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DEQ AIR QUALITY PROGRAM  
1410 N. Hilton, Boise, ID 83706  
For assistance, call the  
Air Permit Hotline – 1-877-5PERMIT

DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE AIR PROGRAM

Emissions Units – Automotive Coating Information **Form EU6**

Revision 5  
2/22/11

Complete this form for each paint booth. Please see instructions on page 2 before filling out the form.

**IDENTIFICATION**

|                                  |   |
|----------------------------------|---|
| 1. Company Name                  | 2. Facility Name:                               |
| NORTHWEST AUTOBODY & TOWING INC. | NORTHWEST AUTOBODY & TOWING INC                 |
| 3. Brief Project Description:    | Permit an existing automotive coating operation |

**PAINT BOOTH INFORMATION**

4. Booth Data:  New Booth  Unpermitted Existing Booth If an existing booth, when was it installed? 2002  
 Modification to a Permitted Booth, Permit #: \_\_\_\_\_ Date Permit Issued: \_\_\_\_\_  
 Dry Filters?  Dry Filters w/ a Wet Wall?  Wet Wall only?  Other, provide details: sprinkled water plant  
 Booth Airflow Type:  Down draft  Semi-Downdraft  Side draft  Other, provide details: \_\_\_\_\_

5. Booth Information: Manufacturer: Nova Verta Model: 52100 Date Manufactured: 2002

6. Planned Construction Date (if applicable): \_\_\_\_\_

7. Is the booth equipped with a heater? No  Go to the next section Yes  If "yes", answer the following questions.  
 Heating method:  Electricity, Go to the next section  Combustion  
 Who is the manufacturer of the booth heater? Power Flame MMBtu/hr What is the model number of the booth heater? JR30A-10U  
 What is the heat input rating of the booth heater? 800000 MMBtu/hr What fuel is used in the booth heater (i.e., natural gas or LPG)? Natural Gas  
 Is the worst-case operation of the booth heater greater than 2,080 hours per year? No  Go to the next section Yes   
 If "Yes", what is the worst-case annual operation of the burner? \_\_\_\_\_ hrs/yr

8. Are bed lining spray operations performed at this facility? No  Go to the next section  Yes, I am requesting an additional 4.0 gal/day limit for component "A" of a two stage "A + B" bed lining material.

**SPRAY GUN DESCRIPTION AND SPECIFICATIONS**

| Gun No. | 9. Manufacturer | 10. Model | 11. Type (e.g. HVLP, airless, conventional) | 12. Gun Transfer Efficiency % per the manufacturer |
|---------|-----------------|-----------|---|--|
| 1       | Anest-Iwata     | LPH400    | HVLP  | 99   |
| 2       | SATA            | NR2000    | HVLP  | unk  |
| 3       | SATA            | JET90-2   | HVLP  | unk  |
| 4       | Anest-Iwata     | LPH400    | HVLP  | 99   |

**REQUEST FOR PERMIT LIMITATIONS**

13. Are you requesting a daily coating materials use permit limit (e.g. gallons per day)?  
 Yes, I am requesting a limit of 4.0 gal/day for all coating materials used at the facility. Note: In order to receive an Automotive Coating general permit a daily materials use limit of **4.0 gal/day** is required.  
 No, Note: You will need to apply for a permit tailored to the situation at your facility, not an Automotive Coating general permit (see previous question).

**EMISSIONS CONTROL DEVICE (FILTER) DESCRIPTION AND SPECIFICATIONS**

| Stack Served | 14. Filter Manufacturer | 15. Model             | 16. PM <sub>10</sub> Control Efficiency(%) <sup>a</sup> |
|--------------|-------------------------|-----------------------|---|
| 1            | Nova Verta              | Sprinkled Water Plant | 98  |
| 2            | SEE ATTACHED            |                       |   |
| 3            |                         |                       |   |
| 4            |                         |                       |   |

Note: a. Provide the filter manufacturer's documentation to support the control efficiency specified above.

**PAINT STRIPPING ACTIVITIES**

17. Is Methylene Chloride (MeCl) (CAS #75-09-2) used for paint stripping activities at this facility?  
 No, Note: In order to receive an Automotive Coating general permit **no MeCl** paint stripping activities can be performed at the facility.  
 Yes, Note: In order to receive an Automotive Coating general permit **no MeCl** paint stripping activities can be performed at the facility (see previous question). You will need to apply for a permit tailored to the situation at your facility, not an Automotive Coating general permit.



Please see instructions on back page before filling out the form. All information is required. If information is missing, the application will not be processed.

**Identification**

1. Facility name:  2. Existing facility identification number:   
 Check if new facility (not yet operating)

3. Brief project description:

**Facility Information**

4. Primary facility permitting contact name:  Contact type:   
 Telephone number:  E-mail:

5. Alternate facility permitting contact name:  Alternate contact type:   
 Telephone number:  E-mail:

6. Mailing address where permit will be sent (street/city/county/state/zip code):

7. Physical address of permitted facility (if different than mailing address) (street/city/county/state/zip code):

8. Is the equipment portable?  Yes\*  No \*If yes, complete and attach PERF; see instructions.

9. NAICS codes: Primary NAICS  Secondary NAICS

10. Brief business description and principal product produced:

11. Identify any adjacent or contiguous facility this company owns and/or operates:

12. Specify type of application  Permit to construct (PTC); application fee of \$1,000 required. See instructions.

Tier I permit  Tier II permit  Tier II/Permit to construct

For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.

Co-process Tier I modification and PTC  Incorporate PTC at the time of Tier I renewal  Administratively amend the Tier I permit to incorporate the PTC upon applicant's request (IDAPA 58.01.01.209.05.a, b, or c)

**Certification**

In accordance with IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho), I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

13. Responsible official's name:  Official's title:   
 Official's address:   
 Telephone number:  E-mail:   
 Official's signature:  Date:

14. Check here to indicate that you want to review the draft permit before final issuance.

## PARTICULARS OF EQUIPMENT AND POLLUTION-PREVENTING TECHNOLOGIES

Washing becomes effective by forcing air to follow a special circuit in which it is sprinkled with water several times.

Air is separated from water by means of a drop-separation filter specially designed for use in purifiers.

The airflow is split into individual currents by means of a series of special shaped walls struck by individual droplets out of inertia, thus forming a liquid film that is brought back into the purifier by gravity while air is emitted into the atmosphere in a purified form.

### CHARACTERISTICS OF PAINT USED:

highly solid paint consisting of 70% solid and 30% solvent

### QUANTITY OF PAINT USED:

100 g for every 1,000 m<sup>3</sup> of rated airflow/h = 1,7 kg/h

### RATED AIRFLOW OF EJECTION UNIT:

17,000 m<sup>3</sup>/h

## CALCULATION OF POLLUTANT CONCENTRATION

### SOLVENTS

30% - i.e. 0.51 kg/h of the 1.7 kg/h of paint sprayed - consists of solvent that largely evaporates during spraying in the preparation area.

According to sound experience and data indicated in literature, approximately 70% of solvent evaporates during spraying in the preparation area.

Therefore 70% of the 0.51 kg/h sprayed will evaporate, amounting to:

approximately 0.36 kg/h of solvent.

This solvent is diluted in 17,000 m<sup>3</sup>/h of flow rate of air under emission and, therefore, has the following concentration:

$$\frac{360.000 \text{ mg/h}}{17.000 \text{ m}^3/\text{h}} = 20 \text{ mg/m}^3 \text{ ca.}$$

17.000 m<sup>3</sup>/h

Sprinkling and washing solvents with water halves emissions, reducing the concentration of solvents of 50% in the air under emission to approximately 10 mg/m<sup>3</sup>.

### SOLID PARTICLES

70% of the 1.7 kg/h of paint used consists of solid parts and amounts to 1.19 kg/h of solid particles.

Sound experience has proven that approximately 80% of it sticks while the remaining 20%, equal to 0.24 kg/h, forms overspray;

IT IS SPLIT UP AS FOLLOWS:

- 5% of the 1.19 kg/h ends up on top of the water

- 15% of the 1.19 kg/h, amounting to 0.18 kg/h, is driven towards the booth's sprinkling plant. As the sprinkled-water plant is 98% efficient for solid particles, the concentration of solids in the air under emission will amount to less than 1 mg/m<sup>3</sup>.

**NOVA VERTA International S.p.A.**

**Technical Department**

**Engineer Marco Massi**

