

Fact Sheet



For Draft/Proposed Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on August 5, 2008.

Permit Number: **R30-03500043-2008**
Application Received: **June 2, 2011**
Plant Identification Number: **03-54-03500043**
Permittee: **Constellium Rolled Products Ravenswood, LLC**
Facility Name: **Ravenswood**
Mailing Address: **Route 2 South, Ravenswood, WV 26164**

Permit Action Number: *SM01* Revised: *Draft/Proposed*

Physical Location: Ravenswood, Jackson County, West Virginia
UTM Coordinates: 428.30 km Easting • 4,308.60 km Northing • Zone 17
Directions: Facility is located along Century Road off of WV State Route 2 just south of Ravenswood.

Facility Description

Constellium Rolled Products Ravenswood, LLC (CRP) (formerly Alcan Rolled Products – Ravenswood, LLC) is a secondary aluminum operation covered under SIC code 3353. This facility melts aluminum in 23 furnaces in the cast house. The metal is cast into ingot for further processing. From the cast house the aluminum is sent to the fabrication plant, which consists of hot rolling, cold rolling, plate, and general finishing. In fabrication the metal is reheated to give it particular characteristics and rolled on one of the facility's hot or cold mills. After the metal has been finished into coil or plate it is warehoused and prepared for shipping to the customer.

The purpose of this Title V significant modification is to incorporate changes approved under 45CSR13 modification R13-0383A, issued on August 5, 2011. R13-0383A allowed for the Melting Furnace DC-9B to utilize new regenerative Low-NO_x gas-fired burners and to increase the capacity from 40 MMBTU/hr to 52 MMBTU/hr; and also revised the emission limits for Melting Furnace DC-9A and Holding Furnace 9.

Emissions Summary

The proposed increases in emissions due to this modification are as follows:

Pollutant	lb/hr	TPY
SO ₂	0.1	0.23
CO ¹	9.3 ¹	40.7 ¹
NO _x	5.06	22.1
VOC	0.51	2.21

¹Since CO emissions were not addressed in the permit application for R13-0383, issued on February 27, 1978, the increase in CO emissions is conservatively higher because it was calculated assuming there were no existing CO emissions from Melting Furnace DC-9A, Melting Furnace DC-9B, and Holding Furnace 9.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of CO, NO_x, PM₁₀, and VOC; and over 25 tons per year of aggregate HAPs (HCl, Cl₂, and HF). 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, CRP 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	Particulate matter and opacity limits for manufacturing sources.
	45CSR13	Preconstruction permits for minor sources.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. Part 63.
	40 C.F.R. 63, Subpart RRR	Secondary Aluminum MACT.
State Only:	NA	

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 (if any)
R13-0017	January 10, 1974	NA
R13-0072	May 23, 1974	NA
R13-0383A	August 5, 2011	NA
R13-2102	July 1, 1997	NA
R13-2376C	December 19, 2005	NA

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 B," which may be downloaded from DAQ's website.

Determinations and Justifications

R13-0383A, issued on August 5, 2011, addresses requirements for Melting Furnace DC-9A, Melting Furnace DC-9B, Holding Furnace 9, 72 Inch Single Stand Cold Mill 384, and 72 Inch Tandem Stand Cold Mill 382. The only emission unit included in R13-0383A that is undergoing a physical modification is Melting Furnace DC-9B which is to have its conventional natural gas fired burners (total rating of 40 MMBTU/hr) replaced with regenerative low-NO_x burners (total rating of 52 MMBTU/hr). The other significant change addressed in R13-0383A was to the SO₂, CO, NO_x, and VOC emission limits for Melting Furnace DC-9A and Holding Furnace 9. The hourly emission rates specified in the permit application for R13-0383 (issued on February 27, 1978 as a "one page" permit) and based on an unknown source were replaced with hourly and annual emission limits based on current AP-42 emission factors.

R30-03500043-2008 provided hourly PM, HCl, SO₂, NO_x, and VOC emission limits for Melting Furnace DC-9A, Melting Furnace DC-9B, and Holding Furnace 9, but not annual emission limits, CO emission limits, or emission limits for the 72 Inch Single Stand Cold Mill 384 and the 72 Inch Tandem Stand Cold Mill 382. The Title V permit was modified to include the R13-0383A hourly and annual emission limits for Melting Furnace DC-9A, Melting Furnace DC-9B, Holding Furnace 9, the 72 Inch Single Stand Cold Mill 384, and the 72 Inch Tandem Stand Cold Mill 382. It was also modified to include new R13-0383A limits for natural gas consumption for Melting Furnaces DC-9A and DC-9B and Holding Furnace 9; and production limits for Melting Furnaces DC-9A and DC-9B, Holding Furnace 9, the 72 Inch Single Stand Cold Mill 384, and the 72 Inch Tandem Stand Cold Mill 382.

The requirement already included in the Title V permit to demonstrate compliance with the hourly PM, HCl, SO₂, NO_x, and VOC emission limits for Melting Furnace DC-9A, Melting Furnace DC-9B, and Holding Furnace 9 as Condition 4.4.3 was included in R13-0383A as Condition 4.2.6. Since CO emission limits were listed in Condition 4.1.1 of R13-0383A, but CO was not included in the recordkeeping requirements in Condition 4.2.6 of R13-0383A, the requirement to maintain records of CO emissions was added to Condition 4.4.3 of the Title V permit per 45CSR§30-5.1.c. Also, since Condition 4.2.6 of R13-0383A did not address determining compliance with the annual emission limits, the requirement to calculate annual emissions was also added per 45CSR§30-5.1.c. Conditions 4.1.9, 4.1.10, 4.1.11, 4.1.12, and 4.1.13 of R13-0383A set natural gas consumption and production limits for Melting Furnace DC-9A, Melting Furnace DC-9B, and Holding Furnace 9. Records required under Condition 4.2.6 of R13-0383A addressed monthly natural gas consumption and daily charge/feed rates, so the requirement to maintain twelve month rolling totals was also added to the Title V permit Condition 4.4.3 per 45CSR§30-5.1.c.

Conditions 4.1.14 and 4.1.15 of R13-0383A limited production from the 72 Inch Single Stand Cold Mill 384 and the 72 Inch Tandem Stand Cold Mill 382. R13-0383A did not require recordkeeping to demonstrate compliance with these limits or with the hourly and annual particulate matter emission limits specified for these units in Condition 4.1.1 of R13-0383A. A requirement to maintain production, oil usage, and emission records was added to the Title V permit as Condition 6.4.3 per 45CSR§30-5.1.c.

The requirements from R13-0383A were added to the Title V permit as follows:

R13-0383A Requirement No.	R30-03500043-2008 (SM01) Requirement No.	Comments
4.1.1	4.1.15	Replaced existing emission limits from Permit Application R13-0383.
4.1.2	3.1.9	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.3	3.1.10	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.4	4.1.2	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.5	4.1.17	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.6	4.1.18	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.7	4.1.24	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.8	4.2.16	A similar requirement was already included in the Title V permit and was modified to include the R13-0383A requirement. The R13-0383A requirement only referenced 4.1.9 (Title V permit condition 4.1.27), but should have also referenced 4.1.10 and 4.1.11 (Title V permit conditions 4.1.28 and 4.1.29), so this change was also included in the Title V permit.
4.1.9	4.1.27	New requirement was added.
4.1.10	4.1.28	New requirement was added.
4.1.11	4.1.29	New requirement was added.
4.1.12	4.1.30	New requirement was added.
4.1.13	4.1.31	New requirement was added.
4.1.14	6.1.5	New requirement was added.
4.1.15	6.1.6	New requirement was added.
4.1.16	6.1.2	Replaced existing requirement for the 72 Inch Single Stand Cold Mill 384 and the 72 Inch Tandem Stand Cold Mill 382 from Permit Application R13-0383 with new requirement from R13-0383A.

R13-0383A Requirement No.	R30-03500043-2008 (SM01) Requirement No.	Comments
4.1.17	6.1.3	Replaced existing requirement for the 72 Inch Single Stand Cold Mill 384 and the 72 Inch Tandem Stand Cold Mill 382 from Permit Application R13-0383 with new requirement from R13-0383A.
4.1.18	4.1.32	New requirement was added.
4.1.19	4.1.20	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.1.20	4.1.15	This requirement was streamlined with the R13-0383A, Condition 4.1.1 emission limits, included in the Title V permit as Condition 4.1.15. The existing 45CSR§7-4.1 particulate emission limits for the 72 Inch Single Stand Cold Mill 384 and the 72 Inch Tandem Stand Cold Mill 382 in Condition 6.1.1 were deleted because they were streamlined with Condition 4.1.15.
4.1.21	6.1.7	This was already included in the Title V permit for the 72 Inch Tandem Stand Cold Mill 382, but was renumbered from Condition 6.1.3 to Condition 6.1.7 and the 72 Inch Single Stand Cold Mill 384 was added per 45CSR§30-12.7.
4.1.22	3.1.17	New requirement was added.
4.2.1	4.2.1	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation. The numbering in this Title V requirement was also corrected.
4.2.2	4.2.8	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.2.3	4.2.9	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.2.4	4.2.14	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.2.5	4.2.15	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.2.6	4.4.3	The requirement was already included in the Title V permit, the R13-0383A requirement was added to the citation. Additional recordkeeping was added to 4.4.3 per 45CSR§30-5.1.c to demonstrate compliance with hourly and annual CO emission limits, annual emission limits, annual natural gas consumption limits, and annual production limits.
4.3.1	3.2.1	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.

R13-0383A Requirement No.	R30-03500043-2008 (SM01) Requirement No.	Comments
4.3.2	4.3.9	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.3.3	4.3.8	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.4.1	3.4.1	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.4.2	3.4.6	New requirement was added.
4.4.3	3.4.7	New requirement was added.
4.4.4	6.4.2	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.5.1	4.5.1	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
4.5.2	4.5.2	The requirement was already included in the Title V permit and the R13-0383A requirement was added to the citation.
---	6.4.3	New requirement was added to demonstrate compliance with annual production limits and hourly and annual particulate matter emission limits for the 72 Inch Single Stand Cold Mill 384 and the 72 Inch Tandem Stand Cold Mill 382.

Updated 40 C.F.R. 64 – Compliance Assurance Monitoring (CAM) Applicability

Melting Furnaces DC-9A and DC-9B do not have control devices and are not subject to CAM. Particulate matter and HCl emissions from Holding Furnace 9 are controlled by Baghouse 4, but since Holding Furnace 9 is subject to the particulate matter and HCl emission limits and standards of 40 C.F.R. 63, Subpart RRR, it is not subject to CAM as specified in the 40 C.F.R. §64.2(b)(1)(i) exemption.

The 72 Inch Tandem Stand Cold Mill 382 (007P102) and the 72 Inch Single Stand Cold Mill 384 (007P101) are both subject to CAM. Both are pollutant-specific emission units subject to a particulate matter emission limitation or standard, both use a control device to achieve compliance with that limit or standards, and they each have potential pre-control device emissions in excess of 100 tons per year of particulate matter. The Title V Fact Sheet for R30-03500043-2008 stated that the 72 Inch Single Stand Cold Mill 384 (007P101) was not subject to CAM even though the uncontrolled annual particulate matter emissions were in excess of 100 tons per year. Since the 45CSR§7-4.1 hourly particulate matter emission limit was 35.4 lb/hr and the uncontrolled hourly particulate matter emissions were 32.6 lb/hr, use of the Demister (007C101) was not necessary to achieve compliance, and would therefore not be subject to CAM. R13-0383A, issued on August 5, 2011, also included hourly particulate matter emission limits for the 72 Inch Single Stand Cold Mill 384 (007P101) of 0.84 lb/hr, not just the 45CSR§7-4.1 particulate matter emission limits. Since the R13-0383A hourly particulate matter emission limits are much lower than the uncontrolled particulate matter emission limits, CAM now applies. CRP has stated that the 72 Inch Single Stand Cold Mill 384 (007P101) is not in operation and there are no future plans to restart, therefore they have requested the addition of language to Condition 6.1.7 (former Condition 6.1.3) which requires the submittal of a CAM plan for the 72 Inch Single Stand Cold Mill 384 (007P101) and Demister (007C101) at least ninety (90) days prior to restart.

Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.

Since CRP has not made any changes that trigger a PSD modification, the requirements of the Greenhouse Gas Tailoring Rule do not apply.

Non-Applicability Determinations

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

There were no non-applicability determinations made as a result of this significant modification.

Request for Variances or Alternatives

None.

Insignificant Activities

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

Comment Period

Beginning Date: November 15, 2011

Ending Date: December 15, 2011

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

Carrie McCumbers
Title V Program Manager
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

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.

Point of Contact

Carrie McCumbers
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1226 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.