

Mr. Allen Frutig  
Nishikawa Standard Company  
2808 Adams Center Road  
Fort Wayne, IN 46803

Re: 003-13845  
First Minor Permit Revision to  
MSOP 003-11924-00229

Dear Mr. Frutig:

Nishikawa Standard Company was issued a minor source operating permit on May 23, 2000 for a stationary automotive weather stripping manufacturing process. A letter requesting a revision to this permit was received on January 30, 2001. Pursuant to the provisions of 326 IAC 2-6.1-6 a minor revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the installation of a rubber surface coating line, the addition of two (2) plastic extruders on Extrusion Line 1, and an increase in the line speed of Extrusion Line No. 1. The pneumatic abrasive blast machine, included in MSOP 003-11924-00229 as part of Extrusion Line No. 1, was removed from the source and has therefore also been removed from the permit.

The following construction conditions are applicable to the proposed project:

- a. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- b. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC-13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- c. Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.
- d. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

- e. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this permit revision which includes this letter, the attached operating conditions applicable to these emission units, and revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc. (ERG). Therefore, questions should be directed to Kate Huckelbridge, ERG, P.O. Box 2010, Morrisville, North Carolina, 27560 or call (919) 468-7902 to speak directly to Ms. Huckelbridge. Questions may also be directed to Duane Van Langinham at IDEM, OAQ, 100 North Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015 or call (800) 451-6027, press 0 and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
ERG/KH

cc: File - Allen County  
U.S. EPA, Region V  
Allen County Health Department  
Air Compliance Section Inspector - Jennifer Dorn  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# **NEW CONSTRUCTION and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY**

**Nishikawa Standard, Inc.  
2808 Adams Center Road  
Ft. Wayne, Indiana 46803**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 003-11924-00229	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 23, 2000
First Minor Permit Revision: 003-13845-00229	Pages Affected: 4, 5, 17, 17a, 18, 19
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 11, 2001

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary automotive weather stripping manufacturing process.

Authorized Individual: CoLette Schlegel  
Source Address: 2808 Adams Center Road, Ft. Wayne, Indiana 46803  
Mailing Address: 2808 Adams Center Road, Ft. Wayne, Indiana 46803  
Phone Number: 219-493-7938  
SIC Code: 3069  
County Location: Allen  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD Rules

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) An automated appearance coating high volume low pressure (HVLP) spray booth (Civic Mainseal) and brush application area (Civic Subseal) for producing a maximum of 511 pounds of coated rubber window sealing systems per hour.

This stationary source is approved to operate the following emissions units and pollution control devices:

- (b) Extrusion line No. 1 consisting of:
- (1) Two (2) rubber extruders with a production capacity of 670 pounds per hour, each;
  - (2) Four (4) plastic extruders with a production capacity of 19.0 pounds per hour, each;
  - (3) Three (3) natural gas combustion units, identified as O-1, O-2, and O-3, with a total capacity of 0.782 million Btu per hour (MM Btu/hr);

- (c) One (1) Civic Coating Line, consisting of six (6) rubber coating areas identified as Brush Application Areas 1 through 6, each rated at 97.5 rubber parts per hour, each utilizing a brush application method, with Brush Application Areas 1 and 4 exhausting through one (1) stack identified as stack 1, Brush Application Areas 2 and 5 exhausting through one (1) stack identified as stack 2, and Brush Application Areas 3 and 6 exhausting through one (1) stack identified as stack 3;
- (d) Fifteen (15) natural gas fired space heating units with a combined capacity of 18.85 million Btu per hour (MMBtu/hr);
- (e) One (1) spray booth, with a capacity of 78.5 pounds of EPDM rubber weather stripping per hour, utilizing high volume low pressure (HVLP) spraying and dry filter controls;
- (f) Three (3) high volume low pressure (HVLP) spray booths with dry filters to control overspray:
  - (1) Booth B-1A coating a maximum of 117 car weather stripping units per hour, and
  - (2) Booths C-1A and C-2B coating a maximum of 234 car weather stripping units per hour, each, sharing a common exhaust.
- (g) One (1) Rubber Surface Coating Line consisting of the following:
  - (1) Twelve (12) spray guns, utilizing high volume low pressure (HVLP) spray technology and dry filters for control.
  - (2) Six (6) gas-fired burners, each rated at 86,000 Btu/hr.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

- (a) An automated appearance coating high volume low pressure (HVLP) spray booth (Civic Mainseal) and brush application area (Civic Subseal) for producing a maximum of 511 pounds of coated rubber window sealing systems per hour.
- (e) One (1) spray booth, with a capacity of 78.5 pounds of EPDM rubber weather stripping per hour, utilizing high volume low pressure (HVLP) spraying and dry filter controls;
- (f) Three (3) high volume low pressure (HVLP) spray booths with dry filters to control overspray:
  - (1) Booth B-1A coating a maximum of 117 car weather stripping units per hour, and
  - (2) Booths C-1A and C-2B coating a maximum of 234 car weather stripping units per hour, each, sharing a common exhaust.
- (g) One (1) Rubber Surface Coating Line consisting of the following:
  - (1) Twelve (12) spray guns, utilizing high volume low pressure (HVLP) spray technology and dry filters for control.
  - (2) Six (6) gas-fired burners, each rated at 86,000 Btu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 BACT Condition [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 and CP-003-4469-00229, issued February 12, 1996, spray booths A-1A, B-1A, C-1A, C-2B, D-1A and D-2B shall use High Volume Low Pressure (HVLP) spray application systems at all time during which the spray booth application systems are operated. HVLP spray application is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the spray coating booths and guns shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for spray booths A-1A, B-1A, C-1A, C-2B, D-1A and D-2B and the associated control devices.

## **Compliance Determination Requirements**

### **D.1.4 Testing Requirements [326 IAC 2-1.1-11]**

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The Permittee is not required to test these emissions units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

**D.1.5 Particulate Matter (PM)**

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The dry filters for PM control shall be in operation at all times when the spray booths and guns are in operation.



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## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Permit Revision to a Minor Source Operating Permit

#### Source Background and Description

Source Name:	Nishikawa Standard, Inc.
Source Location:	2808 Adams Center Road, Fort Wayne, Indiana 46803
County:	Allen
SIC Code:	3069
Operation Permit No.:	MSOP 003-11924-00229
Operation Permit Issuance Date:	May 23, 2000
Permit Revision No.:	003-13845-00229
Permit Reviewer:	ERG/KH

The Office of Air Quality (OAQ) has reviewed an application from Nishikawa Standard, Inc. relating to the installation of a rubber surface coating line, the addition of two (2) plastic extruders on Extrusion Line 1, and an increase in the line speed of Extrusion Line No. 1.

#### History

On January 30, 2001 Nishikawa Standard Company submitted an application to the OAQ requesting to add a rubber surface coating line, two (2) plastic extruders on Extrusion Line 1, and to increase the line speed of Extrusion Line 1. Nishikawa Standard Company was issued a MSOP (003-11924-00229) on May 23, 2000.

#### Enforcement Issue

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 30, 2000.

#### Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 4).

**Potential To Emit of Revision**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	13.64
PM-10	13.64
SO <sub>2</sub>	0
VOC	20.12
CO	0.19
NO <sub>x</sub>	0.23

  

HAP's	Potential To Emit (tons/year)
Single HAP	1.38
TOTAL	3.21

**Justification for Revision**

The Minor Source Operating permit is being revised through a Minor Permit Revision. This revision is being performed pursuant to 326 IAC 2-6.1-6(g)(4)(A),(B) for revisions with a potential to emit less than the limits listed in this rule.

**County Attainment Status**

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all pollutants listed above. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

**Source Status**

Existing Source PSD or Emission Offset Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	6.67
PM10	6.67
SO <sub>2</sub>	0.05
VOC	42.54
CO	1.80
NO <sub>x</sub>	8.60

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions were based upon the TSD for MSOP 003-11924-00229

**Proposed Revision**

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	13.64	13.64	0	20.12	0.19	0.23
PSD or Offset Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

**Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 003-13845-00229, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

**Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

- (b) There are no National Emission Standards for Hazardous Air Pollutant (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

### State Rule Applicability - Entire Source

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

The potential to emit Hazardous Air Pollutants (HAP) from this source is less than ten (10) tons per year for each individual HAP, and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, the provisions of 326 IAC 2-4.1 are not applicable.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the rubber surface coating line shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the rubber surface coating line is in operation, in order to comply with this limit.

#### 326 IAC 8-1-6 (General Reduction Requirements for New Facilities)

The potential to emit VOC from the rubber surface coating line is less than twenty-five (25) tons per year. Therefore, the provisions of 326 IAC 8-1-6 are not applicable.

### Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for

enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

## Proposed Changes

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) An automated appearance coating high volume low pressure (HVLP) spray booth (Civic Mainseal) and brush application area (Civic Subseal) for producing a maximum of 511 pounds of coated rubber window sealing systems per hour.

This stationary source is approved to operate the following emissions units and pollution control devices:

- (b) Extrusion line No. 1 consisting of:
  - (1) Two (2) rubber extruders with a production capacity of ~~670334~~ pounds per hour, each;
  - (2) **Four (4)**~~two (2)~~ plastic extruders with a production capacity of **19.095**~~19.095~~ pounds per hour, each;
  - (3) Three (3) natural gas combustion units, identified as O-1, O-2, and O-3, with a total capacity of 0.782 million Btu per hour (MM Btu/hr);
  - ~~(4) One (1) pneumatic abrasive blast machine with a cyclone and cartridge collector;~~
- (c) One (1) Civic Coating Line, consisting of six (6) rubber coating areas identified as Brush Application Areas 1 through 6, each rated at 97.5 rubber parts per hour, each utilizing a brush application method, with Brush Application Areas 1 and 4 exhausting through one (1) stack identified as stack 1, Brush Application Areas 2 and 5 exhausting through one (1) stack identified as stack 2, and Brush Application Areas 3 and 6 exhausting through one (1) stack identified as stack 3;
- (d) Fifteen (15) natural gas fired space heating units with a combined capacity of 18.85 million Btu per hour (MMBtu/hr);
- (e) One (1) spray booth, with a capacity of 78.5 pounds of EPDM rubber weather stripping per hour, utilizing high volume low pressure (HVLP) spraying and dry filter controls;
- (f) Three (3) high volume low pressure (HVLP) spray booths with dry filters to control overspray:
  - (1) Booth B-1A coating a maximum of 117 car weather stripping units per hour, and
  - (2) Booths C-1A and C-2B coating a maximum of 234 car weather stripping units per hour, each, sharing a common exhaust.
- (g) **One (1) Rubber Surface Coating Line consisting of the following:**
  - (1) **Twelve (12) spray guns, utilizing high volume low pressure (HVLP) spray technology and dry filters for control.**

- (2) **Six (6) gas-fired burners, each rated at 86,000 Btu/hr.**

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

- (a) An automated appearance coating high volume low pressure (HVLP) spray booth (Civic Mainseal) and brush application area (Civic Subseal) for producing a maximum of 511 pounds of coated rubber window sealing systems per hour.
- (e) One (1) spray booth, with a capacity of 78.5 pounds of EPDM rubber weather stripping per hour, utilizing high volume low pressure (HVLP) spraying and dry filter controls;
- (f) Three (3) high volume low pressure (HVLP) spray booths with dry filters to control overspray:
- (1) Booth B-1A coating a maximum of 117 car weather stripping units per hour, and
  - (2) Booths C-1A and C-2B coating a maximum of 234 car weather stripping units per hour, each, sharing a common exhaust.
- (g) **One (1) Rubber Surface Coating Line consisting of the following:**
- (1) **Twelve (12) spray guns, utilizing high volume low pressure (HVLP) spray technology and dry filters for control.**
  - (2) **Six (6) gas-fired burners, each rated at 86,000 Btu/hr.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 BACT Condition [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 and CP-003-4469-00229, issued February 12, 1996, spray booths A-1A, B-1A, C-1A, C-2B, D-1A and D-2B shall use High Volume Low Pressure (HVLP) spray application systems at all time during which the spray booth application systems are operated. HVLP spray application is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the spray coating booths **and guns** shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for spray booths A-1A, B-1A, C-1A, C-2B, D-1A and D-2B and the associated control devices.

## Compliance Determination Requirements

### D.1.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emissions units by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

### D.1.5 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the spray booths **and guns** are in operation.

## ~~SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS~~

~~(b)(4) one (1) pneumatic abrasive blast machine with a cyclone and cartridge collector;~~

## ~~Emission Limitations and Standards~~

### ~~D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(e)]~~

~~Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the pneumatic abrasive blast machine shall not exceed 0.551 pounds per hour when operating at a process weight rate of 10 pounds of abrasive per 24 hours.~~

~~The pounds per hour limitation is based on a process weight rate less than 100 pounds per hour.~~

## ~~Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]~~

### ~~D.2.2 Testing Requirements [326 IAC 2-1.1-11]~~

~~The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

## Conclusion

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed MSOP Permit Revision 003-13845-00229.



**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name: Nishikawa Standard Company  
Address City IN Zip: 2808 Adams Center Road, Fort Wayne, IN 46803  
CP: 003-13845  
Plt ID: 003-00229  
Reviewer: ERG/KH  
Date: 2/14/01**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Mixture of TW-020A and Emrlaon 8370C*	9.2	21.62%	0.0%	21.6%	0.0%	0.00%	1.73097	1.000	1.98	1.98	3.43	82.36	15.03	13.62	ERR	75%

<b>ate Potential Emissions</b>	<b>Add worst case coating to all solvents</b>	<b>3.43</b>	<b>82.36</b>	<b>15.03</b>	<b>13.62</b>
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\* The as applied mixture consists of 95% TW-020A and 5% Emrlaon 8370C

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations  
VOC and HAP  
From Plastic and Rubber Extruders**

**Company Name: Nishikawa Standard Company  
Address City IN Zip: 2808 Adams Center Road, Fort Wayne, IN 46803  
CP: 003-13845  
Pit ID: 003-00229  
Reviewer: ERG/KH  
Date: 2/14/01**

Emission Unit	Total Throughput (lbs/hr)	VOC Emission Factor (lbs VOC/lb product)*	Single HAP Emission Factor (lbs HAP/lb product)*	Total HAP Emission Factor (lbs HAP/lb product)*	VOC Emissions (tpy)	Single HAP Emissions (tpy)	Total HAP Emissions (tpy)
Rubber Extruder - Existing	668	1.68E-03	4.69E-04	1.09E-03	4.92	1.37	3.19
Rubber Extruder - After Modification	1340	1.68E-03	4.69E-04	1.09E-03	9.86	2.75	6.40
<b>Difference</b>					<b>4.94</b>	<b>1.38</b>	<b>3.21</b>
Plastic Extruder - Existing	19	5.50E-04	NA	NA	0.05	NA	NA
Plastic Extruder - After Modification	76	5.50E-04	NA	NA	0.18	NA	NA
<b>Difference</b>					<b>0.14</b>	<b>NA</b>	<b>NA</b>

\* These emission factors were provided by the source and have been used in previous permits (see 003-9770-00229).

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler**

**Company Name: Nishikawa Standard Company**

**Address City IN Zip: 2808 Adams Center Road, Fort Wayne, IN 46803**

**CP: 003-13845**

**Pit ID: 003-00229**

**Reviewer: ERG/KH**

**Date: 2/14/01**

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

0.5

4.5

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	1.72E-02	1.72E-02	1.36E-03	2.26E-01	1.24E-02	1.90E-01

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler**

**HAPs Emissions**

**Company Name: Nishikawa Standard Company**

**Address City IN Zip: 2808 Adams Center Road, Fort Wayne, IN 46803**

**CP: 003-13845**

**Pit ID: 003-00229**

**Reviewer: ERG/KH**

**Date: 2/14/01**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	4.746E-06	2.712E-06	1.695E-04	4.068E-03	7.684E-06

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.130E-06	2.486E-06	3.164E-06	8.588E-07	4.746E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.