

NORTH CAROLINA DIVISION OF AIR QUALITY

Air Permit Review for RACT Requirements

(in conformance with Section 172(c) of the CAA)

Permit Issue Date: **XX XX, 2009**

Region: Mooresville Regional Office
County: Cabarrus
NC Facility ID: 1300027
Inspector's Name: Jim Westmoreland
Date of Last Inspection: 10/15/2008
Compliance Code: C/In Compliance With Procedural Reqr

Facility Data			Permit Applicability (this application only)		
<p>Applicant (Facility's Name): Berenfield Containers SE Ltd</p> <p>Facility Address: Berenfield Containers SE Ltd 12180 University City Boulevard Harrisburg, NC 28075</p> <p>SIC: 3412 / Metal Barrels, Drums & Pails NAICS: 332439 / Other Metal Container Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>			<p>SIP: 2D .0934 NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:</p>		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 1300027.08A Date Received: 08/01/2007 Application Type: Modification Application Schedule: Significant 2Q .0501(d) (1- step process)</p> <p>Existing Permit Data Existing Permit Number: 05577/T13 Existing Permit Issue Date: 06/12/2007 Existing Permit Expiration Date: 05/31/2012</p>		
Artie Jones Process Engineer (704) 455-2111 12180 University City Blvd Harrisburg NC, 28075	Ken Fowler Plant Manager (704) 455-2111 12180 University City Blvd Harrisburg NC, 28075	David Henderson Plant Engineer (704) 455-2111 12180 University City Blvd Harrisburg NC, 28075			
<p>Review Engineer: Charles F. Yirka</p> <p>Review Engineer's Signature: _____ Date: XX XX, 2009</p>			<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 05577/T15 Permit Issue Date: XX XX, 2009 Permit Expiration Date: May 31, 2012</p>		

I. Introduction and Purpose of Application

The U.S. Environmental Protection Agency (EPA) gave final approval to North Carolina's Title V operating permits program effective on October 1, 2001. This EPA approval triggered the requirements for Title V facilities to submit permit applications to the Division of Air Quality (DAQ). Title V facilities are required to obtain an operating permit which addresses all applicable regulations under the State Implementation Plan, Federal Implementation Plan, and other provisions of the Clean Air Act (CAA). The Title V Operating Permit will define all of the facility's obligations under the CAA.

Berenfield Containers SE Ltd. (Berenfield) is located in Cabarrus County and thus in the Metrolina Nonattainment area and is considered a VOC major source with a PTE of greater than 100 tons per year. As such, RACT applicability must be addressed.

The primary source of information used to develop this permit is the air permit application. This permit review is for the application of existing source RACT¹ requirements and intends to convey all pertinent emissions data, rules, policies, and engineering assumptions used to create the Title V operating permit.

Berenfield has the potential to emit more than 100 tons per year of VOC associated with cleaning, painting and drying operations. These emissions result from the production of finished steel drums. As per 2D .0902, emission units at the facility are subject to the applicable RACT requirements. As per 2D .0909 an affected source must submit a permit application by August 1, 2007 that includes a RACT demonstration and a proposal for demonstrating compliance with the proposed RACT. Berenfield submitted an application indicating the facility is an affected facility under MACT MMMM. MACT standards are generally recognized as superior to RACT, therefore, Berenfield indicated that complying with this MACT would be sufficient to comply with RACT.

A review of the Section 2D .0900 rules would indicate the applicable RACT would be 2D .0934. However, in order to expedite the RACT review EPA encourages the permitting authorities to generally recognize MACTs as superior to RACT.

II. Facility Description

The facility is a steel drum manufacturer. 55-gallon drums are manufactured and painted (approximately 80,000 drums per month are manufactured). Current permitted equipment includes cleaning, painting, and stenciling/printing stations

III. Purpose of Application

MACT

The only MACT that applies is MACT MMMM. The MACT applies to all sources (facility-wide) with the exception of the few insignificant activities as described by the attachment to the permit. The complete MACT language was added to the permit under the recent permit renewal. The MACT which regulates HAPs and indirectly VOCs is generally recognized by EPA to be superior to RACT.

RACT

Berenfield is located in the Metrolina Nonattainment area and appears to be an existing VOC major source with a PTE of greater than 100 tons per year. As such, the Director notified Berenfield that RACT may apply. Berenfield submitted an application indicating they are subject to a MACT. This engineer reviewed the Section 2D .0900 RACT rules and determined that 2D .0934 would be the appropriate RACT rule. The MACT Subpart MMMM meets the requirements of the RACT. The DAQ concurs with this finding as this allows permitting authorities to streamline their RACT reviews when a particular MACT (e.g., Subpart MMMM) is effective at controlling VOCs². EPA has indicated MACT controls are usually considered superior to RACT. The MACT MMMM (which requires compliant coatings, allows emission averaging and work practices).

All remaining sources of VOC (not subject to Subpart MMMM) required evaluating as well. The remaining sources subject to a RACT review included the alkaline parts washer with natural gas-fired dryer (8 million Btu per hour maximum heat input capacity) and the conventional parts washer (ID Nos. IW-1 and IPW-1) both of which are considered insignificant activities.

The permit will be processed as a significant modification pursuant to 15A NCAC 2Q .0501(d) and therefore will be subject to a concurrent 30 day public notice and 45 day EPA review.

Finally, due to NOx PTE a NOx RACT review is not required.

¹ "Reasonably available control technology" (also denoted as RACT) means the lowest emission limit which a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology which has been applied to similar, but not necessarily identical, source categories.

² See *Federal Register*/Vol .70, No. 288/Tuesday, November 29, 2005/Rules and Regulations/71653-71655

Other

The testing citations were replaced with the new citation 2D .2601. All references to Part I and II were removed. The General Conditions were updated to the latest version. The NAA Added Fee did not appear to apply.

IV. Statement of Compliance

Based on the latest inspection on October 15, 2008 the facility appeared to be operating in compliance with all applicable air quality standards and regulations. The five-year compliance history is detailed in the inspection report.

V. History/Background/Application Chronology

June 29, 2007 – Date of RACT notification letter. Application was deemed complete for processing.

July 30, 2007 – Extension request received from Applicant. Extension granted via email.

August 1, 2007 – Permit application 1300027.08A received for existing source RACT.

October 15, 2008 – Facility was last inspected. Compliance with all regulations and work-practices was indicated.

January 16, 2009 – ESM approved draft.

January 20, 2009 – Supervisor approved draft.

January 27, 2009 – DRAFT permit sent to Permittee, Regional Office, and received MRO comments on RACT application. (Correct MRO's office address required on permit cover letter).

February 12, 2009 – Received Applicant comments. (No changes required).

XX XX, 2009 – DRAFT permit sent to 30-day public notice and 45-day EPA review. The public comment period ended **XX XX, 2009** with the receipt of no comments. The EPA comment period ended **XX XX, 2009** with the receipt of no comments.

VI. Permit Modifications/Changes and ESM Discussion

The following table lists all modifications associated with this permit action:

Page(s)	Section	Description of Change(s)
Attachment	Insignificant activities	-updated equipment descriptions -amended permit revision number
Cover	-	-amended all dates and permit revision numbers
Table of Contents	-	-Remove references to Part I and II
All	Header	-amended permit revision number
3	Equipment table	-added RACT reference to applicable equipment
4	2.1 A (table)	-added RACT reference
5	2.1 A.1.b.	-updated all testing references to the new rule 2D .2601 from this point forward throughout permit
8	2.1 B (table) 2.2 A (table)	-added RACT reference -added RACT reference
9	2.2 A.2	-added RACT permit language indicating MACT meets the RACT requirements
23-31	General Conditions	-updated shell language per version 2.22.1

VII. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes
15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
15A NCAC 2D .0521, Control of Visible Emissions
15A NCAC 2D .0958, Work Practice Standards for Sources of Volatile Organic Compounds
15A NCAC 2D .1100, Control of Toxic Air Pollutants
15A NCAC 2D .1111, Maximum Achievable Control Technology (Subpart M) (M) (M) (M)
15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions
15A NCAC 2Q .0317, Avoidance Conditions (for 2D .0530, Prevention of Significant Deterioration)
15A NCAC 2Q .0711, Emission Rates Requiring a Permit

A regulatory review for these existing requirements will not be included in this document.

As a result of this RACT review permit renewal, the following regulation has been added:

15A NCAC 2D .0934 COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS

- a. This Rule applies to application areas, flashoff areas, ovens and other processes that are used in the coating of metal parts and products of any manufacturing plant that coats metal parts or products.
- b. The Permittee has "installed and operates reasonable available control technology" as the M) (M) (M) (M), "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products", meets the requirements of RACT³ [15A NCAC 2D .0951(c)(1)].
 - i. Final compliance was demonstrated for existing source RACT no later than **April 1, 2009** [15A NCAC 2D .0909(d)(2)(C)]

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required.

In addition, the DAQ's RACT review indicated some VOC emitting insignificant (< 5 tpy VOC) sources are not subject to RACT and "exempt" as per 2D .0902(d) as emissions are less than 15 pounds per day. The DAQ added permit shield language as a footnote to the insignificant activities list.

VIII. NSPS, NESHAPS/MACT, PSD/NNSR, 112(r), CAM

NSPS – The facility is not currently subject to any New Source Performance Standards of 40 CFR Part 60.

NESHAPS/MACT – The following sources (**ID Nos. ES-01, ES-02, ES-05, F-01, SILK, and INK**) are subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products. Compliance with this standard was required on **January 2, 2007** for all existing sources. The Permittee was required to submit the notification of compliance status required by 63.9(h) by **March 1, 2008**.

PSD/NNSR – The facility is currently subject to a permit condition that limits volatile organic compound emissions facility-wide to less than 250 tons per year. The Permittee is required to complete monthly VOC emissions calculations by multiplying total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. Calculations are to be recorded monthly in a logbook.

With regard to NAA/NSR, Berenfeild has taken multiple limits on VOC emissions of 250 tpy to avoid PSD. As such they are classified as a major source. The major source threshold is now 100 tpy in all counties in

³ See *Federal Register*/Volume 70, No. 288/Tuesday, November 29, 2005/ Rules and Regulations/ 71653-71655

Metrolina. Actual VOC emissions would indicate Berenfeild could be a synthetic minor source but has not chosen to take limits and exercise this option at this time. This permit modification will not affect PSD status.

Cabarrus County is not in attainment with the 8-hour ozone standard. The area was designated as Nonattainment on June 15, 2004. The attainment date is June 2010. Cochrane is subject to RACT however the NAA Added Fee does not apply at this time. (The facility is not required to "change the method of operation e.g., install additional controls or work practices to comply with RACT" as per February 29, 2008 memorandum).

112(r) – The facility is not currently subject to the 112(r) “Prevention of Accidental Releases” requirements because it does not store any chemicals in amounts greater than the applicability threshold.

CAM – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. No permitted equipment currently employs a control device; therefore, CAM does not apply. This permit modification does not affect this status.

IX. Application Fee, PE Seal, Zoning Consistency, Responsible Official

An application fee is not required for an existing source RACT permit application.

As this modification does not involve the appropriateness and design of control equipment, a PE seal is not required

This is an existing facility. As this modification does not involve expansion of the facility or an increase in emissions, a zoning consistency determination is not required.

Mr. Ken Fowler, Vice President, signed the application as the responsible official. Mr. David Henderson is considered the technical contact.

X. Facility Wide Air Toxics

The facility is currently subject to both 15A NCAC 2D .1100 for modeled air toxics (TAPs) emission rates and 15A NCAC 2Q .0711 for all other TAPs not emitted in quantities greater than the toxic permit emission rate (TPER). Compliance is indicated.

XI. Facility Emissions Review

There is no change in emissions for this modification.

The following table represents the latest emission inventory from the facility:

Pollutant(s)	2007 Actual Emissions (tpy)
CO	0.23
NO _x	1.64
PM ₁₀	0.15
SO ₂	0.01
VOC	81.08
Total HAP/TAP	unknown

XII. Public Notice/EPA and Affected State(s) Review

Pursuant to 15A NCAC 2Q .0521, a notice of the DRAFT Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed

permit and each final permit shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. South Carolina is an affected State and Mecklenburg County is an affected Local Program within 50 miles of this facility.

XIII. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this RACT review.

A consistency determination was not required for this RACT review.

MRO recommends issuance of the permit and was presented with a DRAFT permit prior to notice and issuance.

RCO concurs with MRO's recommendation to issue the air permit.