Reset Form

# OAQ PROCESS INFORMATION APPLICATION
## PI-19: Surface Coating & Printing Operations

State Form 52560 (R2 / 1-10)
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**IDEM – Office of Air Quality – Permits Branch**
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NOTES:

- The purpose of this form is to obtain detailed information about the surface coating process. Complete one form for each coating operation (or group of identical coating operations).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

## PART A: Surface Coating Operations

Part A summarizes the surface coating process. If there are multiple coating operations that are identical in nature, capacity, and use, you may use one form to summarize the data for the identical coating operations units.

1. **Unit ID**:
2. **Installation Date** *(actual or anticipated)*:
3. **Number of Identical Units**:
4. **Application Method**: ☐ Dipping ☐ Brushing ☐ Roll-coating ☐ Flow-coating ☐ Spraying
5. **If spray application is used, further specify the coating application method below**.
   - ☐ Not Applicable ☐ Air Atomization ☐ Airless
   - ☐ Electrostatic Air Atomized ☐ Electrostatic Airless ☐ Electrostatic Disc
   - ☐ High Volume Low Pressure (HVLP) ☐ Low Pressure Air Atomization ☐ Other: *(specify)*
6. **Number of Guns Used when coating**: ☐ Not Applicable
7. **Number of Guns Supported by the compressor**: ☐ Not Applicable
8. **Type of Product and Material Coated**:
9. **Gallons of Coating Used per Unit Coated**:
10. **Maximum Production Rate**: *(specify units)*

## PART B: Summary of Printing Process

Part B summarizes the printing process. If there are multiple printing operations that are identical in nature, capacity, and use, you may use one form to summarize the data for the identical printing operations units.

11. **Unit ID**:
12. **Installation Date** *(actual or anticipated)*:
13. **Number of Identical Units**:
14. **Press Type**: ☐ Flexographic ☐ Heatset Lithographic ☐ Non-Heatset Lithographic ☐ Rotogravure ☐ Other: *(specify)*
15. **Paper Feed Type**: ☐ Sheet ☐ Web
16. **Maximum Line Speed**: feet per minute (*fpm*)
17. **Maximum Printing Width**: feet (*ft*)
18. **Ink Type**: *(include MSDS)*

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## PART C: Coating Data

Part C provides data about the coatings used in this process. **Complete this table once for each of the worst case coatings** and provide an MSDS for all of the coatings used in the process.

| | |
|---|---|
| **19. Worst Case Coating**: *Indicate which of the worst case emissions scenario(s) that this coating represents.* | ☐ Highest VOC Content ☐ Highest Single HAP Content ☐ Highest PM ☐ Highest Combined HAP Content |
| **20. Coating Manufacturer**: | |
| **21. Material Identification**: | |
| **22. Batch Identification**: | |
| **23. Is the Coating Polymeric?** | ☐ Yes ☐ No |
| **24. Is this a Multipart Coating?** | ☐ Yes ☐ No |
| A. What are the parts? | |
| B. What are the ratios of the parts? | |
| C. What is the flash-off? | ☐ 100% *(default)* ☐ Other *(specify)*: |
| **25. Is the Coating Thinned or Diluted prior to application?** | ☐ Yes ☐ No |
| A. What is the thinner? | |
| B. What is the dilution ratio? | |
| C. What is the flash-off? | ☐ 100% *(default)* ☐ Other *(specify)*: |

**For the following items, provide as much of the data as is known about the coating.** The instructions for this form include the formulas needed for these calculations.

| | A. As Supplied | B. As Applied |
|---|---|---|
| **26. Material Density** (lbs/gal) ($D_C$) | | |
| **27. Weight % Total Volatiles** *(water and organics)* ($W_V$) | | |
| **28. Weight % Water** ($W_W$) | | |
| **29. Weight % Solids** ($W_N$) | | |
| **30. Weight % VOC** ($W_O$) | | |
| **31. Volume % Total Volatiles** *(water and organics)* ($V_V$) | | |
| **32. Volume % Water** ($V_W$) | | |
| **33. Volume % Solids** ($V_N$) | | |
| **34. Volume % VOC** ($V_O$) | | |
| **35. VOC Content, less water** (lbs/gal) (VOC) | | |
| **36. Weighted Average Density of the Dilution Solvent** ($D_D$) | Not applicable | |
| **37. Dilution Solvent Ratio** ($R_D$) | Not applicable | |

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## PART D: Emission Factors and Control Equipment

Part D identifies all emission factors used to calculate air emissions, as well as any control equipment or control technique for this process.

| 38. Air Pollutant: | 39. Emission Factor | | 40. Source of Emission Factor *(if not using AP-42, include calculations)* |
|---|---|---|---|
| | *value* | *units* | |
| Particulate Matter (PM) | | | ☐ AP-42 ☐ Other ☐ N/A |
| Particulate Matter less than 10μm ($PM_{10}$) | | | ☐ AP-42 ☐ Other ☐ N/A |
| Particulate Matter less than 2.5μm ($PM_{2.5}$) | | | ☐ AP-42 ☐ Other ☐ N/A |
| Hazardous Air Pollutants *(specify)*: | | | ☐ AP-42 ☐ Other ☐ N/A |
| Volatile Organic Compounds (VOC) | | | ☐ AP-42 ☐ Other ☐ N/A |
| Other *(specify)*: | | | ☐ AP-42 ☐ Other ☐ N/A |
| Other *(specify)*: | | | ☐ AP-42 ☐ Other ☐ N/A |

**41. Add-On Control Technology**: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

☐ None

☐ Baghouse / Fabric Filter – *Attach CE-02.*

☐ Oxidizer / Incinerator – *Attach CE-06.*

☐ Condenser – *Attach CE-08.*

☐ Dry Filters – *Attach CE-10.*

☐ Other *(specify)*:

☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*

☐ Adsorber – *Attach CE-07.*

☐ $NO_X$ Reduction – *Attach CE-09.*

☐ Waterwash– *Attach CE-10.*

– *Attach CE-10.*

**42. Control Techniques**: *Identify all control techniques used for this process.*

**43. Process Limitations / Additional Information**: *Identify any acceptable process limitations. Attach additional information if necessary.*

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## PART E: Federal Rule Applicability

Part E identifies any federal rules that apply to the process.

| | | |
|---|---|---|
| **44.** Is a **New Source Performance Standard (NSPS)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☐ No | | **45. Unit ID**: |
| ☐ 40 CFR Part 60, Subpart Kb | Volatile Organic Liquid Storage | |
| ☐ 40 CFR Part 60, Subpart EE | Surface Coating of Metal Furniture | |
| ☐ 40 CFR Part 60, Subpart MM | Auto and Light Duty Truck Surface Coating Operations | |
| ☐ 40 CFR Part 60, Subpart QQ | Graphic Arts Industry: Publication Rotogravure Printing | |
| ☐ 40 CFR Part 60, Subpart RR | Pressure Sensitive Tape and Label Surface Coating Operations | |
| ☐ 40 CFR Part 60, Subpart SS | Industrial Surface Coating: Large Appliances | |
| ☐ 40 CFR Part 60, Subpart TT | Metal Coil Surface Coating | |
| ☐ 40 CFR Part 60, Subpart WW | Beverage Can Surface Coating Industry | |
| ☐ 40 CFR Part 60, Subpart FFF | Flexible Vinyl and Urethane Coating and Printing | |
| ☐ 40 CFR Part 60, Subpart SSS | Magnetic Tape Coating Facilities | |
| ☐ 40 CFR Part 60, Subpart TTT | Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines | |
| ☐ 40 CFR Part 60, Subpart VVV | Polymeric Coating of Supporting Substrates Facilities | |
| **46.** Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☐ No | | **47. Unit ID**: |
| ☐ 40 CFR Part 63, Subpart GG | Aerospace | |
| ☐ 40 CFR Part 63, Subpart IIII | Auto and Light Duty Truck Surface Coating | |
| ☐ 40 CFR Part 63, Subpart VVVV | Boat Manufacturing | |
| ☐ 40 CFR Part 63, Subpart OOOO | Fabric Printing Coating and Dyeing | |
| ☐ 40 CFR Part 63, Subpart NNNN | Large Appliances Surface Coating | |
| ☐ 40 CFR Part 63, Subpart EE | Magnetic Tape Surface Coating | |
| ☐ 40 CFR Part 63, Subpart KKKK | Metal Can Surface Coating | |
| ☐ 40 CFR Part 63, Subpart SSSS | Metal Coil Surface Coating | |
| ☐ 40 CFR Part 63, Subpart RRRR | Metal Furniture Surface Coating | |
| ☐ 40 CFR Part 63, Subpart MMMM | Miscellaneous Metal Parts and Products Surface Coating | |
| ☐ 40 CFR Part 63, Subpart JJJJ | Paper and Other Web Coating | |
| ☐ 40 CFR Part 63, Subpart PPPP | Plastic Parts Surface Coating | |
| ☐ 40 CFR Part 63, Subpart KK | Printing and Publishing Surface Coating | |
| ☐ 40 CFR Part 63, Subpart WWWW | Reinforced Plastic Composites Production | |
| ☐ 40 CFR Part 63, Subpart II | Ship Building and Ship Repair Surface Coating | |
| ☐ 40 CFR Part 63, Subpart QQQQ | Wood Building Products | |
| ☐ 40 CFR Part 63, Subpart JJ | Wood Furniture Surface Coating | |

**48. Non-Applicability Determination**: *Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.*