PERMIT APPLICATION FOR VOLATILE ORGANIC COMPOUND (VOC)
SURFACE COATING EMISSION SOURCES ADEM FORM 109
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION

INSTRUCTIONS FOR COMPLETION OF
PERMIT APPLICATION FOR VOLATILE ORGANIC COMPOUND (VOC)
SURFACE COATING EMISSION SOURCES ADEM FORM 109

Please review entire form before completion.

Items 1-2:	Self-explanatory.
Item 3:	The type of process for which this form is to be completed should be indicated. Separate forms are to be submitted for each type of process and/or for multiple units of one process type (i.e., different coating lines should have separate 109 forms filled out).
Item 4:	Self-explanatory.
Item 5:	Describe how the operation works and what is the final product. A process flow diagram should also be included to clarify your explanation. See item 13.
Item 6:	Operating time for this process only (i.e., actual coating time). Please do not specify 24 hours/7 days/ 52 weeks unless this is actually the case. This will not place a restriction upon your process unless you specifically request it.
Item 7:	All coatings, as they are utilized in the process, are to be identified. The percentages indicated should be by weight, not volume. Attach calculations for pounds of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) per year. Organic liquid diluents added to the paint by your company should be included in item 7 and not here. Organic liquid solvents used for wash or clean up should be included in item 8 and not here (use additional sheets as necessary). Please do not include Safety Data Sheets (SDS) or Certified Data Sheets (CDS) unless requested by the evaluator.
Item 8:	Description of each organic diluent added to coatings. The quantity of chemicals accounted for here should not be included in item 6 or item 8. Attach calculations for pounds VOC and HAP per year (use additional sheets as necessary).
Item 9:	Description of each organic liquid solvent used for wash or clean up. The quantity of chemicals accounted for here should not be included in item 6 or item 7. Attach calculations for pounds VOC and HAP per year (use additional sheets as necessary).
Item 10:	Warm air tunnel dried: dried at ambient temperatures (<100 °F). Oven dried: dried at greater than ambient temperatures (>100 °F). Air dried: dried with no heat added. List fuels used and characteristics of fuels for this process only.
Item 11:	Emission points should be labeled both here, under Item 16 and on attached flow diagram (item 12). Stack height is that above ground level. GEP Stack Height, which means Good Engineering Practice (GEP) stack height as defined in ADEM Administrative Code r. 335 3 14 .03(2)(a)5, 335 3 15 .02(9)(a)5, or 335 3 16 .02(10)(a)5, as applicable, should only be used if the stack is 65 meters measured from ground level elevation at the base of the stack and a GEP analysis has been performed or if the stack is a grandfathered stack, thus yielding a GEP stack height equivalent to "Height above grade." UTM Coordinates, which means *Universal Transverse Mercator* Coordinates, for Alabama, N-S is between 3337.000km-3875.000km and E-W is between 362.000km-709.000km; Zone 16. Standard temperature is 68°F; standard pressure is 29.92 inches of Hg., or 1 atm. Volume of gas discharged can be calculated with the gas velocity (FPS) and stack diameter (Ft). Emission points not associated with a stack or vent should be labeled as "fugitives" under stack height.
Item 12:	Self-explanatory
Item 13:	If answer to this item is yes, the application will not be considered complete unless ADEM Form 110 is provided.
Item 14:	If answer to this item is yes, ADEM Form 110 need not be completed.
Item 15	Self-explanatory
Item 16:	Each air contaminant which is known or suspected to be emitted from each emission point is to be listed. List VOC, combined HAPs, each speciated HAP, and other pollutants as applicable. (For example: Do not list just "VOC"; instead, list specific chemicals such as toluene, xylene etc.). The allowable emission specified in the Regulation must be stated. The Department must be assured that the owner or operator has a clear understanding of the allowable emission rate.
Item 17-18:	May be included as part of monitoring plan (if so, please indicate in space provided); attach additional sheets as necessary.
Item 19	If answer to this item is no, please complete ADEM Form 437.
Item 20:	For existing sources only, attach a detailed chronological history of the process.

SURFACE COATING EMISSION SOURCES ADEM FORM 109

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Do not write in this space

1. Name of facility or organization: ____________________
2. Identification Name or Number given to this process: ____________________
3. Type of surface coating process:
4. Source Classification Code(s): ____________________
5. Briefly describe the operation of this surface coating process in your facility:
6. Typical operating schedule:

   Hours/ day: ________ Days/ week: .... Weeks/ year: ________

   Peak production season (if any): ____________________

7. Coating material used in unit or process (as applied). Do not include diluents added to coatings (see item 7).

Coating Material	Coating Method	Total gal/hr	Density lbs/gal	% wt Solid	% wt Water	% wt VOC	% wt HAP	VOC's applied lbs/year	HAP's applied lbs/year

Total (lbs/year)		
Total (tons/year)		

8. Description of organic liquid diluents (coating thinners & additives) added to the surface coatings:

Diluents	Amt. added per gallon	Coating material	Total gal/yr.	Density lbs/gal	% wt Water	% wt HAP	% wt VOC	HAP's lbs/year	VOC's lbs/year
							Total (pounds/year)		
							Total (tons/year)		

9. Description of all organic liquid solvents used for wash or clean up:

Solvents	Total gal/yr.	Density lbs/gal	% wt Water	% wt HAP	% wt VOC	HAP's lbs/year	VOC's lbs/year
				Total (pounds/year)			
				Total (tons/year)			

10. After coating, materials are: ☐Oven dried ☐Air dried ☐Warm air tunnel dried

If oven or warm air tunnel dried, the total fuel heat input is (exclude fuels used by indirect heating equipment previously described on ADEM Form 104.): .... MMBtu/hr

Fuel	Heat Content	Units	Max. % Sulfur	Max. % Ash	Grade No. [fuel oil only]	Supplier [used oil only]
Coal		Btu/lb				
Fuel Oil		Btu/gal				
Natural Gas		Btu/ft^3				
L. P. Gas		Btu/ft^3				
Wood		Btu/lb				
Other (specify)						

11. Air contaminant emission points: (each point of emission should be listed separately and numbered so that it can be located on the attached flow diagram; attach additional sheets as necessary):

Emission Point	Emission Point Type	Merged Stack**	Stack											
			UTM Coordinates		Geographic Coordinates		Height Above Grade (Feet)	GEP Stack Height (Feet)	Base Elevation (Feet)	Inside Diameter for Round Opening (Feet)	Inside Area if NOT Round Opening (sq. feet)	Gas Exit Velocity (Feet/ Sec)	Volume of Gas Discharged (ACFM)	Exit Gas Temp. (ºF)
			E-W (km)	N-S (km)	LAT	LONG								
		☐												
		☐												
		☐												
		☐												
		☐												
		☐												
		☐												
		☐												
		☐												

* std temperature is 68ºF - std pressure is 29.92" in hg or 1 atm.

** If this is a merged stack with multiple units using this release point, please provide additional information including which units and any different operating scenarios.

12. Attach a flow diagram to illustrate locations of air contaminant release so that emission points under item 11 can be identified.

13. Is there any emission control equipment on this unit or process?

☐ Yes ☐ No (if "Yes", complete ADEM Form 110)

14. Does this process have particulate filters?

☐ Yes ☐ No

15. Do you operate a coating line located within a permanently installed enclosure that directs all exhaust gases from the enclosure to a control device that meets the criteria of Method 204 of Appendix M, 40 CFR Part 51?

☐ Yes ☐ No ☐ Not Applicable

16. Air contaminants emitted: basis of estimate (material balance, stack test, emission factor, etc.) must be clearly indicated on calculations. Attach calculation worksheets. Fugitive emissions must be included (enter on separate line and check box for Fugitive). Particulate emissions should be speciated to include PM10-filterable, PM2.5-filterable, and PM-condensible. Speciated HAP emissions should also be provided. Attach additional page(s) as necessary.

EMISSION POINT	FUGITIVE ONLY	POLLUTANT	UNCONTROLLED POTENTIAL EMISSIONS		CONTROLLED POTENTIAL EMISSIONS		BASIS OF CALCULATION	REGULATORY EMISSION LIMIT (Provide in lb/hr or other Unit of Measure)
			lb/hr	ton/yr	lb/hr	ton/yr		
	☐							
	☐							
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17. For each regulated pollutant, describe any limitations on source operation or any work practice standards which affect emissions:

18. Are you requesting a limitation for permitting? ☐Yes ☐No if “yes”, specify the limit and affected unit(s):

19. Is this surface coating process in compliance with all applicable air pollution rules and regulations?

☐yes ☐no (if "no", complete ADEM Form 437)

20. For existing sources only, attach a chronological history of the process, including original installation date, modification date(s), and detailed description of the modification(s).

Name of person preparing application: ______________________

Company of preparer ______________________

Signature: ______________________ Date: ____________