

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: **14JA1198**

Issuance 1

DATE ISSUED:

ISSUED TO: **EE3, LLC**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Oil and gas facility, known as the Coalmont 3-13H, located in the SWSW of Section 13, Township 7 North, Range 81 West, in Jackson County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

AIRS Point	Description
002	Separator controlled by a flare stack. Flare has a minimum combustion efficiency of 95%. The flare is not enclosed.

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 THOSE 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 after issuance of this permit, by submitting a Notice of Startup form to the Division.** The Notice of Startup form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notices>. Failure to notify the Division of startup of the permitted source is a violation of Air Quality Control Commission (AQCC) Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after 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. (Reference: Regulation No. 3, Part B, 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 per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

4. 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. (Reference: Regulation No. 3, Part B, Section III.E.)
5. 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

6. Emissions of air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis). (Reference: Regulation No. 3, Part B, Section II.A.4)

Annual Limits:

AIRS Point	Tons per Year			Emission Type
	NO _x	VOC	CO	
002	2.1	33.3	11.5	Point

See "Notes to Permit Holder #4" for information on emission factors and methods used to calculate limits.

Facility-wide emissions of each individual hazardous air pollutant shall be less than 8.0 tpy.

Facility-wide emissions of total hazardous air pollutants shall be less than 20.0 tpy.

Compliance with the annual limits shall be determined by recording the facility's annual criteria pollutant emissions, (including all HAPs above the de-minimis reporting level) from each emission unit, on a rolling twelve (12) month total. By the end of each month a new twelve-month total shall be calculated based on the previous twelve months' data. The permit holder shall calculate emissions each month and keep a compliance record on site or at a local field office with site responsibility, for Division review. This rolling twelve-month total shall apply to all permitted emission units, requiring an APEN, at this facility.

7. The emission points in the table below shall be operated and maintained with the control equipment as listed in order to reduce emissions to less than or equal to the limits established in this permit (Reference: Regulation No.3, Part B, Section III.E.)

AIRS Point	Control Device	Pollutants Controlled
002	Separator controlled by a flare stack	VOC, HAPS

PROCESS LIMITATIONS AND RECORDS

8. This source shall be limited to the following maximum processing rates as listed below. Monthly records of the throughput shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4)

Process/Consumption Limits

AIRS Point	Process Parameter	Annual Limit
002	Natural gas flaring	46 MMSCF/yr

The owner or operator shall calculate monthly process rates based on the calendar month.

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.

STATE AND FEDERAL REGULATORY REQUIREMENTS

9. The permit number and AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation Number 3, Part B, III.E.) (State only enforceable)
10. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. (Reference: Regulation No. 1, Section II.A.1. & 4.)
11. No owner or operator of a smokeless flare or other flare for the combustion of waste gases shall allow or cause emissions into the atmosphere of any air pollutant which is in excess of 30% opacity for a period or periods aggregating more than six minutes in any sixty consecutive minutes. (Reference: Regulation No. 1, Section II.A.5.)
12. These sources are subject to the odor requirements of Regulation No. 2. (State only enforceable)

OPERATING & MAINTENANCE REQUIREMENTS

13. Upon startup of these points, the applicant shall follow the operating and maintenance (O&M) plan and record keeping format approved by the Division, in order to demonstrate compliance on an ongoing basis with the requirements of this permit. Revisions to your O&M plan are subject to Division approval prior to implementation. (Reference: Regulation No. 3, Part B, Section III.G.7.)

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

14. The operator shall complete an initial site specific extended gas analysis of the natural gas produced at this site in order to verify the VOC, benzene, toluene, ethylbenzene, xylenes, n-hexane, and 2,2,4-trimethylpentane content (weight fraction) of this emission stream used in the permit application. Results of testing shall be used to determine site-specific emission factors using Division approved methods. Results of site-specific sampling and analysis shall be submitted to the Division as part of the self-certification and used to demonstrate compliance with the emissions factors chosen for this emissions point.
15. The owner or operator shall demonstrate compliance with opacity standards using EPA Method 9 to measure opacity from the flare. (Reference: Regulation No. 1, Section II.A.5).

Periodic Testing Requirements

16. On an annual basis, the operator shall complete a site specific extended gas analysis of the natural gas produced at this site that is routed to the flare in order to verify the VOC content (weight fraction) of this emission stream used in the permit application. Results of testing shall be used to determine site-specific emission factors using Division approved methods.

ADDITIONAL REQUIREMENTS

17. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, II.C)
 - a. Annually 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 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.
 - b. Whenever there is a change in the owner or operator of any facility, process, or activity; or
 - c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
 - d. Whenever a permit limitation must be modified; or
 - e. No later than 30 days before the existing APEN expires.
18. 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 No. 3 Part D).

GENERAL TERMS AND CONDITIONS

19. 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 No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
20. 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 No. 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.**

21. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant 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 applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.
22. 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.
23. 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 applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
24. 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.
25. 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:

Stephanie Chaousy, PE
Permit Engineer

Permit History

Issuance	Date	Description
Issuance 1	This Issuance	Issued to EE3, LLC. Newly permitted separator flare at a synthetic minor facility.

Notes to Permit Holder:

- 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 (Reference: Regulation No. 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 permittee 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 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 permittee 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.

AIRS Point	Pollutant	CAS #	BIN	Uncontrolled Emission Rate (lb/yr)	Are the emissions reportable?	Controlled Emission Rate (lb/yr)
002	Benzene	71432	A	2832	Yes	142
	Toluene	108883	C	1331	Yes	67
	Xylenes	1130207	C	322	Yes	16
	n-Hexane	110543	C	26014	Yes	1301

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

Point 002:

CAS #	Pollutant	Weight Fraction of Gas (%)	Emission Factors Uncontrolled	Emission Factors Controlled	Source
	NOx	---	0.068 lb/MMBtu	0.068 lb/MMBtu	AP-42
	CO	---	0.37 lb/MMBtu	0.37 lb/MMBtu	AP-42
	VOC	46.18	29237.2285 lb/mmscf	1461.8614 lb/mmscf	Engineering Calculation
71432	Benzene	0.10	51.7365 lb/mmscf	2.5868 lb/mmscf	Engineering Calculation
108883	Toluene	0.08	24.3140 lb/mmscf	1.2157 lb/mmscf	Engineering Calculation
100414	Ethylbenzene	0.01	1.4007 lb/mmscf	0.0700 lb/mmscf	Engineering Calculation

CAS #	Pollutant	Weight Fraction of Gas (%)	Emission Factors Uncontrolled	Emission Factors Controlled	Source
1330207	Xylenes	0.03	5.8828 lb/mmscf	0.2941 lb/mmscf	Engineering Calculation
110543	n-hexane	0.63	475.2406 lb/mmscf	23.7620 lb/mmscf	Engineering Calculation

Note: The uncontrolled VOC and HAP emissions for this point were calculated using the December 10, 2013 analysis of a gas sample collected from the Damfino 2-6H; Jackson, CO well. The controlled VOC and HAP emissions factors for point 002 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	Synthetic Minor Source of: <i>VOC, n-hexane, total HAPS</i>
PSD	Minor Source
MACT HH	Area Source Requirements: Not Applicable

- 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 YYYYY
MACT	63.6580-63.8830	Subpart ZZZZ – Subpart MMMMM
MACT	63.8980-End	Subpart NNNNN – Subpart XXXXXX

- 9) A self certification form and guidance on how to self-certify compliance as required by this permit may be obtained online at: <http://www.colorado.gov/pacific/cdphe/air-permit-self-certification>