



State of Utah

Department of
Environmental Quality

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10028

Title V Operating Permit

PERMIT NUMBER: 300030002

DATE OF PERMIT: February 12, 2001

Date of Last Revision: TBD

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Vulcraft, Division of Nucor Corporation
1875 West Highway 13 South
PO Box 637
Brigham City, UT 84302-0637

Permitted Location:

Vulcraft Site
1875 West Hwy 13 South
Brigham City, UT 84302

UTM coordinates: 4,598,000 meters Northing, 411,500 meters Easting
SIC code: 3441

ABSTRACT

Vulcraft operates two steel fabrication plants: Joist Plant/Cold Finish Division and Nucor Building Systems in Box Elder county, near Brigham City. Processes at the Vulcraft locations include the manufacture of bars, coils, wire lines, structural joists, trusses and prefabricated metal buildings. Vulcraft is a Title V major source as well as a prevention of significant deterioration (PSD) major source for volatile organic compounds (VOCs).

UTAH AIR QUALITY BOARD

By:

Prepared By:

M. Cheryl Heying, Executive Secretary

Ron Reece

Operating Permit History

2/12/2001 - Permit issued	Action initiated by an initial operating permit application	
5/3/2002 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	To incorporate Enhanced AO changes. The changes included replacement of an existing baghouse with two new ones, and permitting limited spray painting operations.
xx/xx/2007-Permit issued	Action initiated by a renewal of an operating permit	To incorporate the changes approved in DAQE-AN100280010-07, dated March 30, 2007, to delete ball mill and support equipment, to add Nucor Building Systems equipment.

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: General Provisions

I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. Duty to Comply.

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay

any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. Permit Expiration and Renewal.

I.D.1 **This permit is issued for a fixed term of five years and expires on February 12, 2011.** (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by August 12, 2010. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. Permit Fee.

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. Inspection and Entry.

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L. Compliance Certification.

I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than February 1, 2002 and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such

methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

I.M. Permit Shield.

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
 - I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
 - I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
 - I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
 - I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))
 - I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N. **Emergency Provision.**

I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))

I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O. **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

I.P. **Off-permit Changes.**

Off-permit changes are governed by R307-415-7d(2).

I.Q. **Administrative Permit Amendments.**

Administrative permit amendments are governed by R307-415-7e.

I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S. **Records and Reporting.**

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))

I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

For reports, notifications, or other correspondence
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: 303-312-6440

I.T. **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U. **Inventory Requirements.**

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

Section II: SPECIAL PROVISIONS

- II.A. **Emission Unit(s) Permitted to Discharge Air Contaminants.**
(R307-415-4(3)(a) and R307-415-4(4))
- II.A.1 **Wire Line Baghouse- Cold Finish Division** (designated as 1)
Unit Description: Dust collector, approximately 2,112 scfm located at the Vulcraft Site.
- II.A.2 **Coil Line Baghouse- Cold Finish Division** (designated as 2)
Unit Description: Baghouse controlling emissions from the Coil Line. Approximate capacity is 5,500 dscf. Located at the Vulcraft Site.
- II.A.3 **Bar Line Bag House- Cold Finish Division** (designated as 2b)
Unit Description: Baghouse controlling emissions from the Bar line. Approximate capacity is 14,266 dscf. Located at the Vulcraft Site.
- II.A.4 **Exhaust Vents- Cold Finish Division** (designated as 3)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Vulcraft Site. No unit-specific applicable requirements.
- II.A.5 **Parts Cleaners- Cold Finish Division** (designated as 4)
Unit Description: Miscellaneous parts cleaners with lids located at the Vulcraft Site. No unit-specific applicable requirements.
- II.A.6 **Joist and Truss Painting Equipment – Joist Plant** (designated as 8)
Unit Description: Joist and truss painting equipment includes eight dip tanks with covers that can be closed when not in use, and spray equipment for custom color painting located at the Vulcraft Joist Plant.
- II.A.7 **Bridging Line System - Joist Plant** (designated as 9)
Unit Description: Coating process including an oven. Rated capacity approximately 2.4 MM BTU/hour located at the Vulcraft Joist Plant. Uses natural gas with propane as backup.
- II.A.8 **Exhaust Vents - Joist Plant** (designated as 10)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Vulcraft Joist Plant. No unit-specific applicable requirements.
- II.A.9 **Parts Cleaners - Joist Plant** (designated as 11)
Unit Description: Miscellaneous parts cleaners with lids located at the Vulcraft Joist Plant. No unit-specific applicable requirements.
- II.A.10 **Mixed Gas System- Emergency Fuel Supply - Joist Plant** (designated as 12)
Unit Description: Used for mixing propane with air to make it suitable for burning during natural gas outages located at the Vulcraft Joist Plant. No unit-specific applicable requirements.
- II.A.11 **Exhaust Vents- Compressor Building - Joist Plant** (designated as 13)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Vulcraft Joist Plant. No unit-specific applicable requirements.
- II.A.12 **Exhaust Vents- Truck Shop - Joist Plant** (designated as 14)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Vulcraft Joist Plant. No unit-specific applicable requirements.
- II.A.13 **Parts Cleaners- Truck Shop - Joist Plant** (designated as 15)
Unit Description: Miscellaneous parts cleaners with lids located at the Vulcraft Joist Plant. No unit-specific applicable requirements.
- II.A.14 **Plasma Steel Cutters- Build Up Line - Nucor Building Systems** (designated as 16)
Unit Description: Plasma steel cutters located at the Nucor Building Systems. No unit-specific applicable requirements.

- II.A.15 **Spray Booths- Built Up Line - Nucor Building Systems** (designated as 17)
Unit Description: Two Spray booths located at the Nucor Building Systems. All are equipped with high efficiency spray guns, 70% transfer efficiency.
- II.A.16 **Drying Oven- Built Up Line - Nucor Building Systems** (designated as 18)
Unit Description: Coating drying oven located at the Nucor Building Systems. Rated capacity approximately 3.0 million BTU/hour. Uses natural gas.
- II.A.17 **Exhaust Vents- Built Up Line - Nucor Building Systems** (designated as 19)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.18 **Parts Cleaners- Built Up Line - Nucor Building Systems** (designated as 20)
Unit Description: Miscellaneous parts cleaners with lids located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.19 **Flow Coater- Purlin Line - Nucor Building Systems** (designated as 21)
Unit Description: Coating process located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.20 **Drying Oven- Purlin Line - Nucor Building Systems** (designated as 22)
Unit Description: Coating drying oven located at the Nucor Building Systems. Rated capacity approximately 4.5 million BTU/hour. Uses natural gas.
- II.A.21 **Exhaust Vents- Purlin Line - Nucor Building Systems** (designated as 23)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.22 **Parts Cleaners- Purlin Line - Nucor Building Systems** (designated as 24)
Unit Description: Miscellaneous parts cleaners with lids located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.23 **Flow Coater- Rod Line - Nucor Building Systems** (designated as 25)
Unit Description: Coating process located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.24 **Exhaust Vents- Rod Line - Nucor Building Systems** (designated as 26)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.25 **Parts Cleaners- Rod Line - Nucor Building Systems** (designated as 27)
Unit Description: Miscellaneous parts cleaners with lids located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.26 **Accessory Dip Tanks - Nucor Building Systems** (designated as 28)
Unit Description: Two open-topped dip tanks with covers that can be closed when not in use located at the Nucor Building Systems.
- II.A.27 **Exhaust Vents- Accessory Dip Coating - Nucor Building Systems** (designated as 29)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.28 **Parts Cleaners- Accessory Dip Coating - Nucor Building Systems** (designated as 30)
Unit Description: Miscellaneous parts cleaners with lids located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.29 **Mastic Equipment- Metal Roofing - Nucor Building Systems** (designated as 31)
Unit Description: Mastic equipment located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.30 **Lubrication Equipment-Metal Roofing - Nucor Building Systems** (designated as 32)
Unit Description: Lubricant equipment located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.31 **Exhaust Vents- Metal Roofing - Nucor Building Systems** (designated as 33)
Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.

- II.A.32 **Parts Cleaners- Metal Roofing - Nucor Building Systems** (designated as 34)
 Unit Description: Miscellaneous parts cleaners with lids located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.33 **Exhaust Vents- Compressor Building - Nucor Building Systems** (designated as 35)
 Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.34 **Exhaust Vents- Maintenance Shop - Nucor Building Systems** (designated as 36)
 Unit Description: Miscellaneous powered and non-powered exhaust vents located at the Nucor Building Systems. No unit-specific applicable requirements.
- II.A.35 **Parts Cleaners- Maintenance Shop - Nucor Building Systems** (designated as 37)
 Unit Description: Miscellaneous parts cleaners with lids located at the Nucor Building Systems. No unit-specific applicable requirements.

II.B. **Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

II.B.1 **Conditions on permitted source (Source-wide)**

II.B.1.a **Condition:**

All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. Treatment shall be of sufficient frequency and quantity to minimize fugitive dust as necessary to meet a 20 percent opacity limitation. The permittee is not required to apply water to surfaces during freezing conditions. If chemical treatment is to be used, the plan shall be pre-approved by the Executive Secretary. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.1.a.1 **Monitoring:**

In lieu of monitoring the above opacity limit via visible emissions observations, application of water and chemical treatments shall be monitored to demonstrate that fugitive dust is being controlled and minimized.

II.B.1.a.2 **Recordkeeping:**

Instances of water and/or chemical application to unpaved areas shall be recorded and maintained by the permittee. The records shall include the following:

- (1) Date.
- (2) Number of treatments made, dilution ratio, and quantity.
- (3) Rainfall received, if any, and approximate amount.
- (4) Time of day that treatments are made.
- (5) Records of temperature if the temperature is below freezing.

II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b **Condition:**

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F -

Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

II.B.1.b.1

Monitoring:

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

II.B.1.b.2

Recordkeeping:

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.b.3

Reporting:

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.c

Condition:

Emissions of volatile organic compounds (VOCs) from the combined Vulcraft Site and Nucor Building Systems Site shall be no greater than 338.97 tons per rolling 12-month period, after November 2008. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.1.c.1

Monitoring:

Emissions shall be calculated on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

II.B.1.c.2

Recordkeeping:

VOC emissions shall be determined by maintaining a record of VOC emitting materials used each month. The records shall include the following data for each material used:

1. Name VOC emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
2. Density of each material used (pounds per gallon).
3. Percent by weight of VOC in each material used.
4. Gallons of each VOC emitting material used
5. Amount of VOC emitting material used each month based on quantities pumped from bulk storage.
6. The amount of VOC emitted monthly by each material used, calculated by the following procedure:

$$\text{VOC} = \frac{(\% \text{ VOC by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{gal Consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

7. The total amount of VOC emitted monthly from all materials used.
8. The amount of VOCs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC emissions.
9. VOC emissions from natural gas combustion shall be combined with the sum of the potential of the materials calculated in Condition 6. above, shall not exceed the total emissions limit specified above.

II.B.1.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.d

Condition:

Emissions of hazardous air pollutants (HAPs) from the dipping and spraying of trusts and joists shall be no greater than:

0.05 tons per rolling 12-month period for Lead

4.33 tons per rolling 12-month period for Acrolein

3.76 tons per rolling 12-month period for Manganese Compounds

0.80 tons per rolling 12-month period for m-Xylenes

0.47 tons per rolling 12-month period for 1,1-Dimethyl hydrazine

9.90 tons per rolling 12-month period for any individual HAP:

Ethyl benzene	Vinyl acetate
Xylenes (isomers and mixture)	Ethylene glycol
Methyl methacrylate	Dimethyl formamide
Methanol	Catechol
Cumene	Phenol
Methyl isobutyl ketone (Hexone)	Acetaldehyde
Toluene	Aniline
Hexane	Ethyl acrylate
Methyl tert butyl ether	Phthalic anhydride
Styrene	Dibutylphthalate
Styrene oxide	Dimethyl phthalate
Acetonitrile	Diethanolamine
Naphthalene	Benzene
Acetophenone	beta-Propiolactone

1,3-Butadiene

Biphenyl

24.90 tons per rolling 12-month period for all HAPs combined

[Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN100280010-07]

II.B.1.d.1

Monitoring:

Emissions shall be calculated on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

II.B.1.d.2

Recordkeeping:

HAP emissions shall be determined by maintaining a record of HAP emitting materials used each month. The records shall include the following data for each material used:

1. Name HAP emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
2. Density of each material used (pounds per gallon).
3. Percent by weight of and HAP in each material used.
4. Gallons of each HAP emitting material used
5. Amount of HAP emitting material used each month based on quantities pumped from bulk storage.
6. The amount of HAP emitted monthly by each material used, calculated by the following procedure:

$$\text{HAP} = \frac{(\% \text{ HAP by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{gal Consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

7. The total amount of HAP emitted monthly from all materials used.
8. The amount of HAPs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total HAP emissions.
9. HAP emissions from natural gas combustion shall be combined with the sum of the potential of the materials calculated in Condition 6. above, shall not exceed the total emissions limit specified above.

II.B.1.d.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2

Conditions on Wire Line Baghouse- Cold Finish Division (1)

II.B.2.a

Condition:

Visible emissions shall be no greater than 5 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.2.a.1

Monitoring:

A visual observation shall be performed at least once during each week that the baghouse operates. Visual observations shall be made by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9. The opacity determination shall be made within 24 hours, or at the beginning of the next day of baghouse operation, whichever period is longer.

II.B.2.a.2

Recordkeeping:

Results of monitoring shall be maintained as described in 40 CFR 60, Appendix A, Method 9, and Provision I.S.1 of this permit.

II.B.2.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b

Condition:

Static pressure differential across the baghouse is within 2 to 6 inches of water column. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.2.b.1

Monitoring:

The baghouse shall be monitored at least once during each week. The pressure gage shall be located such that an inspector/operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 2% of the full gage scale. The instrument shall be calibrated against a primary standard annually.

II.B.2.b.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c

Condition:

The above referenced baghouse shall be properly maintained. Maintenance shall include, but shall not be limited to, replacement of bags having holes or rips, and repair of pressure gages that are broken. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.2.c.1

Monitoring:

Inspections shall be conducted on a quarterly basis to verify adequate maintenance.

II.B.2.c.2

Recordkeeping:

Records of inspections and maintenance shall be kept including at a minimum: baghouse identification, date of inspection, results of inspection, cartridge filter or bag replacements, pressure gage repairs, and other corrective actions taken.

II.B.2.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3

Conditions on Coil Line Baghouse – Cold Finish Division (2)

II.B.3.a

Condition:

Visible emissions shall be no greater than 5 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.3.a.1

Monitoring:

A visual observation shall be performed at least once during each week that the baghouse operates. Visual observations shall be made by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9. The opacity determination shall be made within 24 hours, or at the beginning of the next day of baghouse operation, whichever period is longer.

II.B.3.a.2

Recordkeeping:

Results of monitoring shall be maintained as described in 40 CFR 60, Appendix A, Method 9, and Provision I.S.1 of this permit.

II.B.3.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b

Condition:

Measure static pressure differential across the baghouse is within 2 to 9 inches of water column. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

- II.B.3.b.1 **Monitoring:**
 The baghouse shall be monitored at least once during each week. The pressure gage shall be located such that an inspector/operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 2% of the full gage scale. The instrument shall be calibrated against a primary standard annually.
- II.B.3.b.2 **Recordkeeping:**
 Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.
- II.B.3.b.3 **Reporting:**
 There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.3.c **Condition:**
 The above referenced baghouse shall be properly maintained. Maintenance shall include, but shall not be limited to, replacement of bags having holes or rips, and repair of pressure gages that are broken. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]
- II.B.3.c.1 **Monitoring:**
 Inspections shall be conducted on a quarterly basis to verify adequate maintenance.
- II.B.3.c.2 **Recordkeeping:**
 Records of inspections and maintenance shall be kept including at a minimum: baghouse identification, date of inspection, results of inspection, cartridge filter or bag replacements, pressure gage repairs, and other corrective actions taken.
- II.B.3.c.3 **Reporting:**
 There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4 **Conditions on Bar Line Bag House – Cold Finish Division (2b)**

- II.B.4.a **Condition:**
 The above referenced baghouse shall be properly maintained. Maintenance shall include, but shall not be limited to, replacement of bags having holes or rips, and repair of pressure gages that are broken. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]
- II.B.4.a.1 **Monitoring:**
 Inspections shall be conducted on a quarterly basis to verify adequate maintenance.
- II.B.4.a.2 **Recordkeeping:**
 Records of inspections and maintenance shall be kept including at a minimum: baghouse identification, date of inspection, results of inspection, cartridge filter or bag replacements, pressure gage repairs, and other corrective actions taken.

II.B.4.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.b

Condition:

Visible emissions shall be no greater than 5 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.4.b.1

Monitoring:

A visual observation shall be performed at least once during each week that the baghouse operates. Visual observations shall be made by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9. The opacity determination shall be made within 24 hours, or at the beginning of the next day of baghouse operation, whichever period is longer.

II.B.4.b.2

Recordkeeping:

Results of monitoring shall be maintained as described in 40 CFR 60, Appendix A, Method 9, and Provision I.S.1 of this permit.

II.B.4.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.c

Condition:

Measure static pressure differential across the baghouse is within 2 to 9 inches of water column. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.4.c.1

Monitoring:

The baghouse shall be monitored at least once during each week. The pressure gage shall be located such that an inspector/operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 2% of the full gage scale. The instrument shall be calibrated against a primary standard annually.

II.B.4.c.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.4.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5 **Conditions on Joist and Truss Painting Equipment – Joist Plant (8)**

II.B.5.a **Condition:**

All dip tanks shall be covered when not in use. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.5.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.a.2 **Recordkeeping:**

Records of joist assembly/painting shall be maintained. Records shall include dates and times when joist assembly/painting commences and ends, and verification that the dip tank covers are in a closed position when joist assembly/painting has ceased and the dip tanks are not in use for 1-hour.

II.B.5.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6 **Conditions on Bridging Line System - Joist Plant (9)**

II.B.6.a **Condition:**

Visible emission shall be no greater than 20 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.6.a.1 **Monitoring:**

In lieu of monitoring via visible emission observations, the type of fuel used shall be monitored to demonstrate that only natural gas or propane is being combusted.

II.B.6.a.2 **Recordkeeping:**

The permittee shall maintain records of the types of fuel combusted.

II.B.6.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7 **Conditions on Spray Booths-Built Up Line - Nucor Building Systems (17)**

II.B.7.a **Condition:**

Visible emission shall be no greater than 5 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.7.a.1 **Monitoring:**

Visual observations shall be performed on the Spray Booth Stacks at least once during each week that they operate. Visual observations shall be made by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9. The opacity determination shall be made within 24 hours, or at the

beginning of the next day of Spray Booth operation, whichever period is longer. Inspections shall be performed on the Spray Booth Stacks at least once during each week that they operate.

II.B.7.a.2

Recordkeeping:

Results of monitoring shall be maintained as described in 40 CFR 60, Appendix A, Method 9, and Provision I.S.1 of this permit.

II.B.7.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7.b

Condition:

The above referenced spray booth shall be properly maintained. Maintenance shall include, but shall not be limited to, replacement of filters having holes or rips, and repair of pressure gages that are broken. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.7.b.1

Monitoring:

The spray booths shall have a manometer or magnehelic pressure gauge installed to measure the differential pressure across the filter media of each spray booth. During initial operation, a correlation between pressure drop and spray booth face velocity shall be determined through the use of a portable anemometer. This correlation will be used to set a reference mark on each manometer or magnehelic pressure gauge to show the point at which in the future, the face velocity will be assumed to have dropped to 100 fpm, thereby requiring the replacement of all or part of the filter media. Documentation of these measurements shall be maintained. Inspections shall be conducted on a quarterly basis to verify adequate maintenance.

II.B.7.b.2

Recordkeeping:

Records of inspections and maintenance shall be kept including at a minimum: spray booth identification, date of inspection, results of inspection, cartridge filter, manometer or magnehelic gauge repairs, and other corrective actions taken and other corrective actions taken.

II.B.7.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8

Conditions on Drying Oven-Built Up Line - Nucor Building System(18)

II.B.8.a

Condition:

Visible emission shall be no greater than 10 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.8.a.1

Monitoring:

In lieu of monitoring via visible emission observations, the type of fuel used shall be monitored to demonstrate that only natural gas or propane is being combusted.

II.B.8.a.2

Recordkeeping:

The permittee shall maintain records of the types of fuel combusted.

II.B.8.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.9

Conditions on Drying Oven-Purlin Line – Nucor Building Systems (22)

II.B.9.a

Condition:

Visible emission shall be no greater than 10 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.9.a.1

Monitoring:

In lieu of monitoring via visible emission observations, the type of fuel used shall be monitored to demonstrate that only natural gas or propane is being combusted.

II.B.9.a.2

Recordkeeping:

The permittee shall maintain records of the types of fuel combusted.

II.B.9.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10

Conditions on Accessory Dip Tanks – Nucor Building Systems (28)

II.B.10.a

Condition:

The all dip tanks shall be covered when not in use. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE- AN100280010-07]

II.B.10.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.10.a.2

Recordkeeping:

Records of accessory dip tank/painting shall be maintained. Records shall include dates and times when joist assembly painting commences and ends, and verification that the dip tank covers are in a closed position when accessory dip painting has ceased and the dip tanks are not in use for 1-hour.

II.B.10.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C. **Emissions Trading.**

(R307-415-6a(10))

Not applicable to this source.

II.D. Alternative Operating Scenarios.

(R307-415-6a(9))

Not applicable to this source.

Section III: PERMIT SHIELD

A permit shield was not granted for any specific requirements.

Section IV: ACID RAIN PROVISIONS.

This source is not subject to Title IV. This section is not applicable.

6. Comment on an item originating in DAQE-AN100280010-07 regarding addition of Nucor Building Systems equipment.

Changes Made: Updated rule numbers. Added additional equipment.[Comment last updated on 10/16/2007]

7. Comment on an item originating in CAM Applicability

CAM applicability has been evaluated. There are no CAM requirements in this permit. [Comment last updated on 10/16/2007]

8. Comment on an item originating in DAQE-AN100280010-07 regarding Purlin Line Flow Coater

AO condition 23: This condition limits the opacity from the purlin line flow coater to 10%. The flow coating process does not atomize the paint, instead the paint is poured over the part being painted. Opacity is not applicable to this process, so this condition has been dropped from the Title V permit. [Comment last updated on 10/16/2007]

9. Comment on an item originating in DAQE-AN100280010-07 regarding Rod Line Flow Coater

AO condition 23: This condition limits the opacity from the rod line flow coater to 10%. The flow coating process does not atomize the paint, instead the paint is poured over the part being painted. Opacity is not applicable to this process, so this condition has been dropped from the Title V permit. [Comment last updated on 10/16/2007]