

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Nishikawa Standard Company
324 Morrow Street
Topeka, Indiana 46571**

is hereby authorized to construct

- (a) One (1) robotic spray booth equipped with high volume- low pressure (HVLP) spray guns and exhausting to PEF-D5, capacity: 195 extruded rubber parts per hour.
- (b) One (1) manual naphtha wipe cleaning station, capacity: 4.0 gallons of naphtha per day.
- (c) One (1) preheat oven exhausting to PEV-D1, capacity: 1.5 million British thermal units per hour.
- (d) One (1) curing oven exhausting to PEF-D2, capacity: 2.0 million British thermal units per hour.
- (e) One (1) make-up air heater, capacity: 1.5 million British thermal units per hour.
- (f) One (1) corona booth for electrostatic cleaning exhausting to PEF-D3.
- (g) One (1) coating prep and supply area exhausting to PEF-D4.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP 087-9388-00031	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Conditions

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. This permit 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.

Effective Date of the Permit

3. Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit 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.
5. Notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. This document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).
 - (e) The Permittee has submitted their Part 70 (T-087-7182-00031) application on November 15, 1996 for the existing source. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

7. When the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

General Operation Conditions

1. The data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. The Permittee shall 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.

Preventive Maintenance Plan

3. Pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
 - (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. Pursuant to 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of this robotic spray booth is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
 - (a) Violation of any conditions of this permit.

- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. Pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

Annual Emission Reporting

7. Pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. A copy of this rule is enclosed. The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31.

Opacity Limitations

8. 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%) in 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.

Fugitive Dust Emissions

9. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

10. Pursuant to 326 IAC 6-3-2(c) (Process Operations):
- (a) The dry filters for particulate matter overspray control shall be in operation at all times when the robotic spray booth is in operation.
 - (b) The robotic spray booth shall comply with 326 IAC 6-3-2(c) using the following equation when P is equal to or less than 60,000 pounds per hour (30 tons per hour):
$$E = 4.10P^{0.67}$$
 where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.
 - (c) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the dry filters.
 - (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Volatile Organic Compounds (VOC)

11. The input of VOC minus the VOC shipped out, delivered to the applicators of the robotic spray booth shall be limited to less than 25 tons per consecutive twelve (12) month period. During the first twelve (12) months of operation, VOC usage shall be limited such that the VOC used divided by the accumulated months of operation shall not exceed the limit specified. This will result in VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6, New facilities; general reduction requirements, are not applicable. This will also result in total HAP emissions less than 25 tons per year.

Hazardous Air Pollutants

12. (a) The Permittee shall calculate the input of each individual hazardous air pollutant (HAP) (ex. Toluene, Xylene and MIBK), minus the amount of each individual HAP shipped off site, delivered to the applicators of the robotic spray booth. The usage rate computed shall be less than 10 tons of each individual HAP.
- (b) The Permittee shall calculate the input of total hazardous air pollutants (HAPs), minus the total amount of HAPs shipped off site, delivered to the applicators of the robotic spray booth. The usage rate computed shall be less than 25 tons of any combination of HAPs per consecutive twelve (12) month period.

During the first 12 months of operation, HAP usage shall be limited such that the HAP used divided by accumulated months of operation shall not exceed the limits specified. This will make the requirements of 326 IAC 2-1-3.4, New source toxics control, not applicable.

Reporting Requirements

13. A log of information necessary to document compliance with operation permit condition nos. 11 and 12 shall be maintained. These records shall include the coating, thinner and clean up solvent usage, material safety data sheet (MSDS) and the date of use. Records shall be kept for at least the past 36-month period and made available upon request to the Office of Air Management (OAM).
- (a) Quarterly summaries shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 30 days after the end of the quarter being reported in the formats attached. These reports shall include the input volatile organic compounds (VOC) including clean up solvent, minus the VOC solvent shipped out, the input of each individual hazardous air pollutant (HAP) including clean up solvent, minus the individual HAP shipped out, and the input of total hazardous air pollutants (HAPs) including clean up solvent, minus the total HAPs shipped out, delivered to the applicators of the robotic spray booth. Usage of each individual hazardous air pollutant shall be reported on separate Quarterly Report forms.

- (b) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:
 - (i) Delivered by U.S. mail and postmarked on or before the date it is due; or
 - (ii) Delivered by any other method if it is received and stamped by IDEM, OAM, on or before the date it is due.
- (c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.
- (e) The first report shall cover the period commencing the postmarked submission date of the Affidavit of Construction.

Open Burning

14. The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

Emergency Reduction Plans

15. Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 11, 1998.
- (b) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. If after this time, the Permittee does not submit an approvable ERP, IDEM, OAM, shall supply such a plan.
- (c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

- (d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (e) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate level. [326 IAC 1-5-3]

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION**

Quarterly Report

Source Name: Nishikawa Standard Company
 Source Address: 324 Morrow Street, Topeka, Indiana 46571
 Mailing Address: 324 Morrow Street, Topeka, Indiana 46571
 Permit No.: CP 087-9388-00031
 Facility: One (1) robotic spray booth, X025
 Parameter: VOC and total HAP usage
 Limit: Less than 25 tons per consecutive twelve (12) month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION**

Quarterly Report

Source Name: Nishikawa Standard Company
 Source Address: 324 Morrow Street, Topeka, Indiana 46571
 Mailing Address: 324 Morrow Street, Topeka, Indiana 46571
 Permit No.: CP 087-9388-00031
 Facility: One (1) robotic spray booth, X025
 Parameter: Individual HAP usage (use a separate page for each HAP)
 Limit: Less than 10 tons per consecutive twelve (12) month period

YEAR: _____ HAP: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Nishikawa Standard Company
 Source Location: 324 Morrow Street, Topeka, Indiana 46571
 County: LaGrange
 Construction Permit No.: CP 087-9388-00031
 SIC Code: 3061
 Permit Reviewer: CarrieAnn Ortolani

The Office of Air Management (OAM) has reviewed an application from Nishikawa Standard Company relating to the construction and operation of previously registered robotic coating operations, known as X025, at the existing rubber extrusion source, that was used for water-borne urethane coating and will now be used for solvent-borne urethane coating. The registered modification was constructed in October 1997 and consists of the following equipment:

- (a) One (1) robotic spray booth equipped with high volume- low pressure (HVLP) spray guns and exhausting to PEF-D5, capacity: 195 extruded rubber parts per hour.
- (b) One (1) manual naphtha wipe cleaning station, capacity: 4.0 gallons of naphtha per day.
- (c) One (1) preheat oven exhausting to PEV-D1, capacity: 1.5 million British thermal units per hour.
- (d) One (1) curing oven exhausting to PEF-D2, capacity: 2.0 million British thermal units per hour.
- (e) One (1) make-up air heater, capacity: 1.5 million British thermal units per hour.
- (f) One (1) corona booth for electrostatic cleaning exhausting to PEF-D3.
- (g) One (1) coating prep and supply area exhausting to PEF-D4.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
PEV-D1	one (1) preheat oven	24.0	1.0	1,000	90
PEF-D3	one (1) corona booth	23.0	2.0	4,500	68
PEF-D4	coating prep & supply	23.0	1.0	1,000	68
PEF-D5	one (1) robotic spray booth	23.0	2.0	4,500	68
PEV-D2	one (1) curing oven	24.0	1.0	1,000	160

Enforcement Issue

There are no Enforcement actions pending.

Recommendation

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

Information, unless otherwise stated, 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 20, 1998, with additional information received on March 26, 1998, April 17, 1998, and December 2, 1998.

Emissions Calculations

See pages 1 through 3 of 3 of TSD Appendix A (Emissions Calculation Spreadsheets) for detailed calculations.

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/yr)	Potential Emissions (tons/yr)
Particulate Matter (PM)	1.85	1.85
Particulate Matter (PM ₁₀)	1.85	1.85
Sulfur Dioxide (SO ₂)	0.013	0.013
Volatile Organic Compounds (VOC)	40.4	40.4
Carbon Monoxide (CO)	1.84	1.84
Nitrogen Oxides (NO _x)	2.19	2.19
Single Hazardous Air Pollutant (HAP)	18.9	18.9
Combination of HAPs	28.3	28.3

- (a) Allowable emissions of PM will be determined from the applicability of rule 326 IAC 6-3-2(c). Due to a variable process weight rate, a constant allowable can not be determined.
- (b) The potential emissions before control are equal to the allowable emissions, therefore, the allowable emissions are used for the permitting determination.

- (c) Allowable emissions (as defined in the Indiana Rule) of VOC are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.
- (d) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year and the allowable emissions of any combination of the HAPs are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) LaGrange County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

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

Pollutant	Emissions (tons/yr)
PM	13.0
PM ₁₀	13.0
SO ₂	negligible
VOC	136
CO	0.85
NO _x	3.48

- (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 more, and it is not in one of the 28 listed source categories.

- (b) These emissions were based on the Part 70 application submitted by the company on November 15, 1996. There are no emissions on file at the OAM for this source.

Proposed Modification

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 (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
Proposed Modification	0.250	0.250	0.013	29.7	1.84	2.19
PSD 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 has submitted their Part 70 (T-087-7182-00031) application on November 15, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) applicable to these facilities.
- (b) There are no National Emissions Standards for Hazardous Air Pollutants (NESHAPS) (326 IAC 12 and 40 CFR Part 63) applicable to these facilities.

State Rule Applicability

326 IAC 1-5-2 (Emergency Reduction Plans)

Although these facilities emit less than 100 tons of VOC per year in LaGrange County, the source is subject to 326 IAC 1-5-2 (Emergency Reduction Plans), because the entire source emits more than 100 tons per year of VOC. The source has submitted an Emergency Reduction Plan (ERP) on February 11, 1998. The ERP will be reviewed to determine if the plan fulfills the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-1-3.4 (New Source Toxics Control)

Since this facility was constructed after July 27, 1998 and the facility has potential emissions greater than 10 tons per year of any single HAP and 25 tons per year of any combination of HAPs, the

requirements of 326 IAC 2-1-3.4 can be applicable. The source has agreed to limit HAP usage at this facility, known as X025, to less than 10 tons per consecutive twelve (12) month period of each individual HAP and less than 25 tons per consecutive twelve (12) month period of any combination of HAPs. Therefore, the requirements of 326 IAC 2-1-3.4 are not applicable.

326 IAC 2-6 (Emission Reporting)

Although these facilities emit less than 100 tons of VOC per year in LaGrange County, the source is subject to 326 IAC 2-6 (Emission Reporting), because the entire source emits more than 100 tons per year of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by July 1 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the robotic spray booth will 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:

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

Compliance will be demonstrated by operating the dry filters at all times when the robotic spray booth is in operation.

326 IAC 8-1-6 (New facilities; General reduction requirements)

Since the one (1) robotic spray booth, which was constructed after January 1, 1980, has the potential to emit more than 25 tons per year of VOC and no 326 IAC 8-2 rules apply to the coating of rubber parts, 326 IAC 8-1-6 could be applicable. The source has agreed to limit VOC usage at the robotic spray booth to less than 25 tons per consecutive twelve (12) month period. This will result in VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable. This will also result in total HAP emissions less than 25 tons per year.

326 IAC 8-6 (Organic Solvent Emission Limitations)

The requirements of 326 IAC 8-6 (Organic Solvent Emission Limitations) are not applicable to this modification because the modification was constructed after January 1, 1980.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This modification will be limited to emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to the Clean Air Act.
- (b) See page 2 of 3 of the attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of these robotic coating operations will be subject to the conditions of the attached proposed **Construction Permit No. CP 087-9388-00031**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Nishikawa Standard Company
Source Location: 324 Morrow Street, Topeka, Indiana 46571
County: LaGrange
Construction Permit No.: CP 087-9388-00031
SIC Code: 3061
Permit Reviewer: CarrieAnn Ortolani

On December 18, 1998, the Office of Air Management (OAM) had a notice published in the LaGrange Standard, LaGrange, Indiana, stating that Nishikawa Standard Company had applied for a construction permit to construct and operate a previously registered robotic coating operations with dry filters as overspray control, at the existing rubber extrusion source. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 7, 1999, Kushal Som of the United States Environmental Protection Agency (USEPA) submitted comments on the proposed construction permit. The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**). The summary of the comments and corresponding responses are as follows:

COMMENT 1:

For #12, simply delete the first part of the sentence, and add this..."Calculate the input of each individual Hazardous Air Pollutant (HAP) (Toluene, Xylene and MIBK) minus the amount of each individual HAP shipped off-site, delivered to the applicators..."

RESPONSE 1:

Condition 12 has been revised as follows:

- Hazardous Air Pollutants
12. (a) **The Permittee shall calculate the input of each individual hazardous air pollutant (HAP) (ex. Toluene, Xylene and MIBK), ~~hazardous air pollutants (HAPs)~~ minus the amount of each individual HAP ~~HAPs~~ shipped off site, out, delivered to the applicators of the robotic spray booth. The usage rate computed shall be less than 10 tons of each individual HAP.**
- (b) **The Permittee shall calculate the input of total hazardous air pollutants (HAPs), minus the total amount of HAPs shipped off site, delivered to the applicators of the robotic spray booth. The usage rate computed shall be ~~and~~ less than 25 tons of any combination of HAPs per consecutive twelve (12) month period.**

During the first 12 months of operation, HAP usage shall be limited such that the HAP used divided by accumulated months of operation shall not exceed the limits specified. This will make the requirements of 326 IAC 2-1-3.4, New source toxics control, not applicable.

For clarification of reporting requirements, Condition 13 and the report form for individual HAPs have been revised as follows:

Reporting Requirements

13. A log of information necessary to document compliance with operation permit condition nos. 11 and 12 shall be maintained. These records shall include the coating, thinner and clean up solvent usage, material safety data sheet (MSDS) and the date of use. Records shall be kept for at least the past 36-month period and made available upon request to the Office of Air Management (OAM).

(a) ~~A Quarterly summary~~ **summaries** shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 30 days after the end of the quarter being reported in the formats attached. These reports shall include the input volatile organic compounds (VOC) including clean up solvent, minus the VOC solvent shipped out, the input of each individual hazardous air pollutant (HAP) including clean up solvent, minus the individual HAP shipped out, and the input of total hazardous air pollutants (HAPs) including clean up solvent, minus the total HAPs shipped out, delivered to the applicators of the robotic spray booth. **Usage of each individual hazardous air pollutant shall be reported on separate Quarterly Report forms.**

(b) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:

- (i) Delivered by U.S. mail and postmarked on or before the date it is due; or
- (ii) Delivered by any other method if it is received and stamped by IDEM, OAM, on or before the date it is due.

(c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.

(d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.

(e) The first report shall cover the period commencing the postmarked submission date of the Affidavit of Construction.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION**

Quarterly Report

Source Name: Nishikawa Standard Company
 Source Address: 324 Morrow Street, Topeka, Indiana 46571
 Mailing Address: 324 Morrow Street, Topeka, Indiana 46571
 Permit No.: CP 087-9388-00031
 Facility: One (1) robotic spray booth, X025
 Parameter: Individual HAP usage **(use a separate page for each HAP)**
 Limit: Less than 10 tons per consecutive twelve (12) month period

YEAR: _____ HAP: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

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

**Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
CP: 087-9388
Plt ID: 087-00031
Reviewer: CarrieAnn Ortolani
Date: January 20, 1998**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Flash-off (fraction)	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 tons per year	lb VOC /gal solids	Transfer Efficiency	
X025																		
H792C	7.20	100.00%	0.0%	100.0%	0.0%	0.00%	0.00120	195.000	1.000	7.20	7.20	1.68	40.3	7.36	0.00	n/a	75%	
UNISTOLE P 401	7.34	95.00%	0.0%	95.0%	0.0%	0.00%	0.00071	195.000	1.000	6.97	6.97	0.97	23.3	4.25	0.06	n/a	75%	
Oflex Hardener EH-47	8.59	54.50%	0.0%	54.5%	0.0%	1.00%	0.00019	195.000	1.000	4.68	4.68	0.17	4.14	0.76	0.16	468	75%	
FUM Primer Blend	7.37	93.53%	0.00%	93.5%	0.0%	0.09%	0.00210	195.000	1.000	6.89	6.89	2.82	67.7	12.4	0.21	7659	75%	
ST 97 PA	7.51	50.00%	0.0%	50.0%	0.0%	50.00%	0.00009	195.000	1.000	3.75	3.75	0.06	1.55	0.28	0.07	7.51	75%	
H792C	7.20	100.00%	0.0%	100.0%	0.0%	0.00%	0.00141	195.000	1.000	7.20	7.20	1.98	47.4	8.65	0.00	n/a	75%	
Oflex Hardener EH-47	8.59	54.50%	0.0%	54.5%	0.0%	1.00%	0.00026	195.000	1.000	4.68	4.68	0.24	5.78	1.06	0.22	468	75%	
Oflex No. 100 H-5	8.01	74.00%	0.0%	74.0%	0.0%	25.00%	0.00264	195.000	1.000	5.93	5.93	3.05	73.2	13.4	1.17	23.7	75%	
FUM Coating Blend	7.77	79.94%	0.00%	79.9%	0.0%	16.1%	0.00440	195.000	1.000	6.21	6.21	5.33	128	23.4	1.46	38.7	75%	
State Potential Emissions												8.16	196	35.7	1.68			
Add worst case coating to all solvents																		

Control Technology Emissions (Combustion)				Emission Factors							Emissions					
Type	Number	Capacity MMBtu/hr	Gas usage MCMCF/yr	PM lb/MMCF	PM10 lb/MMCF	SO2 lb/MMCF	NOx lb/MMCF	VOC lb/MMCF	CO lb/MMCF	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	
Catalytic			0.0	3.0	3.0	0.6	100.0	5.3	35.0	0.0	0.0	0.0	0.0	0.0	0.0	
Thermal			0.0	3.0	3.0	0.6	140.0	2.8	20.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total			0.0							0.0	0.0	0.0	0.0	0.0	0.0	
Control Efficiency										VOC	PM	Controlled	Controlled	Controlled	Controlled	
										0	0.95	VOC pounds per hour	VOC pounds per day	VOC tons/yr	Particulate tons/yr	
												8.16	196	35.7	0.084	

Controlled Emissions due to Surface Coating Operations and Controls

Cleaning

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Usage Gal of Mat (gal/day)	Usage Gal of Mat (gal/hr)	Flash-off (fraction)	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 tons per year	lb VOC /gal solids	Transfer Efficiency
X025																	
Napha	6.26	100.00%	0.0%	100.0%	0.0%	0.00%	4.00000	0.167	1.000	6.26	6.26	1.05	25.09	4.58	0.00	n/a	100%

Total from Coating & Cleaning

VOC emissions (tons/yr)	PM emissions (tons/yr)
40.3	0.084

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) * Flash-off
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day) * Flash-off
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) * Flash-off
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) * Flash-off
Total = Worst Coating + Sum of all solvents used

HAP Emission Calculations

Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
CP: 087-9388
Plt ID: 087-00031
County: LaGrange
Reviewer: CarrieAnn Ortolani
Date: January 20, 1998

Material	Density (lb/gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Flash-off (fraction)	Weight % Xylene	Weight % Toluene	Weight % MIBK	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	MIBK Emissions (tons/yr)	Total HAP Emissions (tons/yr)
X025											
H792C	7.20	0.00120	195.000	1.00	0.00%	90.00%	9.00%	0.00	6.62	0.66	7.28
UNISTOLE P 401	7.34	0.00071	195.000	1.00	0.00%	95.00%	0.00%	0.00	4.25	0.00	4.25
Oflex Hardener EH-47	8.59	0.00019	195.000	1.00	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
ST 97 PA	7.51	0.00009	195.000	1.00	0.00%	50.00%	0.00%	0.00	0.28	0.00	0.28
H792C	7.20	0.00141	195.000	1.00	0.00%	90.00%	9.00%	0.00	7.79	0.78	8.57
Oflex Hardener EH-47	8.59	0.00026	195.000	1.00	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Oflex No. 100 H-5	8.01	0.00264	195.000	1.00	22.00%	0.00%	22.00%	3.97	0.00	3.97	7.95

TOTALS:	(tons/yr):	3.97	18.9	5.41	28.3
	(lb/hr):	0.908	4.33	1.24	6.48
	(g/sec):	0.114	0.546	0.156	0.816

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emission Calculations
 Natural Gas Combustion Only
 MM Btu/hr 0.3 - < 10
 Commercial Boiler**

**Company Name: Nishikawa Standard Company
 Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
 CP: 087-9388
 Plt ID: 087-00031
 Reviewer: CarrieAnn Ortolani
 Date: January 20, 1998**

Preheat oven, curing oven, and air make-up heater

Heat Input Capacity Potential Throughput
 MMBtu/hr MMCF/yr

5.0

43.8

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential Emission in tons/yr	0.166	0.166	0.013	2.19	0.120	1.84

Methodology

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, Updated 7/98, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-02-006-02

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