

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

CCL Custom Manufacturing, Inc.  
Attn: Yvonne Sherman  
1 West Hegeler Lane  
Danville, Illinois 61832

Application No.: 02070044

I.D. No.: 183804AAC

Applicant's Designation:

Date Received: July 15, 2002

Subject: New Aerosol Filling Line

Date Issued: November 12, 2002

Location: 1 West Hegeler Lane, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a new aerosol filling line as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 UNIT SPECIFIC CONDITIONS

1.1 Unit Line 15

1.1.1 Description

The new line 15 will be used for personal care products, such as shaving gel and shaving foams. The new line will increase production of the source and will have the flexibility of using both through-the valve and bottom filling to charge cans with aerosol propellant.

This permit also addresses the increase operation throughput of the reject cans/can puncture operation accompanying the new line 15.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Line 15	Aerosol can filling line	None

1.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected line" for the purpose of these unit-specific conditions, is the new aerosol filling line, as described in Condition 1.1.1 and 1.1.2.

- b. All process emission units as defined in 35 IAC 211.5190 at the source are subject to 35 IAC 212.321, which provides that: No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- c. All emission units using organic material, including the affected line when filling concentrate in Through-The-Valve (TTV) filling method are subject to 35 IAC 215.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material (OM) into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and with the following exception: if no odor nuisance exists the limitation shall apply only to photochemically reactive.

1.1.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected line not being a major project for purpose of section 112(g) of the Clean Air Act, because the emissions of the affected line are less than 10 tons for a single hazardous air pollutant(HAP) and less than 25 tons for the combination of HAP's.

1.1.5 Control Requirements

- a. At all times, the Permittee shall to the extent practicable, maintain and operate all emission units, including the affected line, in a manner consistent with good air pollution control practice for minimizing emissions.
- b.
  - i. Total number of cans produced in the affected line shall not exceed 6 million cans/month and 63 million cans/year.
  - ii. The maximum throughput of concentrate(i.e., material other than propellant introduced into cans) for the affected line, shall not exceed a total of 400,000 gallons/month and 4 million gallons/year.

- iii. Volatile organic material (VOM) content in the concentrates shall not exceed 50% by weight.
- c. The maximum amount of VOM used for flushing between batches for purpose of cleaning the equipment shall not exceed 3,286 gallons/month and 32,860 gallon/year.
- d. The total amount of propellant in cans from the affected line that are processed by the reject cans/can puncture operation shall not exceed 0.7 tons/month and 3.1 tons/year.

1.1.6 Emission Limitations

- a.
  - i. Emissions of volatile organic material(VOM) from the affected line shall not exceed 3.8 tons per month and 38 tons per year.
  - ii. Emissions of VOM from other ancillary operations, in particular, pipe disconnects/propellant changeovers, solvent(ethanol) storage tanks\*, compounding, concentrate day tanks, concentrate filling and spray testing, combined shall not exceed 0.30 tons per month and 2.96 tons per year.  
  
\* Emissions of VOM from the storage tanks associated with operation of Line 15.
  - iii. Emissions of VOM associated with the ethanol flushing/washing process shall not exceed 0.4 tons/month and 4.32 tons/year.
  - iv. Emissions of VOM associated with the processing of cans from the affected line on the reject can/puncture shall not exceed 0.7 tons/month and 3.1 tons/year.
- b. The Permittee shall remove two of the existing wheatly booster pumps, which would be replaced by a new "zero VOM emission" pump

This Condition is imposed in order to address the applicability and compliance of 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These requirements continue to ensure that the construction addressed in this construction permit does not constitute a major modification pursuant to these rules, by providing a VOM decrease of 10 tons/year. (See Attachment A).

- c. Concentrate and propellants used in the affected line shall not contain hazardous air pollutants, as demonstrated by the information in the Material Safety Data Sheets for materials or their constituents.

1.1.7 Testing Requirements

- a. Within 180 days after initial startup of the affected line, the Permittee shall at his own expense, conduct stack test for VOM emission for both through-the valve and bottom fill can filling operations and the "zero VOM emission" pump in accordance with the applicable test methods and procedures as identified below.

Location of Sample Points USEPA Method 1  
Gas Flow and Velocity USEPA Method 2  
Flue Gas Weight USEPA Method 3  
Volatile Organic Material USEPA Method 18 or 21

- b. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
  - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
  - iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

- iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.
  - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- d. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:
- i. A summary of results.
  - ii. General information.
  - iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.
  - iv. Detailed description of test conditions, including:
    - A. Process information, e.g., equipment mode and propellant feed rate.
    - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
  - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

1.1.8 Monitoring Requirements

None

1.1.9 Recordkeeping Requirements

- a. The Permittee shall keep a file containing the VOM emissions factors used for can filling and ancillary operations, with supporting calculation and documentation.
- b. The Permittee shall keep records of the followings for the affected line:

- i. Total number of cans processed (cans/month and cans/year).
  - ii. Number of cans of processed by class of fill method and VOM content(cans/month and cans/year), if the Permittee is applying different emission factors by class of cans.
- c. The Permittee shall keep records of the followings for the ancillary operations associated with the affected line:
- i. Total amount of VOM (gallons/month and gallons/year) used in the flushing operation.
  - ii. Number of cans with propellant rejected (cans/month and cans/year by class).
- d. Log of inspection and maintenance for the affected line, pump and associated ancillary operation.
- e. The Permittee shall keep the following records related to VOM emissions:
- i. VOM emissions from the affected line in tons/month and tons/year, with all supporting calculations.
  - ii. VOM emissions from each ancillary operation associated with the affected line tons/month and tons/year, with all supporting calculations.
- f. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

#### 1.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, noncompliance of the affected line with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- b. Two copies of required reports and notifications concerning emissions equipment operation or performance testing shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
Telephone:217/782-5811 Facsimile:217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
209 Mall Street  
Collinsville, Illinois 62234  
Telephone:618/346-5120 Facsimile:618/346-5155

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

None

1.1.12 Compliance Procedures

- a. Compliance with Condition 1.1.3(b) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected line.
- b. Compliance with Condition 1.1.6 shall be based on the recordkeeping requirements in Condition 1.1.9 and the following:
  - i. For flushing/washing by percent by weight, specifically 4 percent of the total amount of VOM used in the flushing operation is emitted to the air.

Flushing/washing = Total amount of VOM used in flushing operation x loss emission factor.

- ii. Until other factors are established, the emissions for other operations shall be calculated using the emission factors and formulas contained in the application, as follows:

<u>Operation</u>	<u>Emission Factor</u>
Line 15 (Aerosol Filling- Bottom Filling)	$1.2 \times 10^{-3}$ lb/can
Reject Cans/Can Puncture	$1.6 \times 10^{-2}$ lb/can
Ancillary Operations, including pipe disconnects, ethanol storage tanks, compounding, concentrate day tanks, concentrate filling and spray testing	$9.39 \times 10^{-5}$ lb/can

These emission factors are based worst-case scenario bottom filling mode, operation specific capacity and equipment design. Except for the concentrate filling and solvent flushing/washing-Spraying, which is based on USEPA's AP-42 factors.

Aerosol filing emissions = Number of cans filled x emission factor.

Rejected cans/Can Puncture = Number of cans rejected with propellant x emission factor with propellant content.

Ancillary Operations = Number of cans filled x emission factor.

The Permittee should update their CAAPP application to include this new equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RNG:psj

cc: Region 3

**ATTACHMENT A**

Change in VOM emissions(tons/year)\*

<b>Point of Emissions Primary Operation</b>	<b><u>Bottom Filling</u></b>	<b><u>TTV Filling</u></b>	<b><u>Permitted Emissions</u></b>
Line 15	38	32	38
<b>Ancillary Operations</b>			
Pipe Disconnects or Propellant Changeovers	0.01	0.01	0.01
VOM Storage Tanks	0.26	0.26	0.26
Compounding	0.52	0.52	0.52
Concentrate Day Tanks	0.26	0.26	0.26
Concentrate Filing	0	1.8	1.8
VOM Flushing/Washing	4.32	4.32	4.32
Spray Testing	0.11	0.074	0.11
Reject Cans or Can Puncture Operation	3.1	2.1	3.1
<b>Total Emission Increase</b>	46.58	41.34	48.38
<b>Equipment Removed</b>			
Two Wheatly Booster Pump	10	10	10
<b>Total Emission</b>	(-10)	(-10)	(-10)
<b>Net Emission increase</b>	36.58	31.34	38.38

\* Based on no increase in VOM emissions for the last 5 contemporaneous years.

This attachment provides a summary of the maximum emissions from the project. In preparing this summary, the Illinois EPA used the maximum annual raw material usage in the new line and associated ancillary operations, which results in maximum emissions from the project.

RNG:psj