



AIR QUALITY GENERAL CONSTRUCTION PERMIT

PERMIT NUMBER: GCP-SRFCOAT-1 Permit Name: Surface Coating

Project Description: Surface coating, welding, and abrasive blasting operations

Typical Standard Industrial Classification (SIC) Code: Various

Pursuant to Chapter 14 of the Nebraska Air Quality Regulations, the public has been notified by prominent advertisement of the proposed construction of air contaminant sources meeting the specific criteria of this general construction permit and the thirty (30) day period allowed for comments has elapsed. This general construction permit approves the construction of specific types of Surface Coating Operations. This permit document and the associated application make up the complete permit for the specific source identified in the application.

Compliance with this permit shall not be a defense to any enforcement action for violation of an ambient air quality standard. The permit holder, owner, and operator of the facility shall assure that the installation, operation, and maintenance of all equipment is in compliance with all of the conditions of this permit.

The undersigned issues this permit on behalf of the Director under the authority of Nebraska Administrative Code Title 129 – Nebraska Air Quality Regulations as amended July 20, 2016.

11/28/17		{ORIGINAL SIGNED}	
Date		Kevin Stoner, Air Administrator Air Quality Division	

Filename: GCP Surface Coating P01.docx Total Pages: 13

TABLE OF CONTENTS

Pern	it Signature Page	i
Tabl	e of Contents	ii
Abb	reviationsi	ii
<u>Pern</u>	nit Conditions:	
I.	General Conditions	1
II.	Specific Conditions	3
III.	Specific Conditions for Selected Emission Points:	
	(A) Surface Coating Operations EU-1 through EU-6	.1
	(B) Haul Roads B-	.1

ABBREVIATIONS, SYMBOLS, and UNITS OF MEASURE

AP-42	Compilation of Air Pollutant Emission	NAAQS	National Ambient Air Quality Standards
	Factors, Volume I, Stationary Point and	NDEQ	Nebraska Department of Environmental Quality
1.1	Area Sources	NESHAP	National Emission Standards for Hazardous Air
bhp	Brake Horsepower	NO	Pollutants
BM	Batch Mix	NO_2	Nitrogen Dioxide
BMP	Best Management Practice	NO_x	Nitrogen Oxides
Btu	British Thermal Unit	NSPS	New Source Performance Standard
CAA	Clean Air Act	Pb	Lead (chemical abbreviation)
CE	Control Equipment	PbR	Permit-by-Rule
cf	Cubic feet	PM	Particulate Matter
CFR	Code of Federal Regulations	PM_{10}	Particulate Matter with and aerodynamic diameter
CO	Carbon Monoxide	DM (equal to or less than 10 microns
CO_2	Carbon Dioxide	$PM_{2.5}$	Particulate Matter with and aerodynamic diameter
CO ₂ e CP	CO ₂ equivalent	1.	equal to or less than 2.5 microns
dscf	Construction Permit	ppb	Parts per Billion
	Dry Standard Cubic Feet	ppm	Parts per Million
dscfm EPA	Dry Standard Cubic Feet per Minute	ppmv	Parts per Million by volume
	Environmental Protection Agency	ppmvd	Parts per Million by volume, dry basis
EQC EP	Environmental Quality Council	PSD	Prevention of Significant Deterioration
	Emission Point	PTE	Potential to Emit
EU	Emission Unit	scf	Standard Cubic Feet
FID	Facility Identification Number	SIC	Standard Industrial Classification
FDCP	Fugitive Dust Control Plan	SIP	State Implementation Plan
FIP	Federal Implementation Plan	SO_2	Sulfur Dioxide
FR	Federal Register	SO_x	Sulfur Oxides
ft	Feet	tpy	Tons per year
GHGs	Greenhouse Gases	TRS	Total Reduced Sulfur
H_2S	Hydrogen Sulfide	TSP	Total Suspended Particulate Matter
HAP	Hazardous Air Pollutant	UTM	Universal Transverse Mercator
hp	Horsepower	VHAP	Volatile Hazardous Air Pollutant
hr	Hour	VMT	Vehicle Miles Traveled
lb LDC	Pound	VOC	Volatile Organic Compound
LPG	Liquefied Petroleum Gas (Propane and/or		
Maal	Butane)		
Mgal	One Thousand gallons		
MMBtu	One Million British Thermal Units		
MMscf	One Million Standard Cubic Feet		
MSDS	Material Safety Data Sheet		
MW	Megawatt		

I. GENERAL CONDITIONS

(A) Coverage granted under this permit is not transferable to another source or location except as provided for in Condition IV. {Chapter 9}

- (B) Coverage under this permit does not relieve the owner or operator of the source from the responsibility to comply with all applicable portions of the Nebraska Air Quality Regulations and any other requirements under local, State, or Federal law. Any permit noncompliance shall constitute a violation of the Nebraska Environmental Protection Act and the Federal Clean Air Act, and is grounds for enforcement action or permit revocation. {Chapter 41 and Chapter 17, Section 011}
- (C) Application for review of plans or advice furnished by the Director will not relieve the owner or operator of legal compliance with any provision of these regulations, or prevent the Director from enforcing or implementing any provision of these regulations. {Chapter 37}
- (D) Any owner or operator who failed to submit any relevant facts or who submitted incorrect information in a general permit application shall, upon becoming aware of such failure or incorrect submittal, promptly reapply for coverage or submit a construction permit application under the provisions of Chapter 17. {Chapter 17, Sections <u>006</u>, <u>007</u>, and <u>008</u>}
- (E) Approval to construct will become invalid if a continuous program of construction is not commenced within 18 months after the date of coverage granted by this general construction permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time. {Chapter 17, Section <u>012</u>}
- (F) The owner or operator shall allow the NDEQ, EPA or an authorized representative, upon presentation of credentials to: {Neb. Rev. Statute §81-1504}
 - (1) Enter upon the owner or operator's premises at reasonable times where a source subject to this permit is located, emissions-related activity is conducted or records are kept, for the purpose of ensuring compliance with the permit or applicable requirements;
 - (2) Have access to and copy, at reasonable times, any records, for the purpose of ensuring compliance with the permit or applicable requirements;
 - (3) Inspect at reasonable times any facilities, pollution control equipment, including monitoring and air pollution control equipment, practices, or operations, for the purpose of ensuring compliance with the permit or applicable requirements;
 - (4) Sample or monitor at reasonable times substances or parameters for the purpose of ensuring compliance with the permit or applicable requirements.
- (G) When requested by the NDEQ, the owner or operator shall submit completed emission inventory forms for the preceding year to the NDEO by March 31 of each year. {Chapter 6}
- (H) Open fires are prohibited except as allowed by Chapter 30.
- (I) Particulate Matter General Requirements: {Chapter 32}

(1) The owner or operator shall not cause or permit the handling, transporting or storage of any material in a manner, which allows particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond the property line.

- (2) The owner or operator shall not cause or permit the construction, use, repair or demolition of a building, its appurtenances, a road, a driveway, or an open area without applying all reasonable measures to prevent particulate matter from becoming airborne and remaining visible beyond the property line. Such measures include, but are not limited to, paving or frequent cleaning of roads, driveways and parking lots; application of dust-free surfaces; application of water; and planting and maintenance of vegetative ground cover.
- (J) If and when the Director declares an air pollution episode as defined in Chapter 38, Section <u>003.01B</u>, <u>003.01C</u>, or <u>003.01D</u>, the owner or operator shall immediately take all required actions listed in Title 129, Appendix I until the Director declares the air pollution episode terminated.
- (K) This permit may be revised (reopened and reissued) or revoked for cause in accordance with Title 129 and Nebraska Administrative Code Title 115 Rules of Practice and Procedure. Conditions under which this permit will be revised or revoked for cause, include but are not limited to: {Title 129, Chapter 15, Section 006}
 - (1) A determination by the Director, or the Administrator of EPA that:
 - (a) the permit must be revised to ensure compliance with the applicable requirements;
 - (b) the permit contains a material mistake or that inaccurate statements were made in the emissions standards or other terms or conditions of the permit.
 - (2) A determination by the Director that the source or activity endangers human health or the environment and that the danger cannot be removed by a revision of the permit.
- (L) Coverage under this permit may be revoked for cause in accordance with Title 129 and Title 115. Conditions under which this permit will be revised or revoked for cause, include but are not limited to: {Title 129, Chapter 15, Section 006}
 - (1) The existence at the source of unresolved noncompliance with applicable requirements or a term or condition of the permit, and refusal of the owner or operator to agree to an enforceable schedule of compliance to resolve the noncompliance;
 - (2) The failure of the owner or operator to pay a penalty owed pursuant to court order, stipulation and agreement, or order issued by the Administrator of the EPA; or
 - (3) The submittal by the owner or operator of false, incomplete, or misleading information to the NDEQ or EPA.

II. SPECIFIC CONDITIONS

- (A) The owner/operator of the source shall provide the following notifications to the NDEQ:
 - (1) The date construction commenced as defined in Chapter 1. Notification shall be postmarked no later than 30 days after such date and include a summary description and whether the requirement to commence construction was met through: {Title 129, Chapter 17, Section 012}
 - (a) Initiating physical on-site construction activities of a permanent nature that meet the definition of "begin actual construction", or

- (b) Entering into binding agreements or contractual obligations. If this option is used, the notice shall also include a brief summary of each binding agreement or contractual obligation entered into, the date of the agreement or contract, and why it cannot be cancelled or modified without substantial loss to the owner or operator.
- (2) The notification required in Condition II.(A)(1) shall also include an equipment list which must detail all equipment associated with the facility and the corresponding maximum capacities. {Title 129, Chapter 17, Sections <u>006</u>, <u>007</u>, and <u>008</u>}
- (3) The date on which the source first becomes operational, postmarked within 15 days after such date. {Chapter 7, Section <u>002.03</u>}
- (B) Recordkeeping: Records of all measurements, results, inspections, and observations as required to ensure compliance with all applicable requirements shall be maintained on-site as follows:
 - (1) All calculations and records required throughout this permit shall be completed no later than the fifteenth (15th) day of each calendar month and shall include all information through the previous calendar month, unless otherwise specified in this permit.
 - (2) All records required throughout this permit shall be kept for a minimum of five (5) years and shall be clear and readily accessible to NDEQ representatives, unless otherwise specified in this permit.
 - (3) Copies of all notifications, reports, test results, and plans.
 - (4) Calibration records for all operating parameter monitoring equipment.
 - (5) Operation and Maintenance manuals, or equivalent documentation, detailing proper operation and maintenance of all permitted emission units, required control equipment, and required monitoring equipment shall be kept for the life of the equipment.
 - (6) Records documenting equipment failures, malfunctions, or other variations, including date and time of occurrence, remedial action taken, and when corrections were made to each piece of permitted equipment, required control equipment, and required monitoring equipment.

- (C) All permitted emission units, associated emissions conveyances, required control equipment, and required monitoring equipment shall be properly installed, operated, and maintained. {Chapter 34, Section 006}
 - (1) All emissions from emission units using required controls shall be captured and routed through associated emission conveyances to the required control equipment, except for:

- (a) Uncaptured emissions due to the design of the equipment; or
- (b) Uncaptured emissions described in the permitting documents.
- (D) When performance testing is required it shall be completed and submitted to the NDEQ as follows: {Chapter 34}
 - (1) Performance tests shall be conducted while operating at maximum capacity (operating conditions producing the highest emissions or loading to the control device) within sixty (60) days after first reaching the maximum capacity, but not more than 180 days after the start-up of operations of each unit, unless otherwise specified by the NDEQ.
 - (2) Testing shall be conducted according to the methodologies found in Title 129, Chapter 34, Section <u>002</u>, or other NDEQ approved methodologies.
 - (3) Performance tests shall be conducted for a minimum of three (3) one hour runs unless another run time is specified by the applicable Standard or as deemed appropriate by the NDEQ.
 - (4) The owner or operator of a source shall provide the NDEQ at least thirty (30) days written notice prior to testing to afford the NDEQ an opportunity to have an observer present. The owner or operator shall also provide the NDEQ with an emissions testing protocol at least thirty (30) days prior to testing. The NDEQ may, in writing, approve a notice of less than 30 days. If the testing is pursuant to an underlying requirement contained in a federal rule, the notice provisions of the underlying requirement apply.
 - (5) The owner or operator shall monitor and record the operating parameters for process and control equipment during the performance testing required in the permit.
 - (6) A written copy of the test results signed by the person conducting the test shall be provided to the NDEQ within sixty (60) days of completion of the test unless a different period is specified in the underlying requirements of an applicable Federal Rule and will, at a minimum, contain the following items:
 - (a) A description of the source's operating parameters (e.g., production rates, firing rates of combustion equipment, fuel usage, etc.), control equipment parameters (e.g., baghouse fan speeds, scrubber liquid flow rates, etc.), and ambient conditions (e.g., weather conditions, etc.) during testing.
 - (b) Copies of all data sheets from the test run(s).
 - (c) A description and explanation of any erroneous data or unusual circumstance(s) and the cause for such situation.

(d) A final conclusion section describing the outcome of the testing.

Issued: November 2017

(E) Any emissions due to malfunctions, unplanned shutdowns, and ensuing start-ups that are, or may be, in excess of applicable emission limits shall be reported to the NDEQ in writing and mailed within 48 hours of the beginning of each period of excess emissions. {Chapter 35, Sections <u>004</u> and <u>005</u>}

III.(A) Specific Conditions for Surface Coating Operations

(1) <u>Permitted Emission Points</u>: The source is permitted to construct the emission units identified in the following table at the capacity and using only the fuel types listed. Emission units shall be controlled by the required control equipment as indicated:

Issued: November 2017

Emission Unit ID# and Description	Required Control Equipment	Combustion Capacity	Fuel Type	Process Capacity
EU-1: Paint Booth(s)	CE-1: Paint Booth Filter	-	-	-
EU-2: Welding	-	-	-	-
EU-3a: Wood Sawing	-	-	-	-
EU-3b: Metal Sawing	-	-	-	-
EU-4: Powder Coating Booth(s)	CE-2: Powder Coating Filter	-	-	6,750 ton/yr (combined)
EU-5: External Combustion Source(s)	-	≤ 10 MMBtu/hr (combined)	Natural Gas, LPG, Diesel Fuel	-
EU-6: Abrasive Blasting Booth(s)	CE-3: Abrasive Blasting Filter; Confined Abrasive Blasting Enclosure	-	-	438 ton/yr (combined)

(2) <u>Emission Limitations and Testing Requirements:</u>

- (a) The emissions limitations of Chapter 20, Sections <u>001</u> and <u>004</u> apply to the emission points associated with EU-1 through EU-4, and EU-6.
- (b) The emissions limitations of Chapter 20, Sections <u>002</u> and <u>004</u> apply to the emission points associated with EU-5.
- (c) Combined pollutant emission rates from the emission points associated with the emission units identified in the table below shall not exceed the permitted limits:

Emission Unit Pollutant Permitted Limit/Averaging P		Permitted Limit/Averaging Period	Basis for Permit Limit	Testing Required? (Yes/No)
EU-1	VOC	49.5 tons total per any period of twelve (12) consecutive calendar months	Chapter 17	No
EU-1 & EU-2	Any Individual HAP	2.35 tons total per any period of twelve (12) consecutive calendar months	Chapter 17	No
EU-1 & EU-2	Combined HAP	9.80 tons total per any period of twelve (12) consecutive calendar months	Chapter 17	No

(3) Operational and Monitoring Requirements and Limitations

(a) Emissions from the emission units identified in Condition III.(A)(1) shall be controlled by pollution control equipment as follows: All emission points associated with EU-1 shall be controlled by an individual paint booth filter (CE-1), all emission points associated with EU-4 shall be controlled by an individual powder coating filter (CE-2),

and all emission points associated with EU-6 shall be controlled by an abrasive blasting filter (CE-3). {Chapters 17 and 20}

Issued: November 2017

- (b) All paint spraying, powder coat spraying, and abrasive blasting operations shall be located within complete four-sided enclosures with a complete roof. {Chapters 17 and 20}
- (c) Operation and maintenance of the particulate filters, CE-1, CE-2, and CE-3 shall be in accordance with the following requirements: {Chapter 17}
 - (i) The particulate filter(s) shall be operating and controlling emissions at all times when the associated emission units are in operation.
 - (ii) The particulate filter(s) shall be equipped with an operational pressure differential indicator. Pressure differential indicator readings shall be recorded at least once each day the associated filter is operating.
 - (iii) Particulate filters are to be inspected and/or replaced as often as necessary to ensure proper operation, or more frequently as indicated by pressure differential indicator readings or other indication of filter failure.
 - (iv) Observations, at least once each day during daylight hours of particulate filter operation, shall be conducted to determine whether there are visible emissions from the stack, leaks, noise, or other indications that corrective action is needed. If corrective action is required, it shall occur immediately.
 - (v) The owner or operator shall maintain an on-site inventory of spare filters of each type used to ensure rapid replacement in the event of filter failure.
- (d) VOC emitted from the emission points associated with EU-1 shall be calculated each calendar month using the following equations: {Chapter 17 }

$$E_{VOC} = \sum_{j=1}^{n} v_{j} c_{j}$$

where: E_{VOC} = Total emissions (pounds/month) of VOC from "n" products used at the facility each calendar month:

n = Total number of VOC-containing products used at the facility each calendar month;

v_j = Volume (gallons) or weight (pounds) of each VOC-containing product, "j," used at the facility each calendar month; and

c_j = Concentration (pounds of VOC per gallon of product) or weight fraction (pounds of VOC per pound of product) of VOC in product "j" used at the facility each calendar month.

(e) Individual HAP emitted from the emission points associated with EU-1 and EU-2 shall be calculated each calendar month using the following equations: {Chapter 17}

$$E_i = \sum_{j=1}^n v_j c_{ji}$$

where: E_i = Total emissions (pounds/month) of an individual HAP, "i," from "n" products used at the facility each calendar month;

n = Total number of HAP-containing products used at the facility each calendar month;

v_j = Volume (gallons) or weight (pounds) of each HAP-containing product, "j," used at the facility each calendar month; and

Issued: November 2017

c_{ji} = Concentration (pounds of HAP per gallon of product) or weight fraction (pounds of HAP per pound of product) of HAP "i" in product "j" used at the facility each calendar month.

(f) Combined HAPs emitted the emission points associated with EU-1 and EU-2 shall be calculated each calendar month using the following equation: {Chapter 17}

$$E_{T} = \sum_{i=1}^{m} E_{i}$$

where: E_T = Total emissions (pounds/month) of all HAPs combined used at the facility each calendar month

m = Total number of individual HAPs contained in the products used at the facility each calendar month; and

E_i = Total emissions (pounds/month) of an individual HAP, "i," from all products used at the facility each month.

- (g) Twelve (12) consecutive month sums of individual HAP, combined HAP, and VOC emissions from the emission points associated with EU-1 and EU-2 shall be calculated each calendar month and shall include the most recent twelve (12) consecutive calendar months. {Chapter 17}
- (h) The HAP and VOC content and the density or specific gravity of the products shall be obtained from the manufacturer and/or suppliers included Material Safety Data Sheets (MSDS). If the data obtained gives a range for HAP or VOC content, the maximum value from the range shall be used when determining emissions. If it is necessary to convert volume to weight, multiply the volume (gallons) of the product used by the density (pounds/gallon) of the product. If the specific gravity is given, multiply the specific gravity by 8.34 lbs/gallon (the density of water) to obtain the density of the product. {Chapter 17}
- (i) The source shall not use more than 3,942 tons of powder coating in association with EU-4 per any period of twelve (12) consecutive calendar months. At no time during the first eleven (11) months after a source obtains coverage under this general construction permit shall that source exceed 3,942 tons of powder coating usage. {Chapter 17}
 - (i) If the equipment associated with powder coating is rated to be (in aggregate) less than 900 pounds per hour, as demonstrated by manufacturer documentation, the above condition is not required.
- (j) The source shall not use more than 438 tons of abrasive blasting material in association with EU-6 per any period of twelve (12) consecutive calendar months. At no time during the first eleven (11) months after a source obtains coverage under this general construction permit shall that source exceed 438 tons of abrasive blasting material usage. {Chapter 17}

(i) If the equipment associated with abrasive blasting is rated to be (in aggregate) less than 100 pounds per hour, as demonstrated by manufacturer documentation, the above condition is not required.

Issued: November 2017

- (k) The maximum combustion capacity of the emission units associated with EU-5 shall not exceed 10 MMBtu/hr, as stated in Condition III.(A)(1). {Chapter 17}
- (l) The emission units associated with EU-5 shall be limited to combusting natural gas, LPG, and/or diesel fuel. {Chapter 17}

(4) <u>Applicable NSPS, NESHAP, and MACT Requirements:</u>

The NDEQ has not identified any NSPS, NESHAP, or MACT requirements that will always apply to the emission units listed in Condition III.(A)(1) or any associated emission points. There may be applicable requirements based upon specific facilities or design of emission units.

(5) Reporting and Recordkeeping Requirements:

- (a) The source shall record and maintain records documenting the VOC, individual HAP, and total HAPs emitted through the emission points associated with EU-1 and EU-2 for each month and for each period of twelve (12) consecutive calendar months.
- (b) Records documenting the date, time, and pressure differential reading(s) for each day the associated filter(s) is/are in operation.
- (c) Filter replacement records including the date the filter replacement occurred and the type of filter installed.
- (d) Records documenting the date, time, observations, and corrective actions taken for each day the associated filter(s) is/are in operation.
- (e) Material Safety Data Sheets (MSDS) or equivalent, for each coating applied.
- (f) The source shall record and maintain records documenting the amount (in pounds or tons) of powder coating used in association with EU-4 for each month and for each period of twelve (12) consecutive calendar months. If the source is exempt from the throughput limitation of Condition III.(A)(3)(i), manufacturer's certification of potential throughput capability shall be kept for the life of the equipment.
- (g) The source shall record and maintain records documenting the amount (in pounds or tons) of abrasive blasting material used in association with EU-6 for each month and for each period of twelve (12) consecutive calendar months. If the source is exempt from the throughput limitation of Condition III.(A)(3)(j), manufacturer's certification of potential throughput capability shall be kept for the life of the equipment.
- (h) Records documenting the maximum combustion capacity of the external combustion sources (EU-5).

III.(B) Specific Conditions for Haul Roads

(1) Permitted Emission Points:

All haul roads shall comply with the following conditions. {Chapter 32}

(2) Emission Limitations and Testing Requirements:

Haul roads are subject to the requirements of Title 129, Chapter 32, Section 002.

- (3) Operational and Monitoring Requirements and Limitations:
 - (a) The owner or operator shall utilize best management practices (BMP) on haul roads. The effectiveness of the BMP to minimize emissions from haul roads will be demonstrated by compliance with Condition I.(I). {Chapters 17 and 32}

Issued: November 2017

- (b) A survey of the plant property and haul roads shall be conducted for each day of operation to determine if visible fugitive emissions are being generated and leaving plant property. Implementation of BMP shall be taken upon observation of visible fugitive emissions leaving plant property. {Chapter 32}
- (4) <u>Applicable NSPS, NESHAP, and MACT Requirements:</u>

The NDEQ has not identified any NSPS, NESHAP, or MACT requirements that apply to the haul roads.

- (5) Reporting and Recordkeeping Requirements:
 - (a) Records shall be kept documenting the use of BMP on haul roads.
 - (b) Records documenting the date and time of fugitive dust surveys, whether visible emissions crossed site boundaries, and any corrective action taken if visible emissions are observed in areas to which the public has access

Fact Sheet for General Permit Number: GCP-SRFCOAT-1

Date: November 28, 2017



Typical Standard Industrial Classification Code: Various

Typical North American Industry Classification Code: Various

DESCRIPTION OF GENERAL CONSTRUCTION PERMIT:

The Nebraska Department of Environmental Quality (NDEQ) has determined there are numerous similar sources in Nebraska that are subject to the same Federal and State regulatory requirements. Chapter 9 of Nebraska Administrative Code Title 129 - Air Quality Regulations allows the NDEQ to issue a general construction permit (GCP) for these sources. This GCP follows the applicable procedures of Chapters 9, 14, and 17 of Nebraska Administrative Code Title 129 - Air Quality Regulations. The owner of a source that qualifies for this GCP must apply to the NDEQ for coverage under the applicable terms of the GCP. Each application must include all information necessary to determine qualification for, and to ensure compliance with, the GCP.

The NDEQ will notify the applicant of the determination of coverage under this GCP for the source identified in the application. If the Director of the NDEQ denies coverage of the source under the GCP, the applicant may request an adjudicative hearing in accordance with the procedures established in Title 115 - Rules of Practice and Procedure. The NDEQ may issue coverage under a GCP to an individual source without repeating the notice and comment procedures required in Chapter 14 of Title 129. The NDEQ shall maintain a list of all sources covered by GCPs, which shall be available for public review.

DESCRIPTION OF THE SOURCE GROUP:

The plants covered under this GCP engage in various activities limited to paint spray coating, welding, metal and wood sawing, powder coating, and abrasive blasting. This GCP places various limitations on facilities that are granted coverage under it, including requiring the usage of filters on painting booths and sand blasting operations, requiring operation in four-sided enclosures, volatile organic compound (VOC) and hazardous air pollutant (HAP) limitations and powder coating and abrasive blasting throughput limitations. In addition to the aforementioned equipment, each plant may have up to 10 million British thermal units per hour (MMBtu/hr) of external combustion firing natural gas, liquefied petroleum gas (LPG), and/or diesel fuel. Under this GCP, each plant is limited to emitting less than 50 tons per year (tpy) of VOC, and 2.5 tpy and 10 tpy of individual and aggregate HAPs, respectively.

This GCP does not permit the installation of a stationary engine. However, any engine which is portable and will not remain at the same location for more than 12 consecutive months is considered a nonroad engine and therefore is not subject to stationary source permitting.

TYPE AND QUANTITY OF AIR CONTAMINANT EMISSIONS ANTICIPATED:

Surface coating operations covered by this GCP have the potential to emit (PTE) particulate matter (PM), PM with an aerodynamic diameter of less than or equal to 10 microns (PM₁₀), PM with an aerodynamic diameter of less than or equal to 2.5 microns (PM_{2.5}), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), VOCs, and HAPs.

The primary emissions from these facilities will be generated by the spray application of paint.

Surface Coating:

Facilities covered under this GCP are permitted to construct surface coating booths. Surface coating involves spraying paint onto equipment or other objects, usually performed by painters using handheld

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Filename: GCP Surface Coating FS01.docx Page 1 of 11 spray guns. Paint used in spray coating contains solids, VOCs, and HAPs. VOCs and HAPs are controlled by the emission limitations contained in this GCP. Solids are emitted in the form of PM, PM₁₀, and PM_{2.5}. The required paint booth filters in this GCP control the PM, PM₁₀, and PM_{2.5} emissions.

Welding:

Arc welding involves feeding welding wire through a welding gun. Using the welding wire emits solids in the form of PM, PM₁₀, and PM_{2.5}. Welding operations also emit HAPs. These HAPs are part of a combined limit with the aforementioned paint booths.

Sawing:

Some plants covered under this GCP may engage in metal and wood sawing using table saws or handheld saws. The sawing of these materials emits some PM, PM₁₀, and PM_{2.5}. Sawing of metal is assumed to have trace amounts of HAP emissions from the metal being sawed. To calculate these HAPs, steel is assumed to be the material that is sawed.

Powder Coating:

Powder coating is very similar to spray painting. Workers use a powder coating gun to spray powder onto a piece of equipment or other object, and the powder fluidizes on the object, changing the color. After the powder is fluidized, the powder is typically heated in a curing oven to allow the powder to set permanently. Because powder doesn't fluidize in the air, there are no HAP emissions, unlike spray coating. Powder coating emits PM, PM₁₀, and PM_{2.5}. This GCP contains powder injection limits to limit these pollutants.

Abrasive Blasting:

Plants covered under this GCP are approved to construct abrasive blasting booths. Abrasive blasting is used to remove paint or other particles from equipment prior to painting. The two main types of abrasive blasting used in industry are sand blasting and shot blasting. Sand blasting uses a stream of pressurized sand to remove rough edges and paint. Shot blasting uses small metallic beads to perform the same function. Sand blasting was used as the worst-case scenario for these activities. This permit limits the amount of abrasive material that can be used for abrasive blasting. Abrasive blasting emits PM, PM₁₀, and PM_{2.5}. These particulate emissions are controlled by a required filter.

External Combustion:

Some surface coating operations covered by this GCP may use external combustion of natural gas, LPG, and/or diesel fuel. Plants may use external combustion for worker comfort, make-up air, curing ovens or other reasons. This GCP allows the construction of external combustion units, provided that all installed equipment is fired by natural gas, LPG, diesel fuel, does not have a combined combustion capacity exceeding 10 MMBtu/hr, does not create any air pollutants except combustion emissions, and is not specifically prohibited by any applicable state or federal regulation.

Applicable state regulations include, but are not limited to, open fires not being allowed in Nebraska, except under the provisions of Title 129, Chapter 30. Creation of air pollutants which are not combustion emissions, but are produced by combustion, includes heating of any material which may produce secondary emissions, such as tar or asphalt, or operation of an incinerator. These secondary emissions are not included in PTE under this GCP, therefore any combustion equipment which would produce secondary emissions are not authorized by this permitting action.

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Filename: GCP Surface Coating FS01.docx Page 2 of 11 PTE for external combustion includes PM, PM₁₀, PM_{2.5}, SO₂, NO_x, CO, VOC, HAPs.

Haul Roads:

Fugitive PTE includes an estimated haul road distance of one mile of unpaved road to deliver and ship materials. This distance is a very conservative estimate. Typical surface coating operations are located close to public roadways. Haul roads will produce PM, PM₁₀, and PM_{2.5}.

Internal Combustion:

Facilities may not add stationary internal combustion equipment under this GCP. However, some facilities may use nonroad generator engines, which are considered portable rather than stationary. These nonroad engines are designed to be moved: they have wheels, skids, are affixed to a trailer or truck bed, or have some other method of easy transportation between locations. However, these engines must be moved at least once per 12 months or they are considered stationary.

Portable engines are not considered for PTE under the construction permit program, and therefore are not included in calculations or applicability analyses. Construction of a stationary engine is not authorized by this GCP. If a source wants to install a stationary engine they must evaluate its PTE, determine if its PTE should be aggregated with previous projects, compare the corresponding PTE with the thresholds in Title 129, Chapter 17, and if necessary, submit a construction permit application

Emissions Summary:

The following table lists the potential emissions for any individual plant covered by this GCP:

Regulated Pollutant	Potential Emissions Including Fugitives (tons/year)	Non-Fugitive Emissions (tons/year)
Particulate Matter (PM)	18.01	10.62
PM smaller than or equal to 10 microns (PM ₁₀)	12.28	10.31
PM smaller than or equal to 2.5 microns (PM _{2.5})	10.10	9.90
Sulfur Dioxide (SO ₂)	2.29	2.29
Oxides of Nitrogen (NO _x)	6.35	6.35
Carbon Monoxide (CO)	3.61	3.61
Volatile Organic Compounds (VOC)	49.88	49.88
Hazardous Air Pollutants (HAPs)		
Greatest Individual HAP	2.45	2.45
Total HAPs	9.92	9.92

APPLICABLE REQUIREMENTS AND VARIANCES OR ALTERNATIVES TO REQUIRED **STANDARDS:**

Chapter 4 – Ambient Air Quality Standards:

Based upon the limits of this GCP, the PTE for any plant covered under this GCP is below the thresholds for which air dispersion modeling is typically required. Therefore, air dispersion modeling is not required for issuance of coverage under this GCP. Although including fugitives, PM_{2.5} appears to be above modeling thresholds, fugitive emissions are not counted for the purposes of modeling determinations.

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Page 3 of 11

Chapters 5 and 7 – Operating Permit Requirements:

For the operating permit program, a major or Class I source is one that emits, or has the potential to emit, greater than 100 tons per year (tpy) of any criteria pollutant, 10 tpy of any individual HAP, 25 tpy of total HAPs, or 5 tpy of lead. A minor or Class II source is any facility with does not exceed the major source thresholds, but has actual emissions greater than one half of these thresholds.

Before issuance of coverage under this permit, potential emissions from the surface coating operations which can be covered by this permit would not exceed the major source thresholds. Most facilities will not have other significant sources of air pollutants, and therefore would be a "No Permit Required -Synthetic Minor" source for the operating permit program.

A facility with other sources of emissions, such as equipment covered by another construction permit, may exceed minor or major source thresholds for the operating permit program after permit issuance. Each facility covered by this GCP must determine if they are required to apply for an operating permit, or revise an existing operating permit, due to coverage under this GCP.

Chapter 17 – Construction Permit Requirements:

The source is required to obtain a construction permit, because potential emissions, before coverage by this GCP, would exceed the emission thresholds of Chapter 17, Section 001.01. The source must submit an application fee in order to apply for coverage under this GCP, in accordance with Chapter 17, Section 003.01 and Chapter 9. The NDEO does not consider PM a regulated pollutant when determining the fee for a construction permit.

Chapter 18 – New Source Performance Standards (NSPS), and 40 CFR Part 60:

Most emission units at facilities covered under this GCP will not be subject to any NSPS requirements. However, there are multiple NSPS requirements which may apply to facilities that are covered under this GCP for surface coating of various objects. These NSPS are described below. These rules are subject to change, and any facility issued coverage under this GCP must evaluate, and continue to evaluate, the standards and requirements to which they may be subject.

The following NSPS may be applicable to facilities covered under this GCP:

Subpart A – General Provisions: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.01, applies to those units subject to another NSPS subpart. Unless a facility is subject to another NSPS subpart, it will not be subject to Subpart A.

Subpart TTT – Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.24, applies to spray booths in which plastic parts for use in the manufacture of business machines receive prime coats, color coats, texture coats, or touch-up coats. "Business machine" is defined in 40 CFR Part 60.721. If a facility coats parts for business machines, it will be subject to this subpart.

Subpart MM – Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.04, applies to prime coat, guide coat, and topcoat operations at automobile or light-duty truck assembly plants, except for operations used to coat plastic components or plastic bodies. If a facility applies these coatings to non-plastic automobiles or light-duty trucks, it will be subject to this subpart.

Subpart SS – Standards of Performance for Industrial Surface Coating: Large Appliances: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.23, applies to surface coating operations in a

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Filename: GCP Surface Coating FS01.docx Page 4 of 11 large appliance surface coating line that commence construction, modification, or reconstruction after December 24, 1980. If a facility falls under this definition, it will be subject to this subpart.

Subpart TT – Standards of Performance for Metal Coil Surface Coating: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.28, applies to facilities which perform prime coat and finish coat operations on metal coils that commence construction, modification, or reconstruction after January 5, 1981. If a facility falls under this definition, it will be subject to this subpart.

Subpart WW – Standards of Performance for Beverage Can Surface Coating: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.05, applies to facilities that apply base coat, overvarnish, or inside spray coating operations of beverage cans that commence construction, reconstruction, or modification after November 26, 1980. If a facility falls under this definition, it will be subject to this subpart.

Subpart FFF – Standards of Performance for Flexible Vinyl and Urethane Coating and Printing: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.16, applies to rotogravure printing lines used to print or coat flexible vinyl or urethane products that begin construction, modification, or reconstruction after January 18, 1983. If a facility falls under this definition, it will be subject to this subpart.

Subpart SSS – Standards of Performance for Magnetic Tape Coating Facilities: This subpart, adopted by reference in Title 129, Chapter 18, Section 001.27, applies to coating operations and coating mix preparation equipment at magnetic tape coating facilities that begin construction, modification, or reconstruction after January 22, 1986. New coating operations that utilize less than 38 cubic meters (m³) of solvent, or modified operations that use less than 370 m³ of solvent for the manufacture of magnetic tape per calendar year are subject to different requirements under this subpart. If a magnetic tape coating facility is installed under this GCP, it will be subject to this subpart.

The following NSPS does not apply to emission units permitted to be constructed under this GCP:

Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating *Units:* This subpart, adopted by reference in Title 129, Chapter 18, Section <u>001.52</u>, covers steam generating units with a design rate between 10 MMBtu/hr and 100 MMBtu/hr, installed after June 9, 1989. This general permit authorizes a maximum combined heat input of 10 MMBtu/hr for external combustion. Therefore, only facilities which install a single steam generating unit at the maximum combined allowable heat input capacity would potentially be subject to Subpart Dc.

It is the source's obligation to comply with all applicable NSPS subparts and requirements whether or not they are identified in this permitting action or Title 129. Additional and updated information on all NSPS is available on the NDEQ NSPS Notebook, which can be located by visiting the NDEQ website at http://deq.ne.gov/, and first selecting the "Air" tab, then the "Air Grants, Planning and Outreach Program" dropdown menu tab, then the "New Source Performance Standards (NSPS) Program" dropdown menu tab, and then select "New Source Performance Standards (NSPS) Program". Or alternately use the "Search NDEQ Web" search box on the upper right of the webpage and enter "New Source Performance Standards".

Chapter 19 – Prevention of Significant Deterioration (PSD):

If a source falls into one of the 28 categories listed in Title 129, Chapter 2, Section 008.01, they are subject to 100 ton per year thresholds, including fugitive emissions, on regulated air pollutants for the PSD program. Fugitive emissions must be included when determining PSD applicability if the source is one of the listed categories in Chapter 2, Section <u>002</u>. Surface coating operations are not included in

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Filename: GCP Surface Coating FS01.docx Page 5 of 11 either of these categories; therefore, the major source thresholds for regulated air pollutants are 250 tons per year and fugitive emissions are not counted.

Potential emissions for equipment covered by this GCP do not exceed the major source thresholds, and therefore covered facilities will only be major for PSD if they have additional sources of air pollutants.

Chapter 20 – Particulate Matter Emissions:

Section 001 – Process Weight Rate

Except for fugitive emissions from haul roads, all coating, sawing, welding, and blasting operations are subject to the requirements of Section 001. Facilities will comply with these limits through the proper operation and maintenance of equipment, including dust collection systems. Detailed calculations are included in the fact sheet attachment demonstrating compliance.

Section 002 – Particulate Emissions from Combustion Sources

External combustion sources authorized by this permit are subject to Section <u>002</u>. These emission units will comply through the exclusive use of natural gas, LPG, and/or diesel fuel, as well as proper operation and maintenance of equipment. Detailed calculations are included in the fact sheet attachment demonstrating compliance.

Section 004 – Opacity

No person may cause or allow emissions which are of an opacity equal to or greater than twenty percent (20%) as evaluated by an EPA-approved method, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B. Facilities covered by this GCP will demonstrate compliance with this requirement by properly operating and maintaining equipment.

Chapter 27 – Hazardous Air Pollutants:

The source is not subject to the requirements of this chapter because the proposed increase in PTE of any single HAP and total HAPs are limited to less than the 2.5 and 10 tons per year thresholds listed in Section 002 of this chapter.

Chapter 28 – Hazardous Air Pollutant Emission Standards (NESHAPs):

Most sources granted coverage under this GCP will be an area source of HAPs because the facility PTE will be below 10 tpy for any single HAP and 25 tpy for combined HAPs. If a facility has additional sources of air emissions, they could potentially be above these thresholds and be major for HAPs, which may change their NESHAP requirements. The NDEQ has not identified any NESHAP which will always apply to emission units explicitly authorized by this permitting action. NESHAP Subparts A and JJJJJJ will apply to external combustion units firing natural gas at facilities which are area sources, and Subparts A and DDDDD will apply to external combustion units located at major sources. Emission units specific to a facility, including those not covered by this GCP, may have requirements which have not been identified.

There are many NESHAP requirements for which a facility covered under this GCP could be subject.

The following NESHAP may be applicable to facilities covered under this GCP:

Subpart A – General Provisions: This subpart, adopted by reference in Title 129, Chapter 28, Section 001.01, applies to all sources subject to a NESHAP standard unless otherwise stated in the rule. Unless a facility is subject to another NESHAP subpart, it will not be subject to Subpart A.

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Page 6 of 11 <u>Subpart XXXXXX – National Emission Standards for Hazardous Air Pollutants Area Source Standard for Nine Metal Fabrication and Finishing Source Categories</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.112</u> applies to area sources of HAPs that are primarily engaged in one of the nine source categories listed in 40 CFR Part 63.11514(a) that use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP) as listed in 40 CFR Part 63.11514(b). A facility primarily engaged in one of the nine source categories that uses MFHAP-containing materials will be subject to this subpart.

<u>Subpart IIII – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.87</u>, applies to facilities that surface coat new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks. If a facility engages in these activities, it will be subject to Subpart IIII.

<u>Subpart NNNN – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.62</u>, applies to facilities that are major sources of HAPs and engage in the surface coating of large appliances, as defined in the subpart. If a facility is an area source of HAPs or does not surface coat these appliances, it is not subject to this subpart.

<u>Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.79</u>, applies to facilities that engage in metal can surface coating that use HAP-containing coatings, thinners, and/or cleaning materials, and are not subject to another NESHAP. If a facility engages in this activity, it will be subject to this subpart.

<u>Subpart RRRR – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.73</u>, applies to facilities that engage in the spray coating of metal furniture that use materials that contain organic HAP. If a facility engages in this activity, it will be subject to this subpart.

<u>Subpart MMMM – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.81</u>, applies to facilities that perform surface coatings of small metal parts as listed in 40 CFR Part 63.3881(a) that use more than 250 gallons per year of HAP-containing coatings. If a facility engages in this activity, it will be subject to this subpart.

<u>Subpart PPPP – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products</u>: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.85</u>, applies to facilities that use HAP-containing coatings to perform spray coating of plastic parts listed in 40 CFR Part 63.4481(a). If a facility uses HAP-containing coatings that perform this function, it will be subject to this subpart.

<u>Subpart HHHHHH – National Emissions Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources:</u> This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.107</u>, applies to paint stripping operations that use methylene chloride for paint removal, as specified in 40 CFR Part 63.11169(a). This subpart also applies to spray coating operations that use coatings that contain any of the target HAP in excess of 1%, as specified in 40 CFR Part 63.1169(b), or contain any OSHA-defined carcinogen in excess of 0.1%, as specified in 40 CFR Part 63.1169(b) and 40 CFR Part 63.1180. If a facility engages in spray application of coatings to motor vehicles or mobile equipment, it is also subject to this subpart, but may petition the Administrator for an

General Construction Permit: Surface Coating Operations
Fact Sheet: GCP-SRFCOAT-1
Filename: GCP Surface Coating FS01.docx
Page 7 of 11

exemption. If a facility covered under this GCP fits the definitions found in this NESHAP and explained above, it will be subject to this subpart.

Subpart JJ – National Emissions Standards for Wood Furniture Manufacturing Operations: This subpart, adopted by reference in Title 129, Chapter 28, Section 001.08, applies to any source engaged in part or in whole in wood furniture manufacturing that is a major source of HAP emissions. Most facilities covered under this GCP will be area sources of HAP emissions, therefore this subpart will likely not apply. However, if a major source of HAP emissions that engages in wood furniture manufacturing does receive coverage under this GCP, it will be required to comply with this subpart.

The following NESHAP are not applicable to facilities covered under this GCP:

Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines: This subpart, adopted by reference in Title 129, Chapter 28, Section <u>001.88</u>, applies to existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE) located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand and existing residential, commercial, and institutional emergency RICE at area sources used for 15 hours or less per year for emergency demand response, provided they are not also used for local reliability. Stationary engines are not authorized by this GCP, and nonroad engines are not subject to Subpart ZZZZ. Therefore, most facilities covered by this GCP will not be subject to Subpart ZZZZ.

It is the source's obligation to comply with all applicable NESHAP subparts and requirements whether or not they are identified in this permitting action or Title 129. Additional and updated information on all NESHAP is available on the NDEQ Air Toxics Notebook, which can be located by visiting the NDEQ website at http://deq.ne.gov/, and first selecting the "Air" tab, then the "Air Grants, Planning and Outreach Program" dropdown menu tab, then the "Air Toxics Program" dropdown menu tab, and then select "Air Toxics Program - Guide to NESHAPs". Or alternately use the "Search NDEQ Web" search box on the upper right of the webpage and enter "Air Toxics Notebook".

Permit conditions specific to the proposed permit are discussed as follows:

- II.(A) When a source undertakes a program of construction, reconstruction, or modification they are required to notify the NDEQ when they begin construction/reconstruction/modification and when the source or modification becomes operational. In addition, the NDEQ is requiring that the source submit an equipment list that includes the maximum rated capacity of each unit associated with the facility. These notifications help the NDEQ and source determine when an operating permit application (or revision to an existing operating permit) may be necessary and also whether some emission increases or decreases are within the contemporaneous period. This notification is either for initial operation of the source as a whole (if constructing a new source) or initial operation of the completed project (if modifying an existing source), not individual emission units. Individual emission units subject to specific NSPS or NESHAP standards may have additional notification requirements specific to those federal standards that are independent of this requirement. Startup of individual emission units (such as a boiler subject to an NSPS) does not necessarily mean the source or project has begun operations. For portable sources, this notification is only required for their first commencement of construction following permit issuance. Notifications related to further relocations are handled by the provisions of Condition IV.
- This condition contains general recordkeeping and reporting requirements that apply to all permitted emission units, control equipment, and monitoring devices. These requirements establish several things including, a completion date when records must be completed, how long

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Filename: GCP Surface Coating FS01.docx Page 8 of 11 records need to be maintained, and identifying specific types of records that must be maintained. Records are required to be maintained to ensure compliance with all applicable requirements, specifically those required in this permit. However, additional recordkeeping requirements may be established in the future to better ensure compliance. Documentation detailing operation and maintenance can be operational and maintenance manuals provided by the manufacturer. If manufacturer manuals are not available, the owner or operator must develop a document containing proper operation and maintenance requirements for each permitted emission unit and piece of required control equipment.

- II.(C) This condition requires all permitted emission units, control equipment, associated emissions conveyances, and monitoring equipment to be properly installed, operated, and maintained. In addition, this condition requires that all emissions from emission units using controls shall be captured and routed though associated emission conveyances to the control equipment, except for uncaptured emissions due to the design of the equipment, or uncaptured emissions described in the permitting documents. Associated emissions conveyance (s) is physical equipment (including but not limited to: ductwork, pipes, conduits, vessels, etc.) that route emissions from an emission unit to control equipment. It is expected that the installation, operation, and maintenance conducted will be similar to the items contained in the documents detailing proper operation, inspection, and maintenance of the equipment (required in Specific Condition II.(B)(5)). It is very important that permitted and required equipment is operating properly and maintained since poorly maintained equipment may emit greater amounts of pollution into the atmosphere or monitor information incorrectly or inaccurately. Emission estimates for this permitting action are based on the requirement that all equipment is operating properly and being properly maintained.
- II.(D) General performance testing requirements. When performance testing is required, it is intended to demonstrate and ensure the source will be in compliance on a continuous basis. As such, testing is generally required to be conducted under conditions producing the highest emissions or loading to a control device. This typically is done at the maximum capacity, which at that level would not create an unsafe condition, and the facility will operate at that level at least some of the time. For a comprehensive evaluation on representative testing conditions, please review the NDEQ guidance on stack testing available on our web site or the national stack testing guidance document found on EPA's web site. All performance tests required throughout this permit are required to be conducted in accordance with these conditions. The owner or operator must provide a testing protocol and written (i.e. hard copy, not electronic or verbal) notice prior to testing to ensure the NDEQ has the opportunity to witness the testing and review the proposed testing plan. Operating parameters are monitored and recorded to document the conditions under which the testing was conducted. The NDEQ may require additional testing if previous testing is not representative of current operations.
- II.(E) This condition requires any emissions resulting from equipment failures, malfunctions, or other variations in control or process equipment performance that are, or may be, in excess of the applicable emission control regulations to be reported to the NDEQ in accordance with Title 129, Chapter 35, Section <u>005</u>. The NDEQ must be notified when excess emissions have, or may have occurred along with the cause of the emissions in order to determine the appropriate response. These reports also assist with verifying proper operation and maintenance of process and control equipment.

III.(A) Specific Conditions for Surface Coating Operations:

(1) This condition identifies the general emission units which are authorized for each project approved under this GCP. Each surface coating operation will vary in design, but must

General Construction Permit: Surface Coating Operations
Fact Sheet: GCP-SRFCOAT-1
Filename: GCP Surface Coating FS01.docx
Page 9 of 11

be limited to containing painting, welding, wood and metal sawing, powder coating, abrasive blasting, and external combustion sources. External combustion heating sources, such as water heaters, are limited to a combined 10 MMBtu/hr capacity using natural gas, LPG, and/or diesel fuel to keep emissions below state modeling thresholds. For this same reason, powder coating and abrasive blasting have limits on how much powder coating material and abrasive blasting material can be used, respectively.

- This section specifies which sections of Chapter 20 and 32 apply to each emission unit. Specific facilities may not need to comply with Chapter 20, Sections <u>001</u> or <u>002</u> if they are subject to more stringent limits in an applicable federal rule or construction permit. For the purposes of keeping new facilities below operating permit thresholds, and to keep new sources as area sources of HAP emissions, VOC emissions from surface coating are subject to a 49.5 ton per year limit, and individual HAP and total HAP from a combination of surface coating and welding must be kept below 2.35 tons per year and 9.80 tons per year, respectively.
- (3) In order to verify Chapter 20 process weight rate limits and to keep facilities below modeling thresholds, all paint booths, powder coating booths, and abrasive blasting booths must be controlled by particulate filters. In addition, these operations must occur in four-sided enclosures (a fully enclosed area with a full roof and four complete walls or complete side curtains) in order to maximize the capture efficiency of the filters. These filters must be equipped with pressure differential indicators, and facilities are required to perform pressure differential readings and visible emissions observations daily to ensure proper operation of each filter. Abrasive blasting is required to occur inside a "confined abrasive blasting enclosure" as defined by NESHAP Subpart XXXXXX, for control of blasting sand/beads for Chapter 20 and modeling purposes. A "confined abrasive blasting enclosure" is a small enclosure where a worker places their hands in openings or gloves that extend into a box and enable the worker to hold objects as they are being blasted without allowing air and blast material to escape the box, or a similar enclosure that vents the air and blast material to flow to a control device.

In order to verify the VOC and HAP emission limitations described in Condition III.(A)(2)(c), the facility must perform monthly VOC and HAP calculations and twelve (12) month rolling totals of VOC and HAP emissions. These calculations will be verified using manufacturer's Material Safety Data Sheets (MSDS), or their equivalent.

In order to demonstrate compliance with Condition III.(A)(1), the source is also required to calculate any on-site powder coating and abrasive blasting usage and puts process limits on these processes at 3,942 tons per year and 438 tons per year, respectively. If the powder coating and/or abrasive blasting equipment is rated to be less than these potentials, then monthly and twelve month rolling calculations are not required.

- (4) This condition clarifies that there are no NSPS, NESHAP, or MACT requirements which will apply to all facilities covered by this GCP. As discussed in the Chapter 18 and 28 discussions above, there may be requirements for certain facilities.
- (5) This condition specifies recordkeeping required to comply with Conditions III.(A)(1) through III.(A)(3).

A facility covered by this GCP must maintain records of the VOC and HAP emissions from surface coating and welding wire usage, and the heat input capacity of external combustion equipment for the lifetime of this equipment. Facilities with equipment that

General Construction Permit: Surface Coating Operations
Fact Sheet: GCP-SRFCOAT-1
Filename: GCP Surface Coating FS01.docx
Page 10 of 11

has the potential to exceed the powder coating and abrasive blasting limits must maintain records of the actual throughputs of that equipment. These records may be the nameplate on equipment, a manual produced by the manufacturer, a manufacturer's specification sheet, or any record that can conclusively demonstrate the design capacity of equipment.

III.(B) Specific Conditions for Haul Roads:

This condition clarifies that any haul roads are subject the fugitive dust limits of Chapter 32, and that any facility covered under this GCP must use weekly fugitive dust surveys to demonstrate compliance with Chapter 32 and Condition I.(I). Best management practices for haul roads include water application, wheel washes, speed limits, applying gravel or aggregate to road surfaces, paving, or other methods of directly reducing haul road emissions.

STATUTORY OR REGULATORY PROVISIONS ON WHICH PERMIT REQUIREMENTS ARE BASED:

Applicable regulations: Title 129 - Nebraska Air Quality Regulations as amended July 20, 2016.

PROCEDURES FOR FINAL DETERMINATION WITH RESPECT TO THE PROPOSED **CONSTRUCTION PERMIT:**

The public notice, required by Title 129 Chapter 14, shall be published on Saturday, October 21, 2017 in the Omaha World Herald newspaper and at http://deq.ne.gov/ under "Public Notices." Persons or groups shall have 30 days after the public notice {Tuesday, November 21, 2017} to provide the NDEQ with written comments concerning the proposed permit action or to request a public hearing, in accordance with Title 129 Chapter 14. If a public hearing is granted by the Director, there will be a notice of that meeting published at least 30 days prior to the hearing. The Director may issue the permit following the close of the public comment period and, if one is held, any public hearing.

To request additional information, submit written comments, or to request a public hearing (either electronically or through hardcopy letter) contact:

Gary Buttermore, P.E. Air Permitting Section Supervisor NDEQ Air Quality Division P.O. Box 98922 Lincoln, NE 68509-8922

Email: ndeq.airquality@nebraska.gov

Telephone inquiries may be made at: (402) 471-2186

TDD users should call (800) 833-7352 and ask the relay operator to call the Department at (402) 471-2186.

Attachments:

Fact Sheet Attachment

General Construction Permit: Surface Coating Operations Fact Sheet: GCP-SRFCOAT-1 Filename: GCP Surface Coating FS01.docx Page 11 of 11