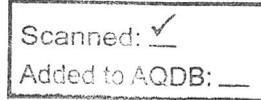




September 21, 2016



FILE

Mr. Randy Emter  
Operations Manager  
Worthington Industries  
1796 S Main Avenue  
Dickinson, ND 58601

Re: Air Pollution Control  
Permit to Operate  
Synthetic Minor Source

Dear Mr. Emter:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Health has completed review of your application received on June 30, 2016, for Worthington Industries located in Stark County, North Dakota.

Enclosed is a copy of the Department's draft/proposed minor (synthetic) Permit to Operate No. M14001 for the facility. Before making final determinations on the permit application, the Department of Health must solicit public comment by means of the enclosed public notice, and provide for a concurrent 30-day Environmental Protection Agency (EPA) review. As indicated in the notice, the public comment period will begin on September 26, 2016 and end on October 26, 2016.

All comments received will be considered in the final determination concerning issuance of the permit. The Department will take final action on the permit application following the public comment period and EPA review. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5188.

Sincerely,



Elizabeth Trythall  
Environmental Scientist  
Division of Air Quality

ET:saj  
Enc:

NOTICE OF INTENT TO ISSUE AN  
AIR POLLUTION CONTROL  
SYNTHETIC MINOR PERMIT TO OPERATE

Take notice that the North Dakota Department of Health (NDDoH) proposes to issue an Air Pollution Control Permit to Operate to Worthington Industries for operation of manufacturing (metal) equipment construction/coating facility in accordance with the ND Air Pollution Control Rules. The facility is located at 1796 S Main Avenue, Dickinson, North Dakota. The permit allows for the operation of metal tank manufacturing equipment. Worthington Industry's mailing address is 1796 South Main, Dickinson, North Dakota 58601.

A thirty-day public comment period for the draft permit will begin September 26, 2016 and end October 26, 2016. Direct comments in writing to the NDDoH, Division of Air Quality, 918 E Divide Avenue, Bismarck, ND 58501-1947. Comments must be received by the end of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDoH. Requests for a public hearing must be received in writing by the NDDoH before the end of the public comment period.

The notice, draft permit and application are available for review at the NDDoH Division of Air Quality address and on the Division of Air Quality website at <http://www.ndhealth.gov/AQ/PublicCom.aspx>. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting Elizabeth Trythall at (701)328-5188 or emailing [ektrythall@nd.gov](mailto:ektrythall@nd.gov).

Dated this 22<sup>nd</sup> day of September, 2016.

Terry L. O'Clair, P.E.  
Director  
Division of Air Quality



AIR POLLUTION CONTROL  
MINOR SOURCE  
PERMIT TO OPERATE

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota, and in reliance on statements and representations heretofore made by the owner designated below, a Permit to Operate is hereby issued authorizing such owner to operate the source unit(s) at the location designated below. This Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Health and to any conditions specified below:

<p>1. <b>Permittee:</b></p> <p>A. <b>Name:</b> Worthington Industries</p> <p>B. 1796 South Main Dickinson, ND 58601</p>	<p>2. A. <b>Permit Number:</b> M14001 Renewal No.: 0 Revision No.: 0</p> <p>B. <b>Permit Description:</b> Synthetic Minor Source: NDAC 33-15-14-03.1.e</p>
<p>3. <b>Source Name &amp; Location:</b> Worthington Cylinders Dickinson 1796 South Main Dickinson, ND 58601 Stark County, North Dakota</p>	<p>4. <b>Source Type:</b> Manufacturing (Metal): Equip. Const/Coating</p>
<p>5. <b>Expiration Date:</b> October 27, 2021</p>	
<p>6. <b>Source Unit(s):</b></p>	

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Two Dayton Model 3E378A UEAS High-Efficiency, Separated-Combustion, Low-Static natural gas-fired unit heaters, each rated at 320,000 Btu/hr	1-2	1-2	None
Titan Air Inc. Model TA-130 NG VRH DA natural gas-fired makeup air handler rated at 2.75 MM Btu/hr	3	3	None
Titan Air Inc. Model TA-227 NG VRH DA natural gas-fired makeup air handler rated at 5.5 MM Btu/hr	4	4	None
Two Space-Ray Model RSTP10 natural gas-fired infrared radiant tubes, each rated at 100,000 Btu/hr	5-6	5-6	None

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Paint Booth	7	7-8	Two separate arrestor filter sets
Shot Blasting	8	9	Blast booth media capture filters.

7. A. **Emission Limits:** Emission limits from the operation of the source unit(s) identified in Item 6 of this Permit to Operate (hereafter referred to as "permit") are as follows. Source units not listed are subject to the applicable emission limits specified in the North Dakota Air Pollution Control Rules.

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit
Two natural gas-fired unit heaters	1-2	1-2	Opacity	20%*
Two natural gas-fired makeup air handler	3-4	3-4	Opacity	20%*
Two natural gas-fired infrared radiant tubes	5-6	5-6	Opacity	20%*
Paint booth	7	7-8	Opacity	20%*
Shot blasting	8	9	Opacity	20%*

\*40% opacity is permissible for not more than one six-minute period per hour.

B. **Process Restrictions:**

- 1) **VOC Emission Limit:** Volatile organic compound (VOC) emissions from all paint usage are limited to a total of 95.0 tons per rolling 12-month period.

By the 15<sup>th</sup> day of each month, the permittee shall record for the previous month the hours of operation, pounds of VOC per gallon of all coating being sprayed, the amount (in gallons) of each coating used in the system and the amount (in gallons) of cleaning, purging and thinning solvent used in the system. VOC emissions shall be calculated on a monthly basis and on a 12-month period using the following equation:

$$\text{VOC emissions (tons)} = [(CU \times \text{VOCC}) + (SU \times \text{VOCS})] / 2000$$

CU = coating usage (gallons)

VOCC = VOC content of coating (lbs VOC/gallon)

SU = solvent usage (pounds)

VOCS = VOC content of solvent (lbs VOC/gallon)

- 2) **HAP Emission Limit:** Hazardous air pollutant (HAP) emissions from all paint usage are limited to a total of 9.5 tons of any one HAP and 24.0 tons for all HAPs per rolling 12-month period.

By the 15<sup>th</sup> day of each month, the permittee shall record for the previous month the hours of operation, pounds of HAP per gallon of all coating being sprayed, the amount (in gallons) of each coating used in the system and the amount (in gallons) of cleaning,

purging and thinning solvent used in the system. HAP emissions shall be calculated on a monthly basis and on a 12-month period using the following equation:

$$\text{HAP emissions (tons)} = [(CU \times \text{HAPC}) + (SU \times \text{HAPS})] / 2000$$

CU = coating usages (gallons)

HAPC = HAP content of coating (lbs HAP/gallon)

SU = solvent usage

HAPS = HAP content of solvent (lbs HAP/gallon)

- 3) In the event that the VOC exceed 95 tons and/or HAP emissions exceed 9.5 tons of any one HAP and/or 24.0 tons for all HAPs in a 12-month period, the permittee shall notify the Department by the 25<sup>th</sup> day of the month in which the calculation was made.
- C. **Fuel Restriction:** The Emission Units (EU 1-6) are restricted to combusting only natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet as fuel.
- D. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17.
- E. **Annual Emission Inventory/Annual Production Reports:** The owner/operator shall submit an annual emission inventory report and/or an annual production report upon Department request, on forms supplied or approved by the Department.
- F. **Source Operations:** Operations at the facility shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or renewal application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.
- G. **Alterations, Modifications or Changes:** Any alteration, repairing, expansion, or change in the method of operation of the source which results in the emission of an additional type or greater amount of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, repairing, expansion or change in the method of operation.
- H. **Recordkeeping:** The owner/operator shall maintain any compliance monitoring records required by this permit or applicable requirements. The owner/operator shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application. Support information may include all calibration and maintenance records and all original strip-chart recordings/computer printouts for continuous monitoring instrumentation, and copies of all reports required by the permit.
- I. **Nuisance or Danger:** This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.

- J. **Malfunction Notification:** The owner/operator shall notify the Department as soon as possible during normal working hours of any malfunction which can be expected to last longer than twenty-four hours and can cause the emission of air contaminants in violation of applicable rules and regulations. Immediate notification to the Department is required for any malfunction that would threaten health or welfare, or pose an imminent danger.
- K. **Operation of Air Pollution Control Equipment:** The owner/operator shall maintain and operate all air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
- L. **Permit Renewal and Invalidation:** This permit shall be effective from the date of its issuance until the date specified in Item 5 unless sooner suspended, revoked or surrendered. Upon suspension or revocation, the permit shall be returned to the Department. Application for renewal of this permit shall be submitted ninety days prior to such expiration date. The Department shall approve or disapprove the renewal of the permit within ninety days of receipt of the renewal application.
- M. **Change of Ownership:** This permit may not be transferred without prior approval from the Department.
- N. **Right of Entry:** Any duly authorized officer, employee or agent of the North Dakota Department of Health may enter and inspect any property, premise or place at which the source listed in Item 3 of this permit is located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.
- O. **Other Regulations:** The owner/operator of the source unit(s) described in Item 6 of this permit shall comply with all State and Federal environmental laws and rules. In addition, the owner/operator shall comply with all local burning, fire, zoning, and other applicable ordinances, codes, rules and regulations.
- P. **Permit Issuance:** This permit is issued in reliance upon the accuracy and completeness of the information set forth in the application. The conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.
- Q. **Odor Restrictions:** The owner/operator shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33-15-16.

- R. **Sampling and Testing:** The Department may require the owner/operator to conduct tests to determine the emission rate of air contaminants from the source. The Department may observe the testing and may specify testing methods to be used. A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the owner/operator shall follow the procedures and formats in the Department's Emission Testing Guideline.

FOR THE NORTH DAKOTA  
DEPARTMENT OF HEALTH

Date \_\_\_\_\_

By \_\_\_\_\_  
Terry L. O'Clair, P.E.  
Director  
Division of Air Quality



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AIR QUALITY EFFECTS ANALYSIS  
FOR  
PERMIT TO OPERATE

**Applicant:**

Worthington Industries  
1796 S Main Avenue  
Dickinson, ND 58601

**Source Location:**

1796 South Main Avenue  
Dickinson, Stark County, North Dakota

**Introduction:**

In 2014 the Department was informed that Worthington Industries (Worthington) had purchased the tank manufacturing division of Steffes. With that notification it was discovered that two emission units had not been previously permitted while owned by the previous operators. Since receiving notification of the change of ownership, the Department has been working with Worthington to determine if the facility would need an operating permit. After determining a permit would be required the Department has been assisting Worthington with submitting an accurate and thorough application.

On June 30, 2016 the Department received a permit application from Worthington. This proposed Permit to Operate establishes a synthetic minor limit on the amount of HAPs the paint booth operation can produce/emit. The purpose of the limit is to maintain HAPs emissions below 10 tons for any single HAP and below 25 tons for all HAPs combined in a year. The facility is classified as a true minor source for all other regulated air contaminants. Worthington is limited in the permit to a total of 9.5 tons/year of any individual HAP and 24.0 tons/year of all combined HAPs per a rolling 12-month period.

**Applicable Rules/Allowable Emissions:**

A. Chapter 33-15-02 – Ambient Air Quality Standards

The facility must comply with the Ambient Air Quality Standards (AAQS). Other requirements of this chapter include general prohibitions against harming health, causing damage to plants, animals, other property and visible degradation. In addition to these standards, compliance with the Department's Air Toxics Policy is required.

B. Chapter 33-15-03 – Restriction of Emissions of Visible Air Contaminants

The facility must comply with an opacity limit of 20% except for one six-minute period per hour when 40% opacity is permissible.

C. Chapter 33-15-14 – Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate

This chapter requires the facility to obtain a Permit to Operate and Public Comment period to establish the HAPs restriction.

D. Chapter 33-15-15 – Prevention of Significant Deterioration of Air Quality

A Prevention of Significant Deterioration (PSD) review could potentially apply to this facility if it is classified as a “major stationary source” under Chapter 33-15-15.

E. Chapter 33-15-16 – Restriction of Odorous Air Contaminants

The owner/operator shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33-15-16.

F. Chapter 33-15-22 – Emissions Standards for Hazardous Air Pollutants for Source Categories

No standards under this chapter apply to the facility.

**Potential Emissions:**

VOC (tpy)	HAPs (tpy)*
95.0	9.5/24.0

\*Written as single/total HAPs

**Expected Emissions\*\*:**

VOC (tpy)	HAPs (tpy)*
69.08	9.9/24.0

\* Written as single/total HAPs

\*\*Based on calculations submitted with application

**Expected Compliance Status:**

A. Chapter 33-15-02 – Ambient Air Quality Standards

The facility is currently considered to be in compliance with the AAQS and the Air Toxics Policy and is expected to remain in compliance.

B. Chapter 33-15-03 – Restriction of Emissions of Visible Air Contaminants

Visible air contaminants are currently well below the 20% opacity limit established by this chapter and are expected to remain in compliance with this chapter.

C. Chapter 33-15-14 – Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate

Based on the expected emissions, the facility will be a minor source under the Title V program because the potential to emit for all criteria pollutants is under 100 tons/year, the potential to emit HAPs (taking into consideration the HAPs restriction) is under 10 tons/year of any individual HAP and under 25 tons/year of all combined HAPs.

D. Chapter 33-15-15 – Prevention of Significant Deterioration of Air Quality

Since the potential to emit for all pollutants remain below 250 tons/year a PSD review is not required.

E. Chapter 33-15-16 – Restriction of Odorous Air Contaminants

Based on Department experience with similar sources, the facility is expected to comply with this chapter.

F. Chapter 33-15-22 – Emissions Standards for Hazardous Air Pollutants for Source Categories

No standards under this chapter apply to the facility.

**Conclusions and Recommendations:**

The facility is expected to comply with the applicable federal and state rules. It is recommended that a Permit to Operate be issued to Worthington Industries to limit the amount of HAPS emitted. Upon issuance of the permit, the facility will be classified as a synthetic minor source for HAPs and a true minor source for criteria pollutants. Since the permit will establish a synthetic minor limit, a 30-day public comment period is required prior to permit issuance.

**Date of Analysis:** September 14, 2016

**Analysis By:**



Elizabeth Trythall  
Environmental Scientist  
Division of Air Quality

ET:saj

Attachments: Draft Permit to Operate  
Permit Application



**PERMIT APPLICATION FOR  
AIR POLLUTION CONTROL EQUIPMENT**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8532 (09-12)

Scanned:   
Added to AQDB:

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM.

**SECTION A – GENERAL INFORMATION**

Name of Firm or Organization Worthington Industries		
Applicant's Name Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Mailing Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601

**SECTION B – FACILITY INFORMATION**

Facility Name Worthington Cylinders Dickinson		
Contact Person for Air Pollution Matters Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Facility Location Dickinson, ND	Source ID No. CE-1	

**SECTION C – EQUIPMENT**

Type:  Cyclone     Multiclone     Baghouse     Electrostatic Precipitator  
 Wet Scrubber     Spray Dryer     Other – Specify:

**Paint Arrestor Filters and blast booth media capture equipment**

Name of Manufacturer Not specified	Model Number Not specified	Date to Be Installed 2009
Application: <input type="checkbox"/> Boiler <input type="checkbox"/> Kiln <input type="checkbox"/> Engine <input checked="" type="checkbox"/> Other – Specify: Arrestor filters capture over-spray in paint booth and coating operations		
Pollutants Removed	Paint/coating overspray	
Design Efficiency (%)	98.8%	
Operating Efficiency (%)	Not available	

Describe method used to determine operating efficiency:  
Arrestor filters are routinely changed after coating application to approximately 50 tanks. See the attachment for a listing of pollutants associated with products used in the painting/coating process.

**SECTION D – GAS CONDITIONS**

<b>Gas Conditions</b>		<b>Inlet</b>	<b>Outlet</b>
Gas Volume (SCFM; 68°F; 14.7 psia)		Not available	Not available
Gas Temperature (°F)		Not available	Ambient indoor temperature
Gas Pressure (in. H <sub>2</sub> O)		Not available	Atmospheric pressure
Gas Velocity (ft/sec)		Not available	40.8ft/sec when operating
<b>Pollutant Concentration (Specify Pollutant and Unit of Concentration)</b>	<b>Pollutant</b>	<b>Unit of Concentration</b>	
	Not available	Not available	
	Not available	Not available	
<b>Pressure Drop Through Gas Cleaning Device (in. H<sub>2</sub>O)</b>			
Not available			

<b>Signature of Applicant</b>		<b>Date</b>	3/7/14
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**PERMIT APPLICATION FOR  
AIR POLLUTION CONTROL EQUIPMENT**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8532 (09-12)

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM.

**SECTION A – GENERAL INFORMATION**

Name of Firm or Organization Worthington Industries		
Applicant's Name Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Mailing Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601

**SECTION B – FACILITY INFORMATION**

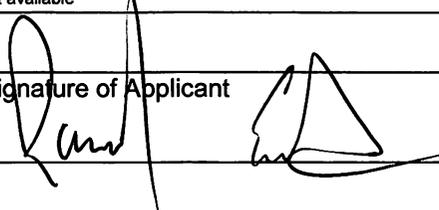
Facility Name Worthington Cylinders Dickinson		
Contact Person for Air Pollution Matters Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Facility Location Dickinson, ND	Source ID No. CE-2	

**SECTION C – EQUIPMENT**

Type: <input type="checkbox"/> Cyclone <input type="checkbox"/> Multiclone <input type="checkbox"/> Baghouse <input type="checkbox"/> Electrostatic Precipitator			
<input type="checkbox"/> Wet Scrubber <input type="checkbox"/> Spray Dryer <input checked="" type="checkbox"/> Other – Specify:			
<b>Paint Arrestor Filters and blast booth media capture equipment</b>			
Name of Manufacturer Not specified	Model Number Not specified	Date to Be Installed 2009	
Application: <input type="checkbox"/> Boiler <input type="checkbox"/> Kiln <input type="checkbox"/> Engine <input checked="" type="checkbox"/> Other – Specify: Arrestor filters capture over-spray in paint booth and coating operations			
Pollutants Removed	Paint/coating overspray		
Design Efficiency (%)	98.8%		
Operating Efficiency (%)	Not available		
Describe method used to determine operating efficiency: Arrestor filters are changed based on visual inspection. See the attachment for a listing of pollutants associated with products used in the painting/coating process.			

**SECTION D – GAS CONDITIONS**

<b>Gas Conditions</b>		<b>Inlet</b>	<b>Outlet</b>
Gas Volume (SCFM; 68°F; 14.7 psia)		Not available	Not available
Gas Temperature (°F)		Not available	Ambient indoor temperature
Gas Pressure (in. H <sub>2</sub> O)		Not available	Atmospheric pressure
Gas Velocity (ft/sec)		Not available	1.36ft/sec when operating
Pollutant Concentration (Specify Pollutant and Unit of Concentration)	<b>Pollutant</b>	<b>Unit of Concentration</b>	
	Not available	Not available	
	Not available	Not available	
Pressure Drop Through Gas Cleaning Device (in. H <sub>2</sub> O)			
Not available			

Signature of Applicant	Date
	3/7/14



**PERMIT APPLICATION FOR  
AIR POLLUTION CONTROL EQUIPMENT**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8532 (09-12)

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM.

**SECTION A – GENERAL INFORMATION**

Name of Firm or Organization Worthington Industries		
Applicant's Name Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Mailing Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601

**SECTION B – FACILITY INFORMATION**

Facility Name Worthington Cylinders Dickinson		
Contact Person for Air Pollution Matters Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Facility Location Dickinson, ND	Source ID No. CE-3	

**SECTION C – EQUIPMENT**

Type:     Cyclone         Multiclone         Baghouse         Electrostatic Precipitator

Wet Scrubber         Spray Dryer         Other – Specify:

**Paint Arrestor Filters and blast booth media capture equipment**

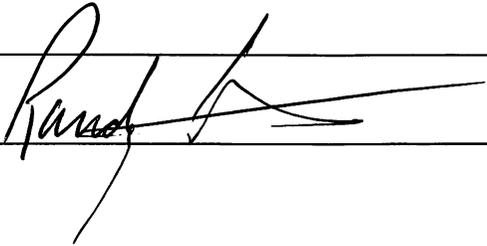
Name of Manufacturer Not specified	Model Number Not specified	Date to Be Installed 2009
Application: <input type="checkbox"/> Boiler <input type="checkbox"/> Kiln <input type="checkbox"/> Engine <input checked="" type="checkbox"/> Other – Specify: Blast booth filters capture blast media for recycle or landfill disposal		
Pollutants Removed	Blast media (particulates)	
Design Efficiency (%)	Not specified	
Operating Efficiency (%)	90% (estimated)	

Describe method used to determine operating efficiency:

When the blast booth is in operation, air is purged through the system at regular intervals, to remove dust that is then sent to the landfill. Approximately 90% of the blast media is recovered and reused.

**SECTION D – GAS CONDITIONS**

<b>Gas Conditions</b>		<b>Inlet</b>	<b>Outlet</b>
Gas Volume (SCFM; 68°F; 14.7 psia)		Not available	Not available
Gas Temperature (°F)		Not available	Ambient indoor temperature
Gas Pressure (in. H <sub>2</sub> O)		Not available	Atmospheric pressure
Gas Velocity (ft/sec)		Not available	40.8ft/sec in total when operating
Pollutant Concentration (Specify Pollutant and Unit of Concentration)	<b>Pollutant</b>	<b>Unit of Concentration</b>	
	Not available	Not available	
	Not available	Not available	
Pressure Drop Through Gas Cleaning Device (in. H <sub>2</sub> O)			
Not available			

Signature of Applicant		Date
		3/7/16

1. **Description of Air Pollution Control Devices:** Pollution control equipment associated with the paint booth at the facility consists of a set of filter banks (Control Equipment – 1 (CE-1)), located on opposite walls of the paint/coating booth, a paint arrestor to capture overspray in the spray liner area (CE-2), and a particulate filter assembly to capture particles in the blast booth (CE-3).
  - CE-1: The paint booth filter banks and exhaust assembly are referenced as CE-1 in the permit application. The paint arrestors utilize GA10-100 20" x 20" fiberglass paint arrestor pads to capture overspray from the coating process and allow for the ventilation system to adequately exhaust vapors from the paint booth. Sheet metal ductwork is in place to convey the exhaust through a 3.5-foot diameter exhaust stack located at a height of 30 feet above grade. The motor for the ventilation process is located on the rooftop of the building. The exhaust system is rated at 30,000 standard cubic feet per minute (scfm). Forty-eight filters are in place for a total filter surface area of approximately 133 square feet. A photograph of the paint booth filter banks is provided in Figure SFN8532-1.
  - CE-2: An assembly of GA10-100 20" x 20" fiberglass arrestor pads filters is also utilized to capture overspray from the coating/spray liner process. The exhaust from the coating area vents to the atmosphere from an exit height of approximately 12 feet above grade, with a 5-foot diameter stack. The exhaust system is rated at 1,000 standard cubic feet per minute (scfm). Twenty-four filters are in place for a total surface area of approximately 67 square feet. A photograph of a paint arrestor located in the coating/spray liner area is provided in Figure SFN8532-2.
  - CE-3: Figure SFN8532-3 shows the filtration system assembly associated with the blast bay. The system is self-assembled and rated at approximately 30,000 scfm. The exhaust measures 2.5-feet in diameter and is located 20 feet above grade. The system has 32 filters that are 16 inches in diameter and 30 inches long. The filters are a fibrous paper wrapped in wire mesh and while operating, they purge once every five minutes knocking the particles into an enclosed collection bin which go to the landfill for disposal.

Attachment for SFN 8532

Permit Application for Air Pollution Control Equipment

Facility: Worthington Cylinders Dickinson



Figure SFN8532-1: Paint Arrestor Filter Banks in Paint Booth (CE-1)



Figure SFN8532-2: Paint Arrestor and Exhaust Ductwork in Spray Liner Area (CE-2)



Figure SFN8532-3: Blast Bay Filtration System (CE-3)

2. **Description of what is done with collected air contaminants until disposal, along with transportation methods:** Spent paint arrestor filters are packaged into 55-gallon drums and disposed of through Safety-Kleen. The majority of steel grit particulates captured from the blast booth filter system are recycled. Dust from the CE-3 system is captured and taken to the landfill for disposal.
  
3. **Stack testing results:** Stack testing has not been performed at the facility.

#### Section C – Equipment – Pollutants Removed:

Pollutants removed by the equipment vary based on the paint/coating in use. Table SFN8532-1 on the following page lists the products used at the facility and the Volatile Organic Compounds (VOCs) Hazardous Air Pollutants (HAPs) associated with each, if any. The paint arrestor filters are replaced at a frequency intended to optimize filter use while maintaining particulate removal efficiency of greater than 98 percent. The blast booth filters are purged once every five minutes, knocking the particles into an enclosed collection bin which go to the landfill for disposal.

#### Section D – Gas Conditions:

Note that for CE-3, combined outlet velocity is 40.8 ft/sec through two adjacent outlets, or 20.4 ft/sec through each individual outlet.

Description	lbs of VOC per Gallon	Density (lbs per Gallon)	1330-20-7 Xylene		108-88-3 Toluene		67-56-1 Methyl Alcohol		100-41-4 Ethylbenzene		108-10-1 Methyl Isobutyl Ketone	
			%	lbs/gal	%	lbs/gal	%	lbs/gal	%	lbs/gal	%	lbs/gal
SW KEM 400 Carlsbad*	4.53	8.41	44.72%	3.76	0.00%	0.00	0.00%	0.00	7.90%	0.66	0.00%	0.00
SW KEM 400 Shale Green*	4.53	8.64	40.48%	3.50	0.00%	0.00	0.00%	0.00	7.14%	0.62	0.00%	0.00
SW Kem 400 Covert Green*	4.91	8.22	44.00%	3.62	0.00%	0.00	0.00%	0.00	8.00%	0.66	0.00%	0.00
SW KEM Flash Ultrabond Primer Thick*	3.90	10.91	11.47%	1.25	0.00%	0.00	0.00%	0.00	2.01%	0.22	6.19%	0.68
SW Fast Clad ER - Part A	1.22	13.59	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
SW Fast Clad ER - Part B	0.01	9.68	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
SW Phenicon HS Epoxy - Part A*	2.53	13.66	14.00%	1.91	0.00%	0.00	0.00%	0.00	2.00%	0.27	0.00%	0.00
SW Phenicon HS Epoxy - Part B*	3.27	8.53	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
SW 1000 (Gun) Cleaner Solvent* - DISCONTINUED	6.00	6.85	1.00%	0.07	7.20%	0.49	1.90%	0.13	0.00%	0.00	0.00%	0.00
International Intercure 4500 Carlsbad (Part A & Part B)	1.88	11.14	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
International Intercure 4500 Shale Green (Part A & Part B)	1.88	11.14	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
SW Polane D200 Enamel Carlsbad - Part A	2.76	9.72	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.10%	0.01	0.00%	0.00
SW Polane D200 Enamel Shale Green - Part A	2.76	9.72	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.10%	0.01	0.00%	0.00
SW Polane D200 Enamel - Part B	0.00	9.54	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Royson Roskote A51 Mastic	3.51	9.23	0.00%	0.00	35.00%	3.23	0.00%	0.00	0.00%	0.00	0.00%	0.00
HAPS Free Lacquer Thinner	6.70	7.06	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00

\* Products no longer in use but with some remaining inventory onsite.

Table SRF8532-1: List of Products Onsite and Corresponding VOC and HAP Composition



**PERMIT APPLICATION FOR  
HAZARDOUS AIR POLLUTANT (HAP) SOURCES**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8329 (09-12)

Scanned:   
Added to AQDB:

**SECTION A1 - APPLICANT INFORMATION**

Name of Firm or Organization Worthington Industries		
Applicant's Name Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Mailing Address (Street & No.) 1796 S Main		
City Dickinson	State ND	ZIP Code 58601

**SECTION A2 - FACILITY INFORMATION**

Contact Person for Air Pollution Matters Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Facility Address (Street & No. or Lat/Long to Nearest Second) 1796 S Main		
City Dickinson	State ND	ZIP Code 58601
County Stark	Number of Employees at Location 25	
Land Area at Plant Site 19.1 Acres (or)	Sq. Ft.	MSL Elevation at Plant 2470

Describe Nature of Business/Process Metal tank manufacturing, including painting and drying of tanks and outdoor, finished tank storage.
---

**SECTION B - STACK DATA**

Inside Diameter (ft) 3 1/2	Height Above Grade (ft) 30'	
Gas Temperature at Exit (°F) 60-100 degrees (Ambient Indoor Temperature)	Gas Velocity at Exit (ft/sec) 40.8 ft/sec	Gas Volume (scfm) 30,000
Basis of any Estimates (attach separate sheet if necessary) Facility building data, company engineer		
Are Emission Control Devices in Place? If YES - Complete SFN 8532 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Nearest Residences or Building Residential Building	Distance (ft) 100 feet	Direction West
Nearest Property Line Adjacent	Distance (ft) 0	Direction West

**SECTION C – EMISSION STREAM DATA**

Source ID No. From SFN 8516 CE-1	Mean Particle Diameter (um) 3-10 micron
Flow Rate (scfm) 30,000	Drift Velocity (ft/sec) Not available
Stream Temperature (°F) Ambient Indoor Temperature (60 - 100 F)	Particulate Concentration (gr/dscf) Not available
Moisture Content (%) Not available	Halogens or Metals Present? No
Pressure (in. Hg) Not available	Organic Content (ppmv) Varies based on paint type in use
Heat Content (Btu/scfm) Not available	O <sub>2</sub> Content (%) Not available

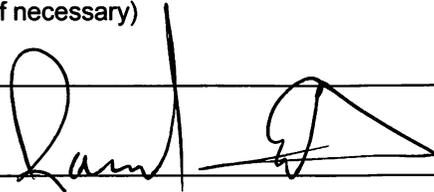
**SECTION D – POLLUTANT SPECIFIC DATA**

**(Complete One Box for Each Pollutant in Emission Stream)**

Pollutant Emitted Xylene	Chemical Abstract Services (CAS) Number 1330-20-7
Proposed Emission Rate (lb/hr) 0.52 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 16 mm Hg at 20 C
Solubility 1.91 g/100mL at 20 degrees C	Molecular Weight (lb/lb-mole) 106.2
Absorptive Properties	

Pollutant Emitted Toluene	Chemical Abstract Services (CAS) Number 108-88-3
Proposed Emission Rate (lb/hr) 5.65 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 3.8 kPa @ 25 C
Solubility 0.52 g/L at 20 degrees C	Molecular Weight (lb/lb-mole) 92.14
Absorptive Properties	

(Add additional pages if necessary)

Signature of Applicant		Date 3/7/16
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**SEND COMPLETED APPLICATION AND ALL ATTACHMENTS TO:**

North Dakota Department of Health  
 Division of Air Quality  
 918 E Divide Ave., 2nd Floor  
 Bismarck, ND 58501-1947  
 (701) 328-5188



**PERMIT APPLICATION FOR  
HAZARDOUS AIR POLLUTANT (HAP) SOURCES**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
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SFN 8329 (09-12)

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City Dickinson	State ND	ZIP Code 58601
County Stark	Number of Employees at Location 25	
Land Area at Plant Site 19.1 Acres (or)	Sq. Ft.	MSL Elevation at Plant 2470

Describe Nature of Business/Process  
Metal tank manufacturing, including painting and drying of tanks and outdoor, finished tank storage.

**SECTION B - STACK DATA**

Inside Diameter (ft) 3 1/2	Height Above Grade (ft) 30'	
Gas Temperature at Exit (°F) 60-100 degrees (Ambient Indoor Temperature)	Gas Velocity at Exit (ft/sec) 40.8 ft/sec	Gas Volume (scfm) 30,000
Basis of any Estimates (attach separate sheet if necessary) Facility building data, company engineer		
Are Emission Control Devices in Place? If YES - Complete SFN 8532 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Nearest Residences or Building Residential Building	Distance (ft) 100 feet	Direction West
Nearest Property Line Adjacent	Distance (ft) 0	Direction West

**SECTION C – EMISSION STREAM DATA**

Source ID No. From SFN 8516 CE-1	Mean Particle Diameter (um) 3-10 micron
Flow Rate (scfm) 30,000	Drift Velocity (ft/sec) Not available
Stream Temperature (°F) Ambient Indoor Temperature (60 - 100 F)	Particulate Concentration (gr/dscf) Not available
Moisture Content (%) Not available	Halogens or Metals Present? No
Pressure (in. Hg) Not available	Organic Content (ppmv) Varies based on paint type in use
Heat Content (Btu/scfm) Not available	O <sub>2</sub> Content (%) Not available

**SECTION D – POLLUTANT SPECIFIC DATA****(Complete One Box for Each Pollutant in Emission Stream)**

Pollutant Emitted Ethylbenzene	Chemical Abstract Services (CAS) Number 100-41-4
Proposed Emission Rate (lb/hr) 0.13 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 9.998 mm Hg
Solubility 0.015 g/100mL at 20 degrees C	Molecular Weight (lb/lb-mole) 106.2
Absorptive Properties	

Pollutant Emitted Methyl Isobutyl Ketone	Chemical Abstract Services (CAS) Number 108-10-1
Proposed Emission Rate (lb/hr) 0.07 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 16 mm Hg @ 20 C
Solubility 1.91 g/100ml at 20 degrees C	Molecular Weight (lb/lb-mole) 100.2
Absorptive Properties	

(Add additional pages if necessary)

Signature of Applicant 	Date 3/7/16
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NORTH DAKOTA DEPARTMENT OF HEALTH  
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SFN 8329 (09-12)

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City Dickinson	State ND	ZIP Code 58601
County Stark	Number of Employees at Location 25	
Land Area at Plant Site 19.1 Acres (or)	Sq. Ft.	MSL Elevation at Plant 2470

Describe Nature of Business/Process Metal tank manufacturing, including painting and drying of tanks and outdoor, finished tank storage.
---

**SECTION B - STACK DATA**

Inside Diameter (ft) 5	Height Above Grade (ft) 12	
Gas Temperature at Exit (°F) 60-100 degrees (Ambient Indoor Temperature)	Gas Velocity at Exit (ft/sec) 1.36 ft/sec	Gas Volume (scfm) 1,000
Basis of any Estimates (attach separate sheet if necessary) Facility building data, company engineer		
Are Emission Control Devices in Place? If YES - Complete SFN 8532 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Nearest Residences or Building Residential Building	Distance (ft) 100 feet	Direction West
Nearest Property Line Adjacent	Distance (ft) 0	Direction West

**SECTION C – EMISSION STREAM DATA**

Source ID No. From SFN 8516 CE-2	Mean Particle Diameter (um) 3-10 micron
Flow Rate (scfm) 1,000	Drift Velocity (ft/sec) Not available
Stream Temperature (°F) Ambient Indoor Temperature (60 - 100 F)	Particulate Concentration (gr/dscf) Not available
Moisture Content (%) Not available	Halogens or Metals Present? No
Pressure (in. Hg) Not available	Organic Content (ppmv) Varies based on paint type in use
Heat Content (Btu/scfm) Not available	O <sub>2</sub> Content (%) Not available

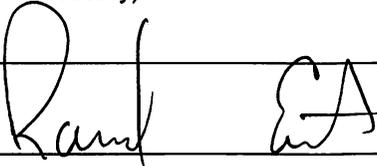
**SECTION D – POLLUTANT SPECIFIC DATA**

**(Complete One Box for Each Pollutant in Emission Stream)**

Pollutant Emitted Ethylbenzene	Chemical Abstract Services (CAS) Number 100-41-4
Proposed Emission Rate (lb/hr) 0.13 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 9.998 mm Hg
Solubility 0.015 g/100mL at 20 degrees C	Molecular Weight (lb/lb-mole) 106.2
Absorptive Properties	

Pollutant Emitted Methyl Isobutyl Ketone	Chemical Abstract Services (CAS) Number 108-10-1
Proposed Emission Rate (lb/hr) 0.07 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 16 mm Hg @ 20 C
Solubility 1.91 g/100ml at 20 degrees C	Molecular Weight (lb/lb-mole) 100.2
Absorptive Properties	

(Add additional pages if necessary)

Signature of Applicant 	Date 3/7/16
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**PERMIT APPLICATION FOR  
HAZARDOUS AIR POLLUTANT (HAP) SOURCES**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8329 (09-12)

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Applicant's Name Randy Emter		
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City Dickinson	State ND	ZIP Code 58601
County Stark	Number of Employees at Location 25	
Land Area at Plant Site 19.1 Acres (or)	Sq. Ft.	MSL Elevation at Plant 2470

Describe Nature of Business/Process  
Metal tank manufacturing, including painting and drying of tanks and outdoor, finished tank storage.

**SECTION B - STACK DATA**

Inside Diameter (ft) 5	Height Above Grade (ft) 12	
Gas Temperature at Exit (°F) 60-100 degrees (Ambient Indoor Temperature)	Gas Velocity at Exit (ft/sec) 1.36 ft/sec	Gas Volume (scfm) 1,000
Basis of any Estimates (attach separate sheet if necessary) Facility building data, company engineer		
Are Emission Control Devices in Place? If YES - Complete SFN 8532 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Nearest Residences or Building Residential Building	Distance (ft) 100 feet	Direction West
Nearest Property Line Adjacent	Distance (ft) 0	Direction West

**SECTION C – EMISSION STREAM DATA**

Source ID No. From SFN 8516 CE-2	Mean Particle Diameter (um) 3-10 micron
Flow Rate (scfm) 1,000	Drift Velocity (ft/sec) Not available
Stream Temperature (°F) Ambient Indoor Temperature (60 - 100 F)	Particulate Concentration (gr/dscf) Not available
Moisture Content (%) Not available	Halogens or Metals Present? No
Pressure (in. Hg) Not available	Organic Content (ppmv) Varies based on paint type in use
Heat Content (Btu/scfm) Not available	O <sub>2</sub> Content (%) Not available

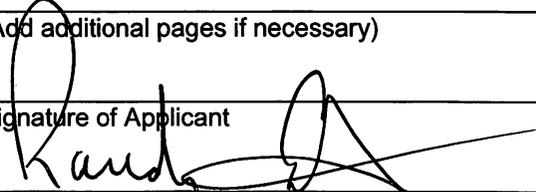
**SECTION D – POLLUTANT SPECIFIC DATA**

**(Complete One Box for Each Pollutant in Emission Stream)**

Pollutant Emitted Xylene (Total for CE-1 and CE-2 Combined)	Chemical Abstract Services (CAS) Number 1330-20-7
Proposed Emission Rate (lb/hr) 0.52	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 16 mm Hg at 20 C
Solubility 1.91 g/100mL at 20 degrees C	Molecular Weight (lb/lb-mole) 106.2
Absorptive Properties	

Pollutant Emitted Toluene	Chemical Abstract Services (CAS) Number 108-88-3
Proposed Emission Rate (lb/hr) 5.65 (Total for CE-1 and CE-2 Combined)	Emission Source (describe) Paint/Coating
Source Classification (process point, process fugitive, area fugitive) Process Point	Pollutant Class and Form (organic/inorganic - particulate/vapor) Organic Vapor
Concentration in Emission Stream (ppmv) Not calculated	Vapor Pressure (in. Hg @ °F) 3.8 kPa @ 25 C
Solubility 0.52 g/L at 20 degrees C	Molecular Weight (lb/lb-mole) 92.14
Absorptive Properties	

(Add additional pages if necessary)

Signature of Applicant 	Date 3/7/16
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**PERMIT APPLICATION FOR  
 AIR CONTAMINANT SOURCES**  
 NORTH DAKOTA DEPARTMENT OF HEALTH  
 DIVISION OF AIR QUALITY  
 SFN 8516 (06-13)



**SECTION A - FACILITY INFORMATION**

Name of Firm or Organization Worthington Industries		
Contact Person for Air Pollution Matters Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Applicant's Name Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Mailing Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601
Facility Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601
County Stark	Latitude (Nearest Second) 46.84795	Longitude (Nearest Second) -102.79114
Legal Description of Facility Site SE <u>1/4</u> SE <u>1/4</u> , 16 Section 139 Twp. 96 Range 19.1	Land Area at Facility Site Acres (or) Sq. Ft.	MSL Elevation at Facility 2470

**SECTION B - GENERAL NATURE OF BUSINESS**

Describe Nature of Business	North American Industry Classification System Number	Standard Industrial Classification Number (SIC)
Metal Tank Manufacturing	332420	3443

**SECTION C - GENERAL PERMIT INFORMATION**

Type of Permit? Permit to Construct (PTC) <input type="checkbox"/> Permit to Operate (PTO) <input checked="" type="checkbox"/>	
If application is for a Permit to Construct, please provide the following data:	
Planned Start Construction Date Facility is already constructed and operational	Planned End Construction Date NA

**SECTION D – SOURCE IDENTIFICATION AND CATEGORY OF EACH SOURCE INCLUDED ON THIS PERMIT APPLICATION**

Your Source ID Number	Source or Unit (Equipment, Machines, Devices, Boilers, Processes, Incinerators, Etc.)	Permit to Construct				Minor Source Permit to Operate						
		New Source	Existing Source Modification	Existing Source Expansion	Existing Source Change of Location	New Source	Existing Source Initial Application	Existing Source After Modification	Existing Source After Expansion	Existing Source After Change of Location	Existing Source After Change of Ownership	Other
CE-1	Paint Booth Exhaust	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CE-2	Coating Booth Exhaust	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CE-3	Blast Booth Exhaust	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add additional pages if necessary

**SECTION E – IDENTIFICATION OF AIR CONTAMINANTS**

Check all which are emitted in measurable quantities into the atmosphere from any operation at facility

<input type="checkbox"/> Arsenic	<input type="checkbox"/> Chlorine Compounds	<input type="checkbox"/> Sulfur Compounds	<input type="checkbox"/> Radioisotopes
<input type="checkbox"/> Asbestos	<input type="checkbox"/> Chromium Compounds	<input type="checkbox"/> Hydrogen Sulfide	<input type="checkbox"/> Visible Emissions
<input type="checkbox"/> Beryllium	<input type="checkbox"/> Fluoride Compounds	<input type="checkbox"/> Odors	<input checked="" type="checkbox"/> Particulates (specify)
<input type="checkbox"/> Cadmium	<input checked="" type="checkbox"/> Volatile Organic Compounds	<input type="checkbox"/> Carbon Monoxide	<input type="checkbox"/> Dust
<input type="checkbox"/> Lead	<input type="checkbox"/> Other Organic Compounds	<input type="checkbox"/> Nitrogen Compounds	<input type="checkbox"/> Silica
<input type="checkbox"/> Mercury	<input type="checkbox"/> Greenhouse Gases (CO <sub>2</sub> e)	<input type="checkbox"/> Pesticides	<input checked="" type="checkbox"/> Other (specify)

List Specific Compounds  
Xylene, Toluene, Methyl Alcohol, Ethylbenzene, Methyl Isobutyl Ketone; dust from steel grit blasting process

Has Source Testing Been Done at the Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Last Date when a Testing Program was Completed	If Program is Continuous, Give Approximate Testing Frequency
--	--	--

**SECTION F1 – ADDITIONAL FORMS**

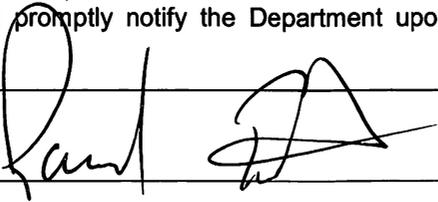
Indicate which of the following forms are attached and made part of the application

<input checked="" type="checkbox"/> Air Pollution Control Equipment (SFN 8532)	<input type="checkbox"/> Fuel Burning Equipment Used for Indirect Heating (SFN 8518)
<input type="checkbox"/> Construct/Operate Incinerators (SFN 8522)	<input checked="" type="checkbox"/> Hazardous Air Pollutant (HAP) Sources (SFN 8329)
<input type="checkbox"/> Natural Gas Processing Plants (SFN 11408)	<input checked="" type="checkbox"/> Manufacturing or Processing Equipment (SFN 8520)
<input type="checkbox"/> Glycol Dehydration Units (SFN 58923)	<input type="checkbox"/> Volatile Organic Compounds Storage Tank (SFN 8535)
<input type="checkbox"/> Flares (SFN 59652)	<input type="checkbox"/> Internal Combustion Engines and Turbines (SFN 8891)
<input type="checkbox"/> Rock, Sand, and Gravel Plants (SFN 8530)	<input type="checkbox"/> Oil/Gas Production Facility Registration (SFN 14334)
<input type="checkbox"/> Asphalt Concrete Plants (SFN 8526)	<input type="checkbox"/> Grain, Feed, and Fertilizer Operations (SFN 8524)

**SECTION F2 – OTHER ATTACHMENTS INCLUDED AS PART OF THIS APPLICATION**

1.	SFN8532	4.	Certificate of Survey with property lines
2.	SFN8329	5.	Facility site layout with equipment
3.	SFN8520	6.	Attachment

I, the undersigned applicant, am fully aware that statements made in this application and the attached exhibits and statements constitute the application for Permit(s) to Construct and/or Operate Air Contaminant sources from the North Dakota Department of Health and certify that the information in this application is true, correct and complete to the best of my knowledge and belief. Further, I agree to comply with the provisions of Chapter 23-25 of the North Dakota Century Code and all rules and regulations of the Department, or revisions thereof. I also understand the permit is nontransferable and, if granted a permit, I will promptly notify the Department upon sale or legal transfer of this permitted establishment.

Signature of Applicant		Date	3/7/16
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1. **Site Plan:** The Certificate of Survey and a Site Plan are attached. The property is not fenced in a manner that would prevent public access. As shown in Figure SRF8516-1, the paint booth and exhaust coating areas are located across from each other towards the center of the facility. The exhaust from the paint booth vents to the atmosphere from an exit height of approximately 30 feet above grade. The exhaust from the coating area vents to the atmosphere from an exit height of approximately 12 feet above grade. The blast booth vents to the atmosphere from an exit height of approximately 20 feet above grade.

The nearest residential property is located directly west of the facility. The house on that property is located approximately 100 yards from the Worthington facility. Prevailing winds in Dickinson are from the west.

2. **Equipment Plans and Specifications:** The existing equipment has been in use since 2009, at which time the facility was under previous ownership. Drawings and specifications of the paint arrestors and ventilation equipment are not readily available. Figure SFN8516-2 is a photograph of the filter banks of paint arrestor pads located in the along the east wall of the paint booth. Figure SFN8516-3 is a photograph of the coating ventilation and exhaust equipment located on the opposite (west) wall from the paint booth. The ventilation fan associated with the paint arrestors and exhaust shown in Figure SFN8516-2 is rated at 30,000 standard cubic feet per minute (scfm). The ventilation fan associated with the coating area shown in Figure SRF8516-3 is rated at 1,000 scfm. Figure SFN8516-4 shows the filtration system for the blast bay. The system is self-assembled and rated at approximately 30,000 scfm. The system has 32 filters that are 16 inches in diameter and 30 inches long. The filters are a fibrous paper wrapped in wire mesh and while operating, they purge once every five minutes knocking the particles into an enclosed collection bin which go to the landfill for disposal.

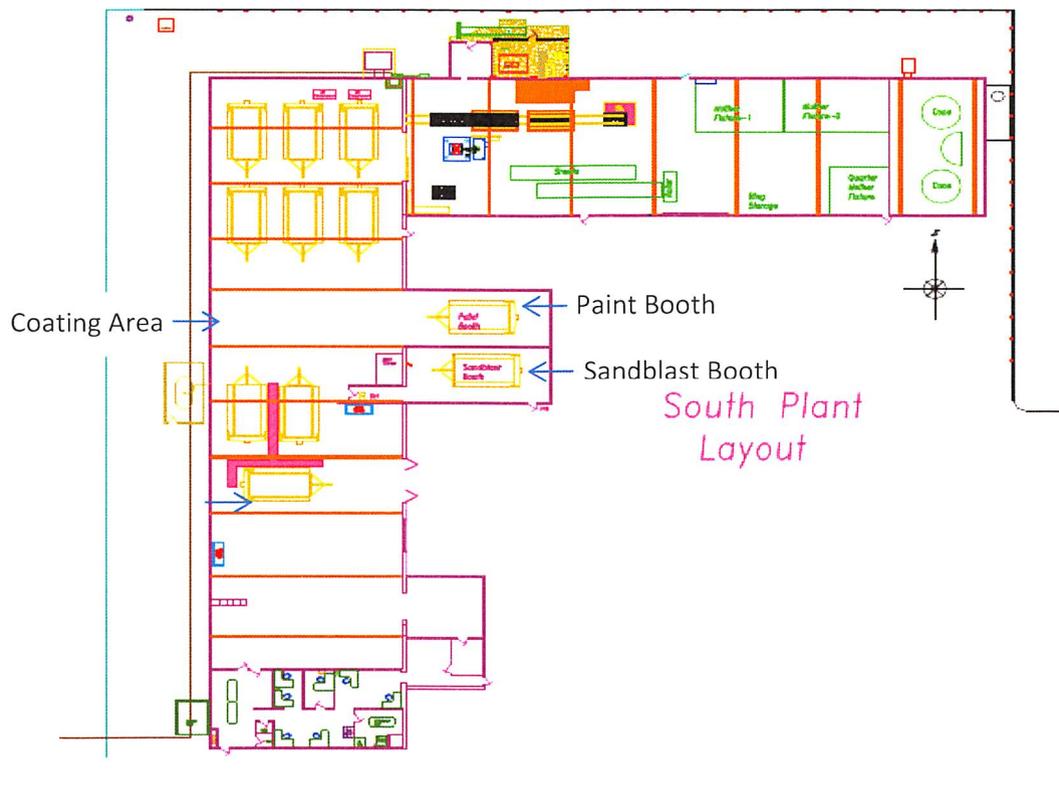


Figure SFN8516-1: Plant layout with Paint Booth and Coating area identified

Attachment for SFN 8516  
Permit Application for Air Pollution Control Equipment  
Facility: Worthington Cylinders Dickinson



Figure SFN8516-2: View looking inside the Paint Booth



Figure SFN8516-3: Coating area and Exhaust Ductwork

Attachment for SFN 8516

Permit Application for Air Pollution Control Equipment

Facility: Worthington Cylinders Dickinson



Figure SFN8516-4: Blast Bay Filtration system



**PERMIT APPLICATION FOR  
MANUFACTURING OR PROCESSING EQUIPMENT**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8520 (09-12)

Scanned:   
Added to AQDB:

**SECTION A – GENERAL INFORMATION**

Equipment items operating as a functional unit may be grouped as one application		
Name of Firm or Organization Worthington Industries		
Applicant's Name Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Mailing Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601

**SECTION B - FACILITY INFORMATION**

Facility Name Worthington Cylinders Dickinson		
ND Air Pollution Control Permit No. (If Applicable)		
Contact Person for Air Pollution Matters Randy Emter		
Title Operations Manager	Telephone Number 701-456-5031	E-mail Address randy.emter@worthingtonindustries.com
Facility Address (Street & No.) 1796 South Main		
City Dickinson	State ND	ZIP Code 58601
County Stark	Latitude (Nearest Second) 46.84795	Longitude (Nearest Second) -102.79114
Legal Description of Facility Site SE $\frac{1}{4}$ SE $\frac{1}{4}$ , 16 Section 139 Twp. 96 Range	MSL Elevation at Facility 2470 ft	Ref. Datum

**SECTION C – EQUIPMENT INFORMATION**

Type of Unit or Process (rotary dryer, cupola furnace, crusher, pelletizer, etc.) Filter and ventilation equipment associated with paint arrestors		
Make Unspecified	Model 20"x20" fiberglass filters, 2" deep	Date Installed 2009
Capacity (manufacturer's or designer's guaranteed maximum) Unspecified	Operating Capacity (specific units) 35 tanks per week - planned max operations	
Brief description of operation of unit or process: The equipment to which the permit pertains includes paint arrestor filter assemblies, ductwork, and ventilation fans utilized to provide ventilation to the areas of the facility in which new tanks are painted and dried. CE-1 refers to equipment associated with the paint booth, CE-2 refers to equipment associated with the coating area, and CE-3 is the blast booth exhaust assembly.		

**SECTION D – NORMAL OPERATING SCHEDULE**

Hours Per Day	Days Per Week	Weeks Per Year	Peak Production Season (if any)	Dates of Annual Shutdown
10 Hours	6 days	52	Not applicable.	Scheduled as needed.

**SECTION E – RAW MATERIALS INTRODUCED INTO UNIT OR PROCESS**

Include solid fuels such as coke or coal. <i>Exclude</i> indirect heat exchangers from this section For indirect heat exchangers, complete form SFN 8518					
Material	Hourly Process Weight (Pounds Per Hour)			Average Annual (Specify Units)	Intermittent Operation Only (Average Hours Per Week)
	Average	Maximum	Minimum		
See attachment for a list of materials					

**SECTION F – PRODUCTS OF UNIT OR PROCESS**

Include all, even those not usable because they do not meet specifications					
Material	Hourly Process Weight (Pounds Per Hour)			Average Annual (Specify Units)	Intermittent Operation Only (Average Hours Per Week)
	Average	Maximum	Minimum		
Not Applicable					

**SECTION G – FUELS USED**

Coal (Tons/Yr) NA	% Sulfur	% Ash	Oil (Gal/Yr)	% Sulfur	Grade No.
Natural Gas (Thousand CF/Yr) NA	LP Gas (Gal/Yr) NA		Other (Specify)		

**SECTION H – EMISSION POINTS**

List each point separately, number each and locate on attached flow chart					
Number	Stack Height (ft)	Stack Diameter (ft at top)	Gas Volume (ACFM)	Exit Temp (°F)	Gas Velocity (fps)
CE-1	30	3.5	Unknown	Interior room temperature	40.8 ft/sec when operating
CE-2	12	5	Unknown	Interior room temperature	1.36 ft/sec when operating
CE-3	20	2.5 (two adjacent outlets)	Unknown	Interior room temperature	40.8 ft/sec total when operating

**SECTION I – AIR CONTAMINANTS EMITTED**

Known or Suspected - Use same identification number as above					
Number	Pollutant	Amount		Basis of Estimate	
		Pounds/Hr	Tons/Yr		
CE-1/CE-2	Xylene	0.52	0.81	Maximum uncontrolled emission - see calculations on attachment	
CE-1/CE-2	Toluene	5.65	8.8	Maximum uncontrolled emission - see calculations on attachment	
CE-1/CE-2	Ethylbenzene	0.0	0.2	Maximum uncontrolled emission - see calculations on attachment	
CE-1/CE-2	Methyl Isobutyl Ketone	0.13	0.11	Maximum uncontrolled emission - see calculations on attachment	

**SECTION J – VOLATILE ORGANIC COMPOUNDS**

Are any volatile organic compounds (VOCs) stored on premises? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – List Below See 40 CFR 51.100(s) for classes of compounds covered		
Material Stored	Size Tank (Gallons)	Vapor Control Device
See attachment	55 Gallons	Tanks are covered when products are not in use.

**SECTION K – ORGANIC SOLVENTS**

Are any organic solvents used or produced? <input type="checkbox"/> No (None or less than 50 gal/yr) <input checked="" type="checkbox"/> Yes – List Below			
Type	Principal Use	Gallons/Yr Consumed	Gallons/Yr Produced
Methyl Ethyl Ketone (discontinued in April 2015)	Cleaner	605 in 2015	Not applicable
HAP-Free Solvent	Cleaner	660 (recycled for reuse in facility)	Not applicable

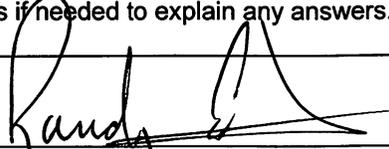
**SECTION L – AIR POLLUTION CONTROL EQUIPMENT**

Is any air pollution control equipment installed on this unit or process? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If 'Yes' attach form SFN 8532
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**SECTION M – MATERIAL STORAGE**

Does the input material or product from this process contain finely divided material which could become airborne? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes					
Describe storage methods used: Blast media from blast booth can become airborne. CE-3 filter system is in place to capture particulates for recycle or landfill disposal.					
Storage Piles	Type of Material	Particle Diameter (Avg. or Screen Size)	Pile Size Average Tons	Pile Wetted	Pile Covered
Enclosed dumpster	Steel grit	Not available	Not available	No	Enclosed storage
Enclosed in dumpster	Coal Slag	Not available	Not available	No	Enclosed storage
Describe any fugitive dust problems: None reported					

Attach additional sheets if needed to explain any answers. Use separate form for each contaminant emitting process

Signature of Applicant		Date	3/7/16
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**SEND COMPLETED APPLICATION AND ALL ATTACHMENTS TO:**

North Dakota Department of Health  
 Division of Air Quality  
 918 E Divide Ave., 2nd Floor  
 Bismarck, ND 58501-1947  
 (701) 328-5188

**Section E – Raw Materials Introduced into Unit or Process**

The facility manufactures metal tanks. The paint/coating application booth within the facility is subject to permitting, and utilizes two banks of paint arrestor filters in the paint booth area and a filter assembly in the coating area, each of which has associated ductwork to capture overspray from the application process. Depending upon the type of tank, a variety of coating materials are used at the facility. Table SFB8520-1 contains a listing of inventory for products that are currently onsite but have been phased out of use. The emissions calculations assume that these products will be used up in 2016 and that inventory will not be refilled.

Product	Pounds of VOC/Gallons	Onsite Storage (Gallons)
SW KEM 400 Carlsbad	4.53	165
SW KEM 400 Shale Green	4.53	165
SW Kem 400 Covert Green	4.91	0
SW KEM Flash Ultrabond Primer Thick	3.90	330
SW Phenicon HS Epoxy - Part A	2.53	10
SW Phenicon HS Epoxy - Part B	3.27	5

Table SFN8520-1: Current Inventory of Products No Longer in Use

Table SFN8520-2 lists the current inventory of products that are and will continue to be used regularly. Emissions calculations assume the use of these products at a peak production of 35 tanks per week, 52 weeks per year. **The production value is limited to 35 tanks per week based on the current size of the facility.** Table SFN8520-2 also summarizes the amount of each product used for each tank based on facility records and practices.

Product	Pounds of VOC/Gallons	Onsite Storage (Gallons)	Gallons used per Tank
SW Fast Clad ER - Part A	1.22	300	12
SW Fast Clad ER - Part B	0.01	300	12
International Intercure 4500 Carlsbad (Part A & Part B)	1.88	160	8
International Intercure 4500 Shale Green (Part A & Part B)	1.88	40	8
SW Polane D200 Enamel Carlsbad - Part A	2.76	200	3
SW Polane D200 Enamel Shale Green - Part A	2.76	200	3
SW Polane D200 Enamel - Part B	0	200	1
Royson Roskote A51 Mastic	3.51	0	3
HAPS Free Lacquer Thinner	6.70	150	0.36

Table SFN8520-2: Current Inventory of Products in Regular Use and Amount used per Tank

## Attachment for SFN 8520

### Permit Application for Air Pollution Control Equipment

Facility: Worthington Cylinders Dickinson

Table SFN8520-3 summarizes the emissions calculations from the products listed in both Table SFN8520-1 and Table SFN8520-2. The maximum uncontrolled pounds per hour for each product were calculated based on the following assumptions:

- 35 tanks produced each week;
- Gallons of paint used per tank according to facility records, or gallons of paint currently onsite for discontinued inventory; and
- Operations occur 10 hours per day, six (6) days per week, 52 weeks per year (3,120 hours per year).

The calculation represents the maximum usage if each individual product was used for the production of 35 tanks per week. In practice, the actual paint usage varies based on the customer and type of tank.

#### **Section H – Emission Points**

Note that for CE-3, combined outlet velocity is 40.8 ft/sec through two adjacent outlets, or 20.4 ft/sec through each individual outlet.

#### **Section I – Air Contaminants Emitted**

Table SFN8520-3 summarizes the calculations upon which the estimated Pounds and Tons per Year are based. The values for Pounds per Hour and Tons per Year reported in Section I are based on the following values:

- Total operating hours of 3,120 per year.
- For discontinued paints/coatings, use of the remaining inventory over 3,120 hours.
- For paints/coatings in regular use, the gallons of paint per tank used for production of 35 tanks per week for 52 weeks in a year.

As an alternative calculation, Table SFN8520-4 presents the worst case hourly emissions in the event the discontinued products continue to be used at the original rate (gallons per tank for 35 tanks per week). It should be noted that the hourly pounds calculated in Table SFN8520-4 would only be applicable until the stated inventory noted in Table SFN8520-1 is depleted. Because the facility intends to use the remaining inventories of discontinued paints/coatings only in small quantities on an infrequent basis, the values calculated in Table SFN8520-4 are not reported in Section I of the SFN8520 application as they are not deemed representative of current or planned operations at the facility.

Projected Annual Maximum Uncontrolled Emissions			Usage in Gallons	Gallons of Discontinued Product Onsite	Density (lbs/gal)	lbs of VOC per Gallon	VOC (lbs)	1330-20-7 Xylene		108-88-3 Toluene		67-56-1 Methyl Alcohol		100-41-4 Ethylbenzene		108-10-1 Methyl Isobutyl Ketone			
	Steffes PN	JDE PN						Description	%	lbs	%	lbs	%	lbs	%	lbs	%	lbs	
	5320016	340251	SW KEM 400 Carlsbad*	10,920	165	8.41	4.53	747.45	44.72%	620.56					7.90%	109.62			
5320031	345488	SW KEM 400 Shale Green*	10,920	165	8.64	4.53	747.45	40.48%	577.08					7.14%	101.79				
5320019	345859	SW Kem 400 Covert Green*	0	0	8.22	4.91	0.00	44.00%	0.00					8.00%	0.00				
5320020	345616	SW KEM Flash Ultrabond Primer Thick*	9,100	330	10.91	3.90	1287.00	11.47%	412.95					2.01%	72.37	6.19%	222.86		
5320073	344642	SW Fast Clad ER - Part A	21,840		13.59	1.22	26644.80												
5320074	345489	SW Fast Clad ER - Part B	21,840		9.68	0.01	218.40												
n/a	356474	SW Phenicon HS Epoxy - Part A*	14,560	10	13.66	2.53	25.30	14.00%	19.12					2.00%	2.73				
n/a	356475	SW Phenicon HS Epoxy - Part B*	3,640	5	8.53	3.27	16.35												
n/a	n/a	SW 1000 (Gun) Cleaner Solvent*	0		6.85	6.00		1.00%		7.20%		1.90%							
5320036	344643	International Intercure 4500 Carlsbad (Part A & Part B)	14,560		11.14	1.88	27372.80												
n/a	347951	International Intercure 4500 Shale Green (Part A & Part B)	14,560		11.14	1.88	27372.80												
n/a	348892	SW Polane D200 Enamel Carlsbad - Part A	5,460		9.72	2.76	15069.60							0.10%	53.07				
n/a	348891	SW Polane D200 Enamel Shale Green - Part A	5,460		9.72	2.76	15069.60							0.10%	53.07				
n/a	348893	SW Polane D200 Enamel - Part B	1,820		9.54	0.00													
5320065	345419	Royson Roskote A51 Mastic	5,460		9.23	3.51	19164.60			35.00%	17643.12								
		HAPS Free Lacquer Thinner	660		7.06	6.70	4424.90												
<b>Yearly Totals (pounds):</b>																			
<b>Pounds per Hour (10 hours per day, 6 days per week, 52 weeks per year = 3120):</b>																			
<b>Yearly Totals (tons):</b>																			
							138,161.05		1,629.72		17,643.12		-		392.65		222.86	19,888.35	
							44.28		0.52		5.65		0.00		0.13		0.07	6.37	
							69.08		0.81		8.82		0.00		0.20		0.11	9.94	

\* Discontinued materials, for which the remaining quantity onsite is reported and assumed depleted in one year.

Table SFN8520-3: Summary of Calculated Maximum Emissions - Reported in Section I

Description	Gallons/ Tank	Tanks/Yr	Density (lbs/gal)	lbs of VOC per Gallon	VOC (lbs)	1330-20-7 Xylene		108-88-3 Toluene		67-56-1 Methyl Alcohol		100-41-4 Ethylbenzene		108-10-1 Methyl Isobutyl Ketone	
						%	lbs	%	lbs	%	lbs	%	lbs	%	lbs
SW KEM 400 Carlsbad*	6	1820	8.41	4.53	747.45	44.72%	41,070					7.90%	7,255		
SW KEM 400 Shale Green*	6	1820	8.64	4.53	747.45	40.48%	38,192					7.14%	6,737		
SW Kem 400 Covert Green*	6	1820	8.22	4.91	0.00	44.00%	39,495					8.00%	7,181		
SW KEM Flash Ultrabond Primer Thick*	5	1820	10.91	3.90	1287.00	11.47%	11,388					2.01%	1,996	6.19%	6,145
SW Fast Clad ER - Part A	12	1820	13.59	1.22	26644.80										
SW Fast Clad ER - Part B	12	1820	9.68	0.01	218.40										
SW Phenicon HS Epoxy - Part A*	8	1820	13.66	2.53	25.30	14.00%	27,845					2.00%	3,978		
SW Phenicon HS Epoxy - Part B*	2	1820	8.53	3.27	16.35										
SW 1000 (Gun) Cleaner Solvent*	-	1820	6.85	6.00		1.00%	-	7.20%		1.90%					
International Intercure 4500 Carlsbad	8	1820	11.14	1.88	27372.80										
International Intercure 4500 Shale Green	8	1820	11.14	1.88	27372.80										
SW Polane D200 Enamel Carlsbad - Part A	3	1820	9.72	2.76	15069.60							0.10%	53		
SW Polane D200 Enamel Shale Green -	3	1820	9.72	2.76	15069.60							0.10%	53		
SW Polane D200 Enamel - Part B	1	1820	9.54	0.00											
Royson Roskote A51 Mastic	3	1820	9.23	3.51	19164.60			35.00%	17,643						
HAPS Free Lacquer Thinner	0.36	1820	7.06	6.70	4424.90										
<b>Total Annual Pounds</b>					138,161.05		157,989.52		17,643.12		-		27,252.12		6,145.49
Total Operating Hours	3,120						3120.00		3120.00		3120.00		3120.00		3120.00
<b>Pounds per Hour*</b>					138,161.05		50.64		5.65		-		8.73		1.97

\* Discontinued product; existing inventory will not be replaced

\*\* Hourly emissions from discontinued inventory based on regular use - does not account for limited inventory

**Table SFN8520-4: Summary of Calculated Maximum Emissions - Pounds per Hour**

**Section J – Volatile Organic Compounds**

Table SFN8520-5 summarizes the VOC content of each product onsite, as well as the amount stored. Other than the ventilation systems associated with CE-1 and CE-2, no other vapor control devices are in place. Containers are kept closed when products are not in use.

<b>Product</b>	<b>Pounds of VOC/Gallons</b>	<b>Onsite Storage (Gallons)</b>
SW KEM 400 Carlsbad – Phased Out of Use	4.53	165
SW KEM 400 Shale Green – Phased Out of Use	4.53	165
SW Kem 400 Covert Green – Phased Out of Use	4.91	0
SW KEM Flash Ultrabond Primer Thick – Phased Out of Use	3.90	330
SW Fast Clad ER - Part A	1.22	300
SW Fast Clad ER - Part B	0.01	300
SW Phenicon HS Epoxy - Part A – Phased Out of Use	2.53	10
SW Phenicon HS Epoxy - Part B – Phased Out of Use	3.27	5
International Intercure 4500 Carlsbad (Part A & Part B)	1.88	160
International Intercure 4500 Shale Green (Part A & Part B)	1.88	40
SW Polane D200 Enamel Carlsbad - Part A	2.76	200
SW Polane D200 Enamel Shale Green - Part A	2.76	200
SW Polane D200 Enamel - Part B	0	200
Royson Roskote A51 Mastic	3.51	0
HAPS Free Lacquer Thinner	6.70	150

Figure SFN8520-5: Current VOC-Containing Product Inventory

**Section M – Material Storage**

Steel grit is the primary media utilized in the blast booth (CE-3), with coal slag occasionally in use (approximately 15 to 20 percent of the time).