydration units

Final Compliance Dates

Construction or reconstruction of the affected unit located in an Urban-1 county commenced before February 6, 1998:

Located w/i Urban Area (UA) Plus Offset and Urban Cluster (UC) boundary - January 4, 2010

Not Located w/i UA Plus Offset and UC boundary - January 5, 2009

Construction or reconstruction of the affected unit located in an Urban-1 county commenced on or after February 6, 1998 – Upon startup or January 3, 2007, whichever date is later.

Construction or reconstruction of the affected unit not located in an Urban-1 county commenced before July 8, 2005: Located w/i UA Plus Offset and UC boundary – January 4, 2010

Not Located w/i UA Plus Offset and UC boundary - January 5, 2009

#### Limited Requirements/Exemptions

Actual average benzene emissions from glycol dehydrators < 1 tpy

#### Applicability to Source

Not Subject – CGP is not a major source of HAP emissions – The potential for flash emissions on site from dehydration unit has PTE < 10/25 tpy of Single HAP/Total HAPs. According to Chipeta Processing unit DEHY-LO meets the exemption criteria for actual average benzene emissions from the glycol dehydrators < 1 tpy.

# June 13, 2007 –NSPS for Small Industrial-Commercial-Institutional Steam Generating Units Promulgated at 40 CFR Part 60, Subpart Dc (NSPS Dc)

(the 6/13/2007 rules form the basis of the current regulations)

#### Applicability:

Each steam generating unit that commenced construction, modification, or reconstruction after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW)(100 million Btu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

Heat recovery steam generators (HRSG) that are associated with combined cycle gas turbines and meet the applicability requirements of NSPS KKKK are not subject to this subpart.

Final Compliance Date: 180 days after initial startup

Applicability to Source:

Subject - CGP operates steam generating units with a maximum design heat input between 10 and 100 MMBtu/hr.

January 18 2008 - MACT 7777 Amendments Promulgated to Include:
January 10, 2000 $\rightarrow$ MACT <u>ELEE</u> Amendments i romungateu to include. Area Sources (HAP < 25 thy & for any size engine)
Mation Sources (HAT $< 25$ tpy or for any size engine)
Major Sources (mAr > 25 tpy & for engines ≤ 500 np)
Affected Sources:
New or reconstructed RICE of any hp at area sources of HAP emissions, constructed or reconstructed on or after 6/12/06
New or reconstructed RICE $\leq$ 500 hp at major sources of HAP emissions, constructed or reconstructed on or after 6/12/06
Final Compliance Dates
Final Computate Dates
Major HAP source
Start up a new or reconstructed RICE $\leq$ 500 hp before January 18, 2008 – January 18, 2008
Start up a new or reconstructed RICE $\leq$ 500 hp after January 18, 2008 – upon startup
Area HAP source
Start up a new or reconstructed RICE of any hp before January 18, 2008 – January 18, 2008
Start up a new or reconstructed RICE of any hp after January 18, 2008 – upon startup
Applicability to Source
Not Subject – According to Chipeta Processing, there are no RICE in operation at CGP.

## January 18, 2008 $\rightarrow$ NSPS JJJJ for Spark Ignition (SI) Internal Combustion Engines (ICE) and Amendments to NESHAP for RICE Promulgated

Affected Sources:

Stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).

Compliance Date - Upon startup

Applicability to Source

Not Subject – According to Chipeta Processing, CGP does not operate any SI ICE at the facility.

#### March 27, 2008 - Consent Decree Entered to Address Potential Clean Air Act Violations

A consent decree was negotiated between Kerr-McGee Corp., State of Colorado, and U.S. EPA to settle the alleged violations of the CAA identified in Kerr-McGee's self disclosure notification at various other facilities. The consent decree was lodged on May 17, 2007 and entered into the federal district court of Colorado on March 27, 2008 (Civil Action No.: 1:07-CV-01034). CGP is subject to the requirements of the consent decree through its parent company Anadarko.

Spring 2009 → Train 2 Commenced Operations									
	PTE (tpy)								
	NO <sub>x</sub>	СО	VOC	HAPs	CH <sub>2</sub> O				
H-2170 – 17.38 MMBtu/hr Regen Gas Heater	+6.8	+5.7	+0.4	+0.0	+0.0				
E-2590 – 7.5 MMBtu/hr Amine Reboiler	+2.9	+2.5	+0.2	+0.0	+0.0				
$TK-5050 - CO_2 Vent$	+0.0	+0.0	+1.7	+1.7	+0.0				
PTE of Modification	+9.7	+8.2	+2.3	+1.7	+0.0				
Spring 2009 PTE Cumulative Totals	19.1	16.3	118.4	14.8	0.0				
Status of Facility:         Not Subject         HAP Status of Facility:         Minor									
HAP Status of Facility per Subpart HH: Area (HH Exempt: < 1 tpy Benzene) Title V Status of Facility: Subject									

March 10, 2010 $\rightarrow$ Updated Part 71 Permit Application Received								
	PTE (tpy)							
	NO <sub>x</sub>	СО	VOC	HAPs	CH <sub>2</sub> O			
H-781 – 16.5 MMBtu/hr Heat Medium Oil Heater	6.4	5.4	0.4	0.0	0.0			
H-782 – 8.0 MMBtu/hr Heat Medium Oil Heater	3.0	2.5	0.2	0.0	0.0			
H-2170 – 17.38 MMBtu/hr Regen Gas Heater	6.8	5.7	0.4	0.0	0.0			
E-2590 – 7.5 MMBtu/hr Amine Reboiler	2.9	2.5	0.2	0.0	0.0			
TK-1601 – 10,000 bbl Condensate Storage Tank	0.0	0.0	29.2	1.5	0.0			
TK-1611 – 10,000 bbl DNG Storage Tank	0.0	0.0	11.6	3.3	0.0			
TK-1621 – 10,000 bbl DNG Storage Tank	0.0	0.0	11.6	3.3	0.0			
L-2 – DNG Truck Loadout	0.0	0.0	13.8	3.9	0.0			
$TK-5050 - CO_2$ Vent	0.0	0.0	1.7	1.7	0.0			
FUG – Fugitive Emissions (equipment leaks from valves, seals, flanges, open- ended lines, etc)	0.0	0.0	45.2	1.0	0.0			
IEUs: EG Storage Tank, Methanol Storage Tank, 3 – Produced Water Tanks, Heat Medium Oil Tank, FL-991 Plant Flare, L-1 Truck Loadout (Condensate), DEHY-LO Low Emission EG Dehydrator	0.0	0.2	4.1	0.1	0.00			
March 2010 PTE Cumulative Total*         19.1         16.3         118.4         14.8								
PSD Status of Facility: Not Subject       HAP Status of Facility: Minor         HAP Status of Facility per Subpart HH: Area (HH Exempt: <1 tpy Benzene)								

#### March 3, 2010 – MACT ZZZZ Amendments Promulgated to Include:

Existing CI ICE at Area Sources (HAP < 10/25 tpy & for any size engine) Existing CI ICE at Major Sources (HAP > 10/25 tpy & for engines  $\leq 500$  HP) Revisions to Startup, Shutdown, & Malfunction Requirements for All RICE

Affected Sources (Additional to 2004 MACT ZZZZ Promulgation): Existing Stationary CI ICE of any hp at area sources of HAP emissions, constructed or reconstructed before June 12, 2006 Existing Stationary CI ICE ≤ 500 hp at major sources of HAP emissions, constructed or reconstructed before June 12, 2006 Existing Non-Emergency CI ICE > 500 hp at major sources of HAP emissions, constructed or reconstructed before December 19, 2002

Final Compliance Dates

Existing Stationary CI ICE of any hp at area sources of HAP emissions – May 3, 2013 Existing Stationary CI ICE  $\leq$  500 hp at major sources of HAP emissions – May 3, 2013 Existing Non-Emergency CI ICE > 500 hp at major sources of HAP emissions – May 3, 2013

Applicability to Source

Not Subject - According to Chipeta Processing, CGP does not operate any CI ICE.

#### August 20, 2010 – MACT ZZZZ Amendments Promulgated to Include: Existing SI ICE at Area Sources (HAP < 10/25 tpy & for any size engine) Existing SI ICE at Major Sources (HAP > 10/25 tpy & for engines ≤ 500 HP)

Affected Sources (Additional to March 2010 MACT ZZZ Promulgation): Existing Stationary SI ICE of any hp at area sources of HAP emissions, constructed or reconstructed before June 12, 2006 Existing Stationary SI ICE ≤ 500 hp at major sources of HAP emissions, constructed or reconstructed before June 12, 2006

Final Compliance Dates

Existing Stationary SI ICE of any hp at area sources of HAP emissions – October 19, 2013 Existing Stationary SI ICE  $\leq$  500 hp at major sources of HAP emissions – October 19, 2013

Applicability to Source

Not Subject – According to Chipeta Processing, CGP does not operate any SI ICE at the facility.

#### f. Potential to emit

Pursuant to 40 CFR 52.21, potential to emit (PTE) is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material

combusted, stored, or processed, shall be treated as part of its design <u>if</u> the limitation, or the effect it would have on emissions, is federally enforceable. Independently enforceable applicable requirements are considered enforceable to the extent that the source is in compliance with the standard. In addition, beneficial reductions in non-targeted pollutants resulting from compliance with an independently enforceable applicable requirement may be counted towards PTE provided the emission reduction of the non-targeted pollutant is enforceable as a practical matter. See the 1995 guidance memo signed by John Seitz, Director of OAQPS titled, "Options for Limiting Potential to Emit of a Stationary Source under Section 112 and Title V of the Clean Air Act."

The PTE for CGP was listed by Chipeta Processing in Forms "GIS", "PTE", and the various forms "EMISS" of the part 71 operating permit application. Table 4 shows PTE data broken down by each individual emission unit, as well as the total facility-wide PTE.

		Regulated Air Pollutants in tpy (uncontrolled)										
Unit ID	NO <sub>X</sub>	VOC <sup>1</sup>	SO <sub>2</sub>	PM <sub>10</sub>	СО	Lead	Total HAPs	CH <sub>2</sub> O	Largest Single HAP (n-hexane)			
H-781	6.4	0.4	0.04	0.5	5.4	0.0	0.0	0.0	0.0			
H-782	3.0	0.2	0.02	0.2	2.5	0.0	0.0	0.0	0.0			
H-2170	6.8	0.4	0.04	0.5	5.7	0.0	0.0	0.0	0.0			
E-2590	2.9	0.2	0.02	0.2	2.5	0.0	0.0	0.0	0.0			
TK-1601	0.0	29.2	0.0	0.0	0.0	0.0	1.5	0.0	0.0			
TK-1611	0.0	11.6	0.0	0.0	0.0	0.0	3.3	0.0	0.1			
TK-1621	0.0	11.6	0.0	0.0	0.0	0.0	3.3	0.0	0.1			
L-2	0.0	13.8	0.0	0.0	0.0	0.0	3.9	0.0	3.2			
TK-5050	0.0	1.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0			
FUG	0.0	45.2	0.0	0.0	0.0	0.0	1.0	0.0	0.2			
IEUs	0.0	4.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0			
TOTAL	19.1	118.4	0.1	1.4	16.3	0.0	14.8	0.0	3.6			

 Table 4 - Potential to Emit (uncontrolled)

 Chipeta Processing, LLC – Chipeta Gas Plant

1. Emissions for DEHY-LO based on < 1 tpy VOC limit in consent decree. DEHY-LO PTE = 1 tpy VOC and is incorporated in the PTE for IEUs.

The facility-wide PTE for CGP without considering controls is:

Nitrogen oxides  $(NO_x) - 19.1$  tpy Volatile organic compounds (VOC) - 118.4 tpy Lead - 0.0 tpy Total hazardous air pollutants (HAPs) - 14.8 tpy Largest Single HAP (n-hexane) - 3.6 tpy Carbon monoxide (CO) – 16.3 tpy Small particulates (PM<sub>10</sub>) – 1.4 tpy Sulfur dioxide (SO<sub>2</sub>) – 0.1 tpy Formaldehyde (CH<sub>2</sub>O) – 0.0 tpy

Table 5 shows the allowable PTE based on enforceable controlled emission limits set forth in applicable requirements and the consent decree.

# Table 5 - Potential to Emit (allowable)Chipeta Processing, LLC – Chipeta Gas Plant

Emission Unit ID	Regulated Air Pollutants in tpy (allowable)										
	NO <sub>X</sub>	VOC <sup>1,2</sup>	SO <sub>2</sub>	$PM_{10}$	со	Lead	Total HAPs	CH <sub>2</sub> O	Largest Single HAP (n-hexane)		
H-781	6.4	0.4	0.04	0.5	5.4	0.0	0.0	0.0	0.0		
H-782	3.0	0.2	0.02	0.2	2.5	0.0	0.0	0.0	0.0		
H-2170	6.8	0.4	0.04	0.5	5.7	0.0	0.0	0.0	0.0		
E-2590	2.9	0.2	0.02	0.2	2.5	0.0	0.0	0.0	0.0		
TK-1601	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TK-1611	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1		
TK-1621	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1		
L-2	0.0	13.8	0.0	0.0	0.0	0.0	3.9	0.0	3.2		
TK-5050	0.0	1.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0		
FUG	0.0	23.5	0.0	0.0	0.0	0.0	0.5	0.0	0.2		
IEUs	0.0	4.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0		
TOTAL	19.1	45.3	0.1	1.4	16.3	0.0	6.4	0.0	3.6		

1. Emissions for DEHY-LO based on < 1 tpy VOC limit in consent decree. DEHY-LO PTE = 1 tpy VOC and is incorporated in the PTE for IEUs.

2. Controlled VOC emissions from storage tanks calculated using EPA Tanks 4.09d estimates for internal floating roof tanks, enforceable through NSPS subpart Kb.

 Controlled fugitive VOC emissions estimates calculated using control efficiencies from EPA's guidance document "Protocol for Equipment Leak Emission Estimates" (EPA Document No. 453/R-95-017), enforceable through NSPS subpart KKK.

The facility-wide PTE for CGP with enforceable controls is:

Nitrogen oxides  $(NO_x) - 19.1$  tpy Volatile organic compounds (VOC) - 45.3 tpy Lead - 0.0 tpy Total hazardous air pollutants (HAPs) - 6.4 tpy Largest Single HAP (n-hexane) - 3.6 tpy Carbon monoxide (CO) – 16.3 tpy Small particulates ( $PM_{10}$ ) – 1.4 tpy Sulfur dioxide ( $SO_2$ ) – 0.1 tpy Formaldehyde ( $CH_2O$ ) – 0.0 tpy

### 2. Tribe Information

### a. Indian country

CGP is located in "Indian country" as defined at 18 U.S.C. §1151, within the exterior boundaries of the Uintah and Ouray Reservation. The Ute Tribe does not have a federallyapproved Clean Air Act (CAA) title V operating permits program nor does EPA's approval of the State of Utah's title V program extend to Indian country. Thus, EPA is the appropriate governmental entity to issue the title V permit to this facility.

### b. The reservation

The Uintah and Ouray Reservation consists of two separate but contiguous tracts of land set aside in the nineteenth century for the exclusive use and occupancy of the three bands of Indians (Uncompany, Uintah and Whiteriver) who make up the present-day Ute Indian Tribe. The Uintah Valley Reservation along the Duchesne River was established in 1861 and confirmed by Congress in the Act of May 5, 1864. An Executive Order, dated January 5, 1882, established the Uncompany Reservation for the use and occupancy of the Uncompany Utes.

#### c. Tribal government

The Ute Tribe operates under a constitutional government organized pursuant to the authority of section 16 of the Indian Reorganization Act of June 16, 1934, 48 Stat. 986. The Tribe adopted its Constitution and By-Laws on December 19, 1936, for the government, protection and common welfare of the Ute Indian Tribe and its members. It was approved by the Secretary of the Interior on January 19, 1937.

The governing body of the Ute Tribe consists of six individuals who are elected to the Ute Tribal Business Committee. Members of the Business Committee are elected by band: two representatives each from the Uncompany, Uintah and Whiteriver Bands. Members are elected for a term of four (4) years by the eligible members of the respective bands. The Business Committee is responsible for the overall social, economic and natural resource development of the Reservation and for the members of the Ute Tribe. They are delegated broad powers under the Tribe's Constitution to carry out these responsibilities. The Tribe also operates an extensive tribal court system, including a lower court, a court of appeals, and a juvenile court.

### d. Local air quality and attainment status

The Uintah and Ouray Reservation either attains the national ambient air quality standard or is "unclassifiable" for all criteria pollutants. An area is unclassifiable when there is insufficient monitoring data. The Ute Indian Tribe has operated samplers to collect data for  $PM_{10}$  (particulate matter with an aerodynamic diameter less than or equal to ten micrometers). Until 2006, two stations reported daily and annual averages of  $PM_{10}$  concentrations under a grant from EPA Region 8. As of mid-2009 the Tribe began independently monitoring criteria pollutants (including particulate matter, ozone, and oxides of nitrogen) and meteorological conditions at two sites (Myton and Whiterocks). In addition, two other industry funded monitors also collect data for particulate matter, ozone, and oxides of nitrogen at the Ouray and Redwash stations.

### 3. Applicable Requirement Review

### a. Review of Federal Regulations

The following discussion addresses some of the regulations from the Code of Federal Regulations (CFR) at title 40. Note, that this discussion does not include the full spectrum of potentially applicable regulations and is not intended to represent official applicability determinations. These discussions are based on the information provided by Chipeta Processing in the part 71 application and are only intended to present the information certified to be true and accurate by the Responsible Official of this facility.

### **Prevention of Significant Deterioration (PSD)**

New major stationary sources of air pollution are required by the CAA to obtain an air pollution permit before commencing construction. A major stationary source is any source type belonging to a list of 28 source categories which emits or has the potential to emit 100 tpy or more of any pollutant subject to regulation under the CAA or any other source type which emits or has the potential to emit such pollutants in amounts equal to or greater than 250 tpy.

CGP does not belong to any of the 28 source categories. Therefore, the potential to emit threshold for determining PSD applicability for this source is 250 tpy. In its initial part 71 application, Chipeta Processing indicated that the potential emissions of any pollutant regulated under the CAA [not including pollutants listed under section 112] were below the major source PSD thresholds; therefore, this facility was not required to obtain a PSD permit for initial construction. Subsequent modifications to the facility did not trigger PSD either.

#### New Source Performance Standards (NSPS)

<u>40 CFR Part 60, Subpart A</u>: General Provisions. This subpart applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication of any standard in part 60. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 60.

As explained below, CGP is subject to 40 CFR part 60, subpart Dc, subpart Kb, and subpart KKK; therefore, the General Provisions of part 60 do apply.

<u>40 CFR Part 60, Subpart Dc</u>: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule applies to steam generating units with a maximum design heat capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. A steam generating unit is defined in this subpart as a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium.

According to Chipeta Processing, emission units H-781 and H-2170 meet the definition of a steam generating unit and have a maximum heat design capacity between 10 and 100 MMBtu/hr. Unit H-781 has a maximum heat design capacity of 16.5 MMBtu/hr and unit H-2170 has a maximum heat design capacity of 17.38 MMBtu/hr. Therefore, these units are subject to the requirements of subpart Dc.

<u>40 CFR Part 60, Subpart K</u>: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. 40 CFR part 60, subpart K does not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

The subpart does not apply to the storage vessels at CGP because according to Chipeta Processing there are no tanks at this site that were constructed prior to May 19, 1978.

<u>40 CFR Part 60, Subpart Ka</u>: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to June 23, 1984. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. Subpart Ka does not apply to petroleum storage vessels with a capacity of less than 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer.

The subpart does not apply to the storage vessels at CGP because according to Chipeta Processing there are no tanks at this site that were constructed prior to June 23, 1984.

<u>40 CFR Part 60, Subpart Kb</u>: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984. An affected facility under this subpart is each storage vessel with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids.

According to Chipeta Processing, the following 3 tanks at CGP have a storage capacity greater than 75 cubic meters and store volatile organic liquids:

- 1. TK-1601 10,000 bbl Internal Floating Roof Condensate Storage Tank;
- 2. TK-1611 10,000 bbl Internal Floating Roof DNG Storage Tank; and
- 3. TK-1621 10,000 bbl Internal Floating Roof DNG Storage Tank.

Each 10,000 bbl storage tank is approximately 1,589.873 cubic meters. As a result, units TK-1601, TK-1611, and TK-1621 are affected facilities under this rule and are subject to the applicable requirements found at 40 CFR part 60, subpart Kb.

<u>40 CFR Part 60, Subpart GG</u>: Standards of Performance for Stationary Gas Turbines. This rule applies to stationary gas turbines, with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), that commenced construction, modification, or reconstruction after October 3, 1977.

According to Chipeta Processing, there are no stationary gas turbines located at CGP; therefore, this rule does not apply.

<u>40 CFR Part 60, Subpart KKK</u>: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart establishes requirements for controlling fugitive VOC emissions from onshore natural gas processing plants.

Subpart KKK requires a source to comply with several requirements of 40 CFR 60, subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981 and on or Before November 7, 2006. Both subpart VV and subpart KKK regulate fugitive emissions of VOCs at onshore natural gas processing plants. The regulations for subpart VV are found at 40 CFR 60 §§60.480 through 60.489.

#### Natural Gas Processing Plant

Pursuant to the definitions at 40 CFR 60.631, a *natural gas processing plant* "means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, <u>or</u> both."

#### Natural Gas Liquids

Pursuant to the definitions at 40 CFR 60.631, *natural gas liquids* "means the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas." The use of "such as" in this definition indicates that this definition is inclusive of the listed hydrocarbons liquids but does not exclude all others. In fact, the definition of *natural gas liquids* found in <u>Frick's Petroleum Production Handbook, Vol. II</u> states that NGLs are divided into more specific categories, including: (1) condensate; (2) natural gasoline; and (3) liquefied petroleum gases.

#### Process Unit

Process units are defined as equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

According to an April 7, 2009 memo from Cynthia J. Reynolds, Director of the Region 8 Technical Enforcement Program to Callie A. Videtich, Director of the Region 8 Air Program, titled <u>Clarification of Applicability of 40 CFR 60</u>, <u>Subpart KKK to Dew Point and Joules</u> <u>Thompson Skids at Natural Gas Processing Operations</u>, the use of dew point or Joules Thompson (JT) skids meet the definition of "Natural Gas Processing Plant." As such, while compressor stations are typically not considered natural gas processing plants, the use of either a dew point or JT skid causes these facilities to meet the definition of natural gas processing plants and would thus be subject to the requirements of this rule.

### Applicability and Designation of Affected Facilities

The provisions of this subpart apply to the following components at onshore natural gas processing plants that commenced construction, reconstruction, or modification after January 20, 1984:

- Compressors in VOC service or wet gas service are subject to this rule. A compressor is in VOC service if it contains or contacts a process fluid that is at least 10% VOC by weight. In wet gas service means that a piece of equipment contains or contacts the field gas before the extraction step in the process.
- 2) All equipment except compressors within a process unit.

A compressor station, dehydration unit, sweetening unit, underground storage tank, field gas gathering system, or liquefied natural gas unit is covered by this subpart if it is located at an onshore natural gas processing plant. If the unit is not located at the plant site, then it is exempt from the provisions of this subpart.

## Equipment

Equipment means each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by this subpart.

Subpart KKK establishes monitoring/testing requirements, recordkeeping requirements and reporting requirements for the following components that may be located at an onshore natural gas processing plant:

- Pumps in light liquid service
- Compressors in VOC service or wet gas service
- Pressure relief devices in gas vapor service
- Sampling connection systems
- Open-ended valves or lines
- Valves in gas / vapor or light liquid service
- Pumps and valves in heavy liquid service, pressure relieve devices in light or heavy liquid service, and flanges and other connectors
- Closed vent systems and control devices
- Vapor recovery systems
- Enclosed combustion devices
- Flares

In addition, the rule establishes separate requirements for the following:

- Delay of repair of equipment for which leaks have been detected;
- Alternative means of emissions limitation for components subject to the rule; and
- Determining components that are not in VOC or wet gas service.

### Applicability to CGP

According to Chipeta Processing, CGP operates a hydrocarbon dew point control plant to extract NGLs from the field gas, and thus meets the definition of a natural gas processing plant under this subpart. Therefore, this rule does apply.

<u>40 CFR Part 60, Subpart LLL</u>: Standards of Performance for Onshore Natural Gas Processing; SO<sub>2</sub> Emissions. This rule applies to sweetening units and sulfur recovery units at onshore natural gas processing facilities. As defined in this subpart, sweetening units are process devices that separate hydrogen sulfide (H<sub>2</sub>S) and carbon dioxide (CO<sub>2</sub>) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H<sub>2</sub>S and CO<sub>2</sub>) removed by a sweetening unit.

According to Chipeta Processing, CGP does not perform sweetening or sulfur recovery at the facility. Therefore, this rule does not apply.

<u>40 CFR Part 60, Subpart JJJJ</u>: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. This subpart establishes emission standards and compliance requirements for the control of emissions from stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).

According to the information provided by Chipeta Processing, there is no SI ICE operating at CGP. Therefore, this rule does not apply.

<u>40 CFR part 60, subpart KKKK</u>: Standards of Performance for Stationary Combustion Turbines. This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005. The rule applies to stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour.

According to Chipeta Processing, there are no stationary gas turbines located at CGP; therefore, this rule does not apply.

## National Emissions Standards for Hazardous Air Pollutants (NESHAP)

<u>40 CFR Part 63, Subpart A</u>: General Provisions. This subpart contains national emissions standards for HAPs that regulate specific categories of sources that emit one or more HAP regulated pollutants under the CAA. The general provisions under subpart A apply to sources that are subject the specific subparts of part 63.

As explained below, CGP is not subject to any specific subparts of part 63; therefore, the General Provisions of subpart A do not apply.

<u>40 CFR Part 63, Subpart HH</u>: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. This subpart applies to the owners and operators of affected units located at natural gas production facilities that are major sources of HAPs, and that process, upgrade, or store natural gas prior to the point of custody transfer, or that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. The affected units are glycol dehydration units, storage vessels with the potential for flash emissions, and the group of ancillary equipment, and compressors intended to operate in volatile hazardous air pollutant service, which are located at natural gas processing plants.

## Throughput Exemption

Those sources whose maximum natural gas throughput, as appropriately calculated in 63.760(a)(1)(i) through (a)(1)(ii), is less than 18,400 standard cubic meters per day are exempt from the requirements of this subpart.

#### Source Aggregation

Major source, as used in this subpart, has the same meaning as in §63.2, except that:

- 1) Emissions from any oil and gas production well with its associated equipment and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units.
- 2) Emissions from processes, operations, or equipment that are not part of the same facility shall not be aggregated.
- 3) For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage tanks with flash emission potential shall be aggregated for a major source determination.

#### Facility

For the purpose of a major source determination, facility means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in subpart HH. Examples of facilities in the oil and natural gas production category include, but are not limited to: well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

### Production Field Facility

Production field facilities are those located prior to the point of custody transfer. The definition of custody transfer (40 CFR 63.761) means the point of transfer after the processing/treating in the producing operation, except for the case of a natural gas processing plant, in which case the point of custody transfer is the inlet to the plant.

### Natural Gas Processing Plant

A natural gas processing plant is defined in 40 CFR 63.761 as any processing site engaged in the extraction of NGLs from field gas, or the fractionation of mixed NGLs to natural gas products, or a combination of both. A treating plant or gas plant that does not engage in these activities is considered to be a production field facility.

### Major Source Determination for Production Field Facilities

The definition of major source in this subpart (at 40 CFR 63.761) states, in part, that only emissions from the dehydration units and storage vessels with a potential for flash emissions at production field facilities shall be aggregated when comparing to the major source thresholds.

For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated.

#### Area Source Applicability

40 CFR part 63, subpart HH applies also to area sources of HAPs. An area source is a HAP source whose total HAP emissions are less than 10 tpy of any single HAP or 25 tpy for all HAPs in aggregate. This subpart requires different emission reduction requirements for glycol dehydration units found at oil and gas production facilities based on their geographical location.

Units located in densely populated areas (determined by the Bureau of Census) and known as urbanized areas with an added 2-mile offset and urban clusters of 10,000 people or more, are required to have emission controls. Units located outside these areas will be required to have the glycol recirculation pump rate optimized or operators can document that PTE of benzene is less than 1 tpy.

### Applicability of Subpart HH to CGP

CGP extracts NGLs from field gas, and therefore, is considered a natural gas processing plant. NGLs and natural gas are transported to the local market via pipeline and truck loading from the plant, hence, the point of custody transfer, as defined in subpart HH, occurs at the facility. For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated for a major source determination. The total HAP emissions at the facility are below the major source thresholds of 10 tpy of a single HAP (n-hexane = 3.6 tpy) and 25 tpy of aggregated HAPs (total HAPs = 14.8 tpy). Therefore, CGP meets the definition of an area source under this rule.

For area sources, affected sources under the rule only include glycol dehydration units. Furthermore, uncontrolled actual benzene emissions from the dehydration unit at the facility are less than 1 tpy as required by the specifications set forth for low-emission dehydrators in the consent decree. As a result, the dehydration unit (DEHY-LO) at the facility is exempt from the §63.764(d) general requirements for area sources.

<u>40 CFR Part 63, Subpart HHH</u>: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This rule applies to natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user, and that are a major source of HAP emissions. Natural gas transmission means the pipelines used for long distance transport and storage vessel is a tank or other vessel designed to contain an accumulation of crude oil, condensate, intermediate hydrocarbon, liquids, produced water or other liquid and is constructed of wood, concrete, steel or plastic structural support.

This subpart does not apply to CGP, as the facility is not a major source of HAP emissions according to Chipeta Processing.

<u>40 CFR Part 63, Subpart YYYY:</u> National Emission Standards for Hazardous Air Pollutants from Stationary Combustion Turbines. This rule establishes national emission limitations and work practice standards for HAPs emitted from Stationary Combustion Turbines. The affected source includes the stationary combustion turbine located at a major source of HAP emissions.

#### Stationary Combustion Turbine

Stationary combustion turbines are defined in §63.6175 as all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system. Stationary means that the combustion turbine is not self propelled or intended to be propelled while performing its function. Stationary combustion turbines located at a research or laboratory facility, if research is conducted on the turbine itself and the turbine is not being used to power other applications at the research or laboratory facility.

#### Major Source

Major source for purposes of this subpart has the same meaning as provided in 40 CFR 63.2 with the exception that emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are contiguous or are under common control.

### Applicability to CGP

According to Chipeta Processing, there are no stationary combustion turbines located at CGP; therefore, this rule does not apply.

<u>40 CFR Part 63, Subpart ZZZZ (MACT ZZZZ)</u>: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This rule establishes standards and operating limitations for HAPs emitted from stationary SI ICE and stationary compression ignition internal combustion engines (CI ICE).

According to the information provided by Chipeta Processing, there is no RICE operating at CGP. Therefore, this rule does not apply. Compression at CGP is performed by electric residue compressors.

### **Compliance Assurance Monitoring (CAM) Rule**

<u>40 CFR Part 64</u>: Compliance Assurance Monitoring Provisions. According to 40 CFR 64.2(a), the CAM rule applies to <u>each</u> Pollutant Specific Emission Unit (PSEU) at a major source that is required to obtain a part 70 or part 71 permit if the unit satisfies all of the following criteria:

1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant other than an emissions limitation or standard that is exempt under §64.2(b)(1);

"§64.2(b)(1): Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards:

- (i) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act;
- *(ii) Stratospheric ozone protection requirements under title VI of the Act;*
- (iii) Acid Rain Program requirements pursuant to Sections 404, 405, 406, 407(a), 407(b) or 410 of the Act;
- (iv) Emissions limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions with a source or between sources;
- (v) An emissions cap that meets the requirements specified in (70.4(b)(12)) or (71.6(a)(13)(iii)) of this chapter;
- (vi) Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1."

*"§64.1: <u>Continuous compliance method</u> means a method, specified by the applicable standard or an applicable permit condition, which:* 

Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and
 Provides data either in units of the standard or correlated directly with the compliance limit."

- 2) The unit uses a control device to achieve compliance with any such limit or standard; and
- 3) The unit has pre-control device emissions of the applicable regulated pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Since no PSEU at CGP has pre-controlled emissions that exceed or equal 100% of major source thresholds, CGP is not subject to CAM requirements.

## **Chemical Accident Prevention Program**

<u>40 CFR Part 68</u>: Chemical Accident Prevention Provisions. The goal of the Chemical Accident Prevention and Risk Management Program is to prevent accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures and to mitigate the severity of releases that do occur. The 1990 Amendments to the CAA require EPA to issue a rule specifying the types of actions to be taken by facilities to prevent accidental releases of such hazardous chemicals into the atmosphere and reduce their potential impact on the public and the environment. This is the 40 CFR part 68 rule (part 68). In general, part 68 requires that facilities subject to the rule:

1. Develop and implement a risk management program and maintain documentation of the program at the site. The risk management program should include an analysis of the potential offsite consequences of an accidental release, a five-year accident history, a release prevention program, and an emergency response program.

- 2. Develop and submit a risk management plan (RMP), which includes registration information, to EPA no later than June 21, 1999, or the date on which the facility first has more than a threshold quantity in a process, whichever is later. The RMP provides a summary of the risk management program and should be available to federal, state, and local government agencies.
- 3. Continue to implement the risk management program and update their RMPs periodically or when processes change, as required by the rule.

This rule applies to any source that has more than a threshold quantity of a regulated substance as identified at 40 CFR 68.130. According to Chipeta Processing, the total storage capacity of the NGL pressurized storage vessel exceeds the 10,000 pound threshold for flammable substances; therefore, CGP is subject to the requirement to develop and submit a risk management plan.

#### **Stratospheric Ozone and Climate Protection**

<u>40 CFR Part 82, Subpart F</u>: Air Conditioning Units. Based on the information provided by Chipeta Processing, air conditioning units are in use at CGP. Should Chipeta Processing perform any maintenance, service, repair, or disposal of any equipment containing chlorofluorocarbons (CFCs), or contract with someone to do this work, CGP must comply with the standards of part 82, subpart F for recycling and emissions reduction.

<u>40 CFR Part 82, Subpart H</u>: Halon Fire Extinguishers. Based on information provided by Chipeta Processing, there are no halon fire extinguishers at CGP. However, should Chipeta Processing obtain any halon fire extinguishers, then it must comply with the standards of 40 CFR part 82, subpart H for halon emissions reduction, if it services, maintains, tests, repairs, or disposes of equipment that contains halons or uses such equipment during technician training. Specifically, Chipeta Processing would be required to comply with 40 CFR part 82 and submit an application for a modification to this title V permit.

### **Mandatory Greenhouse Gas Reporting**

<u>40 CFR Part 98</u>: Mandatory Greenhouse Gas Reporting. This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 71.2, neither 40 CFR part 98, nor CAA §307(d)(1)(V), the CAA authority under which 40 CFR part 98 was promulgated, are listed as applicable requirements for the purpose of title V permitting. Although the rule is not an applicable requirement under 40 CFR part 71, the source is not relieved from the requirement to comply with the rule separately from compliance with their part 71 operating permit. It is the responsibility of each source to determine applicability to part 98 and to comply, if necessary.

### b. Conclusion

Since CGP is located in Indian country, the State of Utah's implementation plan does not apply to this source. In addition, no Tribal Implementation Plan (TIP) has been submitted and approved for the Ute Indian Tribe, and EPA has not promulgated a Federal Implementation Plan (FIP) for the area of jurisdiction governing the Uintah & Ouray Indian Reservation. Therefore, CGP is not subject to any implementation plan. Based on the information provided in Chipeta Processing's applications for CGP, EPA has determined that the facility is subject only to those applicable federal CAA programs discussed in 3.a., above.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Regional Offices will, as necessary and appropriate, promulgate FIPs that will establish federal requirements for sources in specific areas. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop TIPs for approval under the Tribal Authority Rule. EPA intends that its federal regulations created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

## 4. Consent Decree – Civil Action No. 1:07-CV-1034

CGP is subject, or potentially subject, to certain provisions of federal Consent Decree Civil Action No. 1:07-CV-01034, lodged on May 17, 2007 and entered in the United States District Court on March 27, 2008. A copy of the Consent Decree is attached as an appendix to the permit. The following discussions summarize the provisions of the Consent Decree, as applicable to CGP.

# **Emission Reduction Requirements – Low-Emission Dehydrators (Section IV.A. of Consent Decree)**

New facilities in the Uintah Basin constructed after the lodging date of the consent decree are required to install and operate Low-Emission Dehydrators. CGP commenced operations after May 17, 2007 and is therefore subject to this requirement. Low-Emission Dehydrators shall meet the specifications set forth in Appendix C of the consent decree (attached). A Low-Emission Dehydrator shall mean a dehydration unit that:

- 1. incorporates an integral vapor recovery function such that the dehydrator cannot operate independent of the vapor recovery function;
- 2. either returns the captured vapors to the inlet of the facility where such dehydrator is located or routes the captured vapors to that facility's fuel gas supply header; and
- 3. has a PTE less than 1.0 tpy of VOCs, inclusive of VOC emissions from the reboiler burner.

According to Chipeta Processing's part 71 application update submitted on March 10, 2010, CGP operates a Low-Emission Dehydrator that meets the above criteria.

# **Emission Reduction Requirements – Compressor Engines in the Uintah Basin (Section IV.D of Consent Decree)**

Any new RICE with a nameplate rating of 500 bhp or greater installed at any facility in the Uintah Basin after the lodging date of the consent decree shall be lean-burn or achieve comparable emission reductions, and be equipped with catalyst controls. The consent decree requires the following emission limits for the oxidation catalysts installed:

• CO: 93% reduction efficiency at  $\geq$  90% operating load

According to Chipeta Processing's initial part 71 application submitted on November 17, 2008 and additional information submitted on March 30, 2009, CGP does not currently operate any natural gas-fired RICE.

## **Pneumatic Controllers (Section IV.E. of Consent Decree)**

The consent decree requires Chipeta Processing to install and operate low- or no-bleed pneumatic controllers to conserve natural gas at all newly constructed facilities in the Uintah Basin after the lodging date of the consent decree through January 1, 2017. However, Chipeta Processing need not install low- or no-bleed controllers at sites for which Chipeta Processing can demonstrate that the use of such pneumatic devices is not technically or operationally feasible.

## Sulfur Removal Technology in the Uintah Basin (Section IV.F. of Consent Decree)

Chipeta Processing is required to install and operate solid-bed or liquid-bed sulfur removal processes when necessary to remove hydrogen sulfide ( $H_2S$ ) from natural gas at facilities in the Uintah Basin, in lieu of amine-based sulfur removal with flaring of removed  $H_2S$ . According to Chipeta Processing's initial part 71 application submitted on November 17, 2008 and all subsequent application updates and additional information received through October 12, 2010, CGP does not operate any sulfur removal processes.

### **Record Keeping and Reporting Requirements (Various Sections of Consent Decree)**

CGP is subject to the record keeping and reporting requirements of the consent decree. The consent decree requires Chipeta Processing to maintain records and information adequate to demonstrate its compliance with the consent decree requirements. Chipeta Processing is also required to submit an Annual Report of the status of its compliance with the consent decree requirements. Additionally, Chipeta Processing is required to notify EPA in writing of any violation(s), potential violation(s), or reason to believe that it may violate any requirement of the consent decree. The reporting requirements of the Consent Decree are applicable until termination of the Consent Decree, or upon written agreement by EPA where a Consent Decree reporting requirement is added to a final Title V permit or other non-Title V permit such that the permit meets or exceeds the Consent Decree reporting requirement.

In accordance with the Consent Decree, EPA will incorporate the above cited provisions of the Consent Decree into a federally enforceable minor NSR permit. The NSR permit conditions will then constitute applicable requirements for the purposes of title V and 40 CFR part 71 and will be incorporated into the part 71 permit.

## 5. EPA Authority

#### a. General authority to issue part 71 permits

Title V of the CAA requires that EPA promulgate, administer, and enforce a federal operating permits program when a state does not submit an approvable program within the time frame set by title V or does not adequately administer and enforce its EPA-approved program. On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR 71 setting forth the procedures and terms under which the Agency would administer a federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or tribal agency has not developed an approved part 70 program. Unlike states, Indian tribes are not required to develop operating permits programs, though EPA encourages tribes to do so. See, e.g., Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA will administer and enforce a part 71 federal operating permits program for stationary sources until a tribe receives approval to administer their own operating permits programs.

### 6. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

### 7. Public Participation

#### a. Public notice

There was a 30-day public comment period for actions pertaining to the draft permit. Public notice was given for the draft permit by mailing a copy of the notice to the permit applicant, the affected state, tribal and local air pollution control agencies, the city and county executives, the state and federal land managers and the local emergency planning authorities which have jurisdiction over the area where the source is located. A copy of the notice was also provided to all persons who have submitted a written request to be included on the mailing list.

If you would like to be added to our mailing list to be informed of future actions on these or other Clean Air Act permits issued in Indian country, please send your name and address to the contact listed below:

> Part 71 Lead U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

Public notice was published in the <u>Ute Bulletin</u> and <u>Vernal Express</u> on February 2, 2011, giving opportunity for public comment on the draft permit and the opportunity to request a public hearing.

#### b. Opportunity for comment

Members of the public were given an opportunity to review a copy of the draft permit prepared by EPA, the application, this Statement of Basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents were available at:

> Uintah County Clerk's Office 147 East Main Street, Suite 2300 Vernal, Utah 84078

and

Ute Indian Tribe Environmental Programs Office 910 South 7500 East Fort Duchesne, Utah 84026

and

US EPA Region 8 Air Program Office 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

All documents were available for review at the U.S. EPA Region 8 office Monday through Friday from 8:00 a.m. to 4:00 p.m. (excluding federal holidays).

Any interested person could submit written comments on the draft part 71 operating permit during the public comment period to the Part 71 Permit Contact at the address listed above. EPA keeps a record of the commenters and of the issues raised during the public participation process. All comments have been considered and answered by EPA in making the final decision on the permit.

Anyone, including the applicant, who believed any condition of the draft permit was inappropriate could raise all reasonable ascertainable issues and submit all arguments supporting their position by the close of the public comment period. Any supporting materials submitted must have been included in full and may not have been incorporated by reference, unless the material was already submitted as part of the administrative record in the same proceeding or consisted of state or federal statutes and regulations, EPA documents of general applicability, or other generally available reference material.

No comments on the draft permit and Statement of Basis were received during the public comment period.

#### c. Opportunity to request a hearing

A person could submit a written request for a public hearing to the Part 71 Permit Contact, at the address listed in section 8.a above, by stating the nature of the issues to be raised at the public hearing. No request for a public hearing was received. EPA did not receive any requests for a public hearing during the public comment period.

#### d. Appeal of permits

Within 30 days after the issuance of a final permit decision, any person who filed comments on the draft permit or participated in the public hearing may petition to the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or participate in the public hearing may petition for administrative review, only if the changes from the draft to the final permit decision or other new grounds were not reasonably foreseeable during the public comment period. The 30-day period to appeal a permit begins with EPA's service of the notice of the final permit decision.

The petition to appeal a permit must include a statement of the reasons supporting the review, a demonstration that any issues were raised during the public comment period, a demonstration that it was impracticable to raise the objections within the public comment period, or that the grounds for such objections arose after such a period. When appropriate, the petition may include a showing that the condition in question is based on a finding of fact or conclusion of law which is clearly erroneous; or, an exercise of discretion, or an important policy consideration that the Environmental Appeals Board should review.

The Environmental Appeals Board will issue an order either granting or denying the petition for review, within a reasonable time following the filing of the petition. Public notice of the grant of review will establish a briefing schedule for the appeal and state that any interested person may file an amicus brief. Notice of denial of review will be sent only to the permit applicant and to the person requesting the review. To the extent review is denied, the conditions of the final permit decision become final agency action.

A motion to reconsider a final order shall be filed within 10 days after the service of the final order. Every motion must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors. Motions for reconsideration shall be directed to the Administrator rather than the Environmental Appeals Board. A motion for reconsideration shall not stay the effective date of the final order unless it is specifically ordered by the Board.

#### e. Petition to reopen a permit for cause

Any interested person may petition EPA to reopen a permit for cause, and EPA may commence a permit reopening on its own initiative. EPA will only revise, revoke and reissue, or terminate a permit for the reasons specified in 40 CFR 71.7(f) or 71.6(a)(6)(i). All requests must be in writing and must contain facts or reasons supporting the request. If EPA decides the request is not justified, it will send the requester a brief written response giving a reason for the decision. Denial of these requests is not subject to public notice, comment, or hearings. Denials can be informally appealed to the Environmental Appeals Board by a letter briefly setting forth the relevant facts.

### f. Notice to affected states/tribes

As described in 40 CFR 71.11(d)(3)(i), public notice was given by mailing a copy of the notice to the air pollution control agencies of affected states, tribal and local air pollution control agencies that have jurisdiction over the area in which the source is located, the chief executives of the city and county where the source is located, any comprehensive regional land use planning agency and any state or Federal land manager whose lands may be affected by emissions from the source. The following entities were notified:

- State of Colorado, Department of Public Health and Environment
- State of Utah, Department of Environmental Quality
- State of Wyoming, Department of Environmental Quality
- Uintah County, County Clerk
- National Park Service, Air, Denver, CO
- U.S. Department of Agriculture, Forest Service, Rocky Mountain Region
- WildEarth Guardians
- Ute Indian Tribe