



CONSTRUCTION PERMIT

Permit number: **18WE0486** Issuance: **1**

Date issued: **August 16, 2018**

Issued to: **Aka Energy Group, LLC**

Facility Name: **Speer Compressor Station**
 Plant AIRS ID: **123/9DF7**
 Physical Location: **SW SEC 31 T4N R65W**
 County: **Weld County**
 General Description: **Natural Gas Compressor Station**

Equipment or activity subject to this permit:

Facility Equipment ID	AIRS Point	Equipment Description	Emissions Control Description
FL-350	003	Blowdown emissions from condensate stabilizer	Enclosed flare

This permit is granted subject to all rules and regulations of the Colorado Air Quality Control Commission and the Colorado Air Pollution Prevention and Control Act (C.R.S. 25-7-101 et seq), to this specific general terms and conditions included in this document and the following specific terms and conditions.

REQUIREMENTS TO SELF-CERTIFY FOR FINAL AUTHORIZATION

1. YOU MUST notify the Air Pollution Control Division (the Division) no later than fifteen days of the latter of commencement of operation or issuance of this permit, by submitting a Notice of Startup form to the Division for the equipment covered by this permit. The Notice of Startup form may be downloaded online at www.colorado.gov/pacific/cdphe/other-air-permitting-notice. Failure to notify the Division of startup of the permitted source is a violation of Air Quality Control Commission (AQCC) Regulation Number 3, Part B, Section III.G.1. and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) of the latter of commencement of operation or issuance of this permit, compliance with the conditions contained in this permit shall be demonstrated to the Division. It is the owner or operator's responsibility to self-certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit. A self certification form and guidance on how to self-certify compliance as required by this permit may be obtained online at www.colorado.gov/pacific/cdphe/air-permit-self-certification. (Regulation Number 3, Part B, Section III.G.2.)



3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline. (Regulation Number 3, Part B, Section III.F.4.)
4. Upon commencement of operation, the operator shall install a dedicated flow meter to monitor and record volumetric flow rate of natural gas vented during blowdown events covered by this permit.
5. The operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Regulation Number 3, Part B, Section III.E.)
6. The operator shall retain the permit final authorization letter issued by the Division, after completion of self-certification, with the most current construction permit. This construction permit alone does not provide final authority for the operation of this source.

EMISSION LIMITATIONS AND RECORDS

7. Emissions of air pollutants shall not exceed the following limitations. (Regulation Number 3, Part B, Section II.A.4.)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year				Emission Type
		PM2.5	NO _x	VOC	CO	
FL-350	003	--	--	4.3	1.1	Point

Note: See “Notes to Permit Holder” for information on emission factors and methods used to calculate limits.

Compliance with the annual limits for criteria air pollutants shall be determined on a rolling twelve (12) month total. By the end of each month a new twelve month total is calculated based on the previous twelve months’ data. The permit holder shall calculate actual emissions each month and keep a compliance record on site or at a local field office with site responsibility for Division review.

8. The emission points in the table below shall be operated and maintained with the emissions control equipment as listed in order to reduce emissions to less than or equal to the limits established in this permit. (Regulation Number 3, Part B, Section III.E.)

Facility Equipment ID	AIRS Point	Control Device	Pollutants Controlled
FL-350	003	Emissions from the condensate stabilizer vent are routed to an enclosed flare during blowdown events	VOC and HAP

PROCESS LIMITATIONS AND RECORDS

9. This source shall be limited to the following maximum processing rates as listed below. Monthly records of the actual processing rates shall be maintained by the owner or operator and made available to the Division for inspection upon request. (Regulation Number 3, Part B, II.A.4.)

Process Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit
FL-350	003	Natural gas vented during blowdown events	3.50 MMscf

Compliance with the annual throughput limits shall be determined on a rolling twelve (12) month total. By the end of each month a new twelve-month total is calculated based on the previous twelve months' data. The permit holder shall calculate throughput each month and keep a compliance record on site or at a local field office with site responsibility, for Division review.

10. Upon commencement of operation, the owner or operator shall continuously monitor and record the volumetric flow rate of natural gas vented from condensate stabilizer vent blowdowns using the flow meter. The owner or operator shall use monthly throughput records to demonstrate compliance with the process limits contained in this permit and to calculate emissions as described in this permit.

STATE AND FEDERAL REGULATORY REQUIREMENTS

11. The permit number and ten digit AIRS ID number assigned by the Division (e.g. 123/4567/001) shall be marked on the subject equipment for ease of identification. (Regulation Number 3, Part B, Section III.E.) (State only enforceable)
12. This source is subject to the odor requirements of Regulation Number 2. (State only enforceable)
13. Minor sources in designated nonattainment or attainment/maintenance areas that are otherwise not exempt pursuant to Regulation No. 3, Part B, Section II.D shall apply Reasonably Available Control Technology (RACT) for the pollutants for which the area is nonattainment or attainment/maintenance (Reference: Regulation No. 3, Part B, III.D.2.a). This requirement to apply RACT shall be satisfied by installing/implementing the following emission controls:
 - a. Directed Inspection & Maintenance as described below shall satisfy the requirement to apply RACT.
 - i. Auditory/visual/olfactory inspection (AVO) will be performed on a quarterly basis.
 - ii. For each leak found in the AVO inspection, a gas detector may be used to determine the size of the leak. The gas detector shall be regularly calibrated. Component leaks greater than 10,000 ppm shall be managed in accordance with Item (vi) below, unless it is unfeasible to make the repair without shutting down the affected operation of the facility. Component leaks less than 10,000 ppm shall not require repair. For such component leaks that require a shutdown to be repaired, repair shall occur during the first shutdown of the affected operation after the leak is discovered.
 - iii. For repair, valves adjacent to the equipment to be repaired will be closed if practicable, minimizing the volume released.
 - iv. Repaired components shall be re-screened using AVO to determine if the leak is repaired.
 - v. The following records shall be maintained for a period of two years:
 - The name of the site screened via AVO inspection and the name of the inspector.
 - Components evaluated with the gas detector.
 - Repair methods applied.

- Dates of the AVO inspections, gas detector calibrations, attempted repairs, successful repairs, repair delays, and post-repair screenings.
- vi. Leaks shall be repaired as soon as practicable, but no later than 15 calendar days after detection, unless it is technically or operationally infeasible to make the repair within 15 calendar days. Records documenting the rationale shall be maintained if it is technically or operationally infeasible to make the repair within 15 calendar days.
14. The combustion device covered by this permit is subject to Regulation Number 7, Section XVII.B.2. General Provisions (State only enforceable). If a flare or other combustion device is used to control emissions of volatile organic compounds to comply with Section XVII, it shall be enclosed; have no visible emissions during normal operations, as defined under Regulation Number 7, XVII.A.16; and be designed so that an observer can, by means of visual observation from the outside of the enclosed flare or combustion device, or by other convenient means approved by the Division, determine whether it is operating properly. This flare must be equipped with an operational auto-igniter according to the following schedule:
- All combustion devices installed on or after May 1, 2014, must be equipped with an operational auto-igniter upon installation of the combustion device;
 - All combustion devices installed before May 1, 2014, must be equipped with an operational auto-igniter by or before May 1, 2016, or after the next combustion device planned shutdown, whichever comes first.

OPERATING & MAINTENANCE REQUIREMENTS

15. This source is not required to follow a Division-approved operating and maintenance plan.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

16. The owner/operator shall complete an initial site specific extended gas analysis ("Analysis") within one hundred and eighty days (180) after commencement of operation or issuance of this permit, whichever comes later, of the natural gas vented during condensate stabilizer blowdown in order to verify the VOC and n-hexane content (weight fraction) of this emission stream. Results of the Analysis shall be used to calculate site-specific emission factors for the pollutants referenced in this permit (in units of lb/MMSCF gas vented) using Division approved methods. Results of the Analysis shall be submitted to the Division as part of the self-certification and must demonstrate the emissions factors established through the Analysis are less than or equal to, the emissions factors submitted with the permit application and established herein in the "Notes to Permit Holder" for this emissions point. If any site specific emissions factor developed through this Analysis is greater than the emissions factors submitted with the permit application and established in the "Notes to Permit Holder" the operator shall submit to the Division within 60 days, or in a timeframe as agreed to by the Division, a request for permit modification to address this/these inaccuracy(ies).
17. The owner or operator shall demonstrate compliance with opacity standards, using EPA Reference Method 22, 40 C.F.R. Part 60, Appendix A, to determine the presence or absence of visible emissions. "Visible Emissions" means observations of smoke for any period or periods of duration greater than or equal to one minute in any fifteen minute period during normal operation. (Regulation Number 7, Sections XVII.B.2. and XVII.A.16)

Periodic Testing Requirements

18. On a monthly basis, the operator is required to conduct an inspection of the subject combustion device for the presence or absence of smoke (e.g., visible emissions). If smoke is observed during the visible emissions inspection, the operator has the option to either (1) immediately shut-in the equipment to investigate the cause of the smoke, conduct any necessary repairs, and maintain records of the specific repairs completed; or (2) conduct a formal Method 22

observation to determine whether visible emissions (as defined per Regulation No. 7, Section XVII.A.16.) are present.

ADDITIONAL REQUIREMENTS

19. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Regulation Number 3, Part A, II.C.)
- Annually by April 30th whenever a significant increase in emissions occurs as follows:
For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five (5) tons per year or more, above the level reported on the last APEN; or

For volatile organic compounds (VOC) and nitrogen oxides sources (NO_x) in ozone nonattainment areas emitting **less than 100 tons of VOC or NO_x per year**, a change in annual actual emissions of one (1) ton per year or more or five percent, whichever is greater, above the level reported on the last APEN; or
For sources emitting **100 tons per year or more**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.
 - Whenever there is a change in the owner or operator of any facility, process, or activity; or
 - Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
 - Whenever a permit limitation must be modified; or
 - No later than 30 days before the existing APEN expires.
20. Federal regulatory program requirements (i.e. PSD, NANSR) shall apply to this source at any such time that this source becomes major solely by virtue of a relaxation in any permit condition. Any relaxation that increases the potential to emit above the applicable Federal program threshold will require a full review of the source as though construction had not yet commenced on the source. The source shall not exceed the Federal program threshold until a permit is granted. (Regulation Number 3, Parts C and D).

GENERAL TERMS AND CONDITIONS

21. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the APCD as provided in AQCC Regulation Number 3, Part B, Section II.B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
22. If this permit specifically states that final authorization has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit does not provide "final" authority for this activity or operation of this source. Final authorization of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation Number 3, Part B, Section III.G. Final authorization cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final authorization. **Details for obtaining final authorization to operate are located in the Requirements to Self-Certify for Final Authorization section of this permit.**

23. This permit is issued in reliance upon the accuracy and completeness of information supplied by the owner or operator and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the owner or operator or owner or operator's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.
24. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
25. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (AQCC), including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the owner or operator, or the Division revokes a permit, the owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
26. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
27. Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

By:



Betsy Gillard, PE
Permit Engineer

Permit History

Issuance	Date	Description
Issuance 1	This Issuance	Issued to Aka Energy Group, LLC.

Notes to Permit Holder at the time of this permit issuance:

- 1) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit. (Regulation Number 3, Part A, Section VI.B.)
- 2) The production or raw material processing limits and emission limits contained in this permit are based on the consumption rates requested in the permit application. These limits may be revised upon request of the owner or operator providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and complete application form must be submitted with a request for a permit revision.
- 3) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The owner or operator shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1 of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>
- 4) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

Facility Equipment ID	AIRS Point	Pollutant	CAS #	Uncontrolled Emissions (lb/yr)	Controlled Emissions (lb/yr)
FL-350	003	Benzene	71432	105	5
		Toluene	108883	14	1
		n-Hexane	110543	1050	52

Note: All non-criteria reportable pollutants in the table above with uncontrolled emission rates above 250 pounds per year (lb/yr) are reportable and may result in annual emission fees based on the most recent Air Pollution Emission Notice.

- 5) The emission levels contained in this permit are based on the following emission factors:

Point 003:

CAS #	Pollutant	Uncontrolled Emission Factors (lb/MMSCF)	Controlled Emission Factors (lb/MMSCF)	Source
	CO	631.45	631.45	TNRCC Flare Emissions Guidance Speciated gas analysis from simulation
	VOC	48,910.2	2445.51	
110543	n-Hexane	300.1	15.01	

Note: The controlled emissions factors for this point are based on the flare control efficiency of 95%.

- 6) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point

associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

7) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	True Minor Source
NANSR	True Minor Source

8) Full text of the Title 40, Protection of Environment Electronic Code of Federal Regulations can be found at the website listed below:

<http://ecfr.gpoaccess.gov/>

Part 60: Standards of Performance for New Stationary Sources		
NSPS	60.1-End	Subpart A - Subpart KKKK
NSPS	Part 60, Appendixes	Appendix A - Appendix I
Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories		
MACT	63.1-63.599	Subpart A - Subpart Z
MACT	63.600-63.1199	Subpart AA - Subpart DDD
MACT	63.1200-63.1439	Subpart EEE - Subpart PPP
MACT	63.1440-63.6175	Subpart QQQ - Subpart YYYY
MACT	63.6580-63.8830	Subpart ZZZZ - Subpart MMMMM
MACT	63.8980-End	Subpart NNNNN - Subpart XXXXXX