

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05300004-2018**

Application Received: **August 1, 2017**

Plant Identification Number: **053-00004**

Permittee: **Felman Production LLC**

Mailing Address: **4442 Graham Station Road, Letart, WV 25253-8701**

Physical Location: New Haven, Mason County, West Virginia
UTM Coordinates: 419.73 km Easting • 4312.468 km Northing • Zone 17
Directions: Approximately 4 miles east of New Haven adjacent to US Route 33.

Facility Description

Felman Production LLC manufactures manganese, silicon based ferroalloys, and ferrosilicon and is covered by Standard Industrial Classification (SIC) codes 3313 and 3341. The facility consists of three electric submerged arc furnaces, associated sizing equipment and environmental controls. This renewal permit incorporates changes authorized by modifications to NSR permit R13-2857B as R13-2857C and R13-2857D.

Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | |
|---|---------------------|-----------------------|
| Regulated Pollutants | Potential Emissions | 2016 Actual Emissions |
| Carbon Monoxide (CO) | 1146.25 | 303.01 |
| Nitrogen Oxides (NO _x) | 16.69 | 5.10 |
| Particulate Matter (PM _{2.5}) | 265.27 | 14.28 |
| Particulate Matter (PM ₁₀) | 265.27 | 42.14 |
| Total Particulate Matter (TSP) | 316.31 | 96.65 |
| Sulfur Dioxide (SO ₂) | 1203.16 | 125.66 |

| Regulated Pollutants | Potential Emissions | 2016 Actual Emissions |
|---|---------------------|-----------------------|
| Volatile Organic Compounds (VOC) | 878.99 | 2.87 |
| <i>PM₁₀ is a component of TSP.</i> | | |
| Hazardous Air Pollutants | Potential Emissions | 2016 Actual Emissions |
| Arsenic | <0.01 | <0.01 |
| Cadmium | <0.01 | <0.01 |
| Chromium | 0.01 | <0.01 |
| Manganese | 51.37 | 0.54 |
| Mercury | <0.01 | <0.01 |
| Nickel | 0.17 | 0.01 |
| Selenium | 0 | 0 |

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 1,146.25 tons per year of CO; 265.27 tons per year of PM₁₀; 1,203.16 tons per year of SO₂; 878.99 tons per year of VOCs, and 51.37 tons per year of Manganese. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Felman Production LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

| | | |
|--------------------|------------------------------|---|
| Federal and State: | 45CSR6 | Open burning prohibited |
| | 45CSR7 | PM limits on manufacturing processes |
| | 45CSR10 | SO ₂ limits |
| | 45CSR11 | Standby plans for emergency episodes |
| | 45CSR13 | Construction Permits |
| | 45CSR16 | Performance Standards for New Stationary Sources |
| | 45CSR30 | Operating permit requirement |
| | 45CSR34 | Emissions Standards for HAPs |
| | 40 CFR Part 61 | Asbestos inspection and removal |
| | 40 CFR Part 82, Subpart F | Ozone depleting substances |
| | 40 CFR Part 60, Subpart Y | Coal Prep and Processing Plants NSPS |
| | 40 CFR Part 60, Subpart IIII | Stationary Compression Ignition Engines NSPS |
| | 40 CFR Part 60, Subpart OOO | Non-metallic Mineral Processing NSPS |
| | 40 CFR Part 63, Subpart XXX | Ferroalloys Production: Ferromanganese and Silico-manganese NESHAPs |
| | 40 CFR Part 63, Subpart ZZZZ | Reciprocating Internal Combustion Engines NESHAPs |
| State Only: | 45CSR4 | No objectionable odors. |

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

| Permit or Consent Order Number | Date of Issuance | Permit Determinations or Amendments That Affect the Permit (<i>if any</i>) |
|-------------------------------------|------------------|--|
| CO-R7, 13, 16-93-1 | April 16, 1993 | CO-R7-95-13, Civil Action No. 94-C-1084 |
| CO-R7-95-13, Civil Action 94-C-1084 | April 20, 1995 | |
| R13-2857D | November 6, 2014 | |
| R13-3217 | April 29, 2015 | |

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a second renewal for this facility. This renewal permit incorporates changes authorized by modifications to NSR permit R13-2857B as R13-2857C and R13-2857D. The following changes have occurred since the most recent permit was issued:

Title V Boilerplate changes: Conditions 3.5.3., 3.5.5. and 3.5.6. were changed to require electronic submittal of reports.

Other changes:

Section 1.1. - Emission Units Table: Crushing and Screening System #1 (009-01) Design Capacity was revised to 150 TPH in accordance with R13-2857D. Crushing and Screening Systems #4 and #5 (009-03 and 009-04), have been removed. A new heading was added to specify equipment permitted under R13-2857 and new equipment was added in accordance with R13-2857C and R13-2857D. Equipment listed under R13-3217 was changed from a design capacity of 400 tpy to 400 tph because of a typographical error. Equipment listed under temporary permit R13-3244T was deleted since the Temporary permit expired.

Section 1.2. - Active R13, R14, and R19 Permits Table: Updated to show the revisions to R13-2857. The Temporary permit expired, therefore R13-3244T was deleted.

40 CFR 63 Subpart XXX - National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese. This MACT was revised on June 30, 2015. All affected sources at Felman were installed before June 30, 2015, therefore the provisions of 40 CFR §§63.1650 through 63.1661 cease to apply as of June 30, 2017, in accordance with 40 CFR § 63.1621. The provisions of 40 CFR §§63.1620 through 63.1629 are applicable. Because of the way the new MACT requirements were written, all new MACT requirements are located in Section 3.0 of the permit as Conditions 3.1.15., 3.1.16., 3.2.3., 3.3.2., 3.4.5., and 3.5.13. The following old MACT Conditions were deleted: 3.1.17., 3.3.3., 3.5.14., 3.5.15., 4.1.9.,

4.2.3, 4.2.4., 4.3.2., 4.3.3., 4.5.1., 5.1.8., 5.3.1., 6.1.10, 6.2.2., 6.3.4., 6.4.2., 7.1.9., 7.2.1., 7.3.4., and 7.4.1. Conditions 3.2.1. and 4.1.1. were updated by removing the streamlining reference to the MACT and removing the MACT citation. Conditions 4.2.1. and 4.2.2. were updated by removing the MACT citation. The facility does not have metal oxygen refining or wet scrubbers, therefore these sections of the MACT were not included in the Permit.

Consent Order - The requirements from CO-R13-E-2011 have been completed and it has been terminated. Therefore Conditions 5.1.9. and 5.4.3. have been deleted.

R13-2857C and R13-2857D changes and determinations:

The permittee applied for amendments to R13-2857B. R13-2857C was issued on July 9, 2014 for installation of a new portable sizing operation. R13-2857D was issued on November 6, 2014 for replacement of a crusher (CC2) with a larger unit, replacement of a crusher (CC1) and screen (CS1) with identical units and the relocation of two screens (CS2 (from another part of the plant) & CS3 (from its old location in the same sizing line)).

The emissions limits authorized by these amendments and the associated monitoring, testing, recordkeeping and reporting requirements have been incorporated in the Title V Permit in Section 6.0. Condition 6.1.16. was changed to reference the control devices associated with equipment permitted under R13-2857. Conditions 6.1.20., 6.1.22. through 6.1.26., 6.3.4., and 6.3.8. were updated to correlate with the changes to R13-2857.

The new screens/crushers/conveyors are not subject to 40 CFR 60 Subpart OOO because they do not process any "nonmetallic mineral" as defined in 40 CFR §60.671. Similarly, they are not subject to 40 CFR 60 Subpart Y because they do not process any coal.

The crushing and screening equipment and associated fugitive dust sources are subject to 40 CFR 63 Subpart XXX, which has been revised. The crushers and screens are subject to a new limitation of 13 mg/dscm in accordance with 40 CFR §63.1623(e), now Condition 3.1.15.d., therefore Condition 6.1.10. was deleted. In order to determine compliance with the particulate matter concentration limit, the permittee must perform testing, as outlined in 40 CFR §63.1625, incorporated as Condition 3.3.2.

Section 8.0 of the permit was deleted because the Temporary permit R13-3244T expired.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR Part 60, subpart K, Ka, and Kb - The facility has three above ground storage tanks with capacities less than 19,813 gallons.

40 CFR Part 60, subpart Z - This NSPS applies to facilities that commence construction or modification after October 21, 1974. Electric Arc Furnaces No. 2 and No. 5, were installed in 1966, and in January, 1974, respectively. Electric Arc Furnace No. 7 commenced construction in March 1974 when the owner or operator entered into contractual obligations.

40 CFR 64 - Compliance Assurance Monitoring (CAM). The emissions controls for the new equipment consist of full and partial enclosures. Enclosures do not meet the definition of a control device in accordance with 40 CFR § 64.1, therefore CAM is not applicable to the new equipment. It was determined during the initial permit review and subsequent renewal that CAM was not applicable to the rest of the facility.

Request for Variances or Alternatives

Condition 3.3.2.b.9. required the use of a Digital Camera Opacity Technique (DCOT). Felman petitioned the EPA for alternative monitoring using Method 9, which was approved by letter from Steffan M. Johnson to Ms. Laure Guillot and Ms. Laura K. McAfee dated June 8, 2017. The requirements for the approved alternative monitoring plan were added to the permit in condition 3.3.2.b.11.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Friday, May 25, 2018

Ending Date: Monday, June 25, 2018

Point of Contact

All written comments should be addressed to the following individual and office:

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
Bobbie.Scroggie@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

The facility commented on July 3, 2018 that the requirement for the Digital Camera Opacity Technique (DCOT) was replaced by Method 9 monitoring based on approval of EPA. The comment was received after the comment period ended, however, changing the monitoring makes the permit correct. Therefore, the change was made as noted under "Request for Variances or Alternatives". The facility also commented that the Baghouse Leak Detection System requirement has been reconsidered, however the reconsideration has not been finalized. Therefore, the permit requirements for the Baghouse Leak Detection System, which are incorporated from the current version of 40 CFR 63, subpart XXX, have not been changed.