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A SELF-EVALUATION CHECKLIST
of
BEST PRACTICES for AUTO REFINISH SHOPS and SCHOOLS

WHAT IS THE DESIGN FOR THE ENVIRONMENT (DFE) AUTO REFINISH PROJECT?

The DfE Program has been working with the automotive refinishing industry since 1997 to increase awareness of the health and environmental concerns associated with refinishing activities and to identify and promote safer, cleaner, and more efficient practices and technologies. Visit the DfE website to learn more about the DfE project at <http://www.epa.gov/dfe/pubs/projects/auto/>

What is the Self-Evaluation Checklist?

The Self-Evaluation Checklist is a tool to help you evaluate current practices and technologies in your facility and identify areas where you should make improvements to protect your workers (or students) and surrounding communities from isocyanates and other hazardous air pollutants generated during refinish activities. The checklist covers five key operations: surface preparation, paint mixing, spray painting, spray gun cleaning, and health and safety management.

NOTE: The Self-Evaluation Checklist is not a regulatory compliance tool, however, some of the best practices included in the checklist may be mandated by U.S. Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) standards. Where this is the case, the specific EPA or OSHA standard that may apply is noted in brackets and italics after the checklist question associated with the relevant best practice.

Instructions for Completing the Checklist

✓ Perform the walkthrough evaluation

Walk through your shop to observe your operations in each of the five areas and record your answers to each question on the checklist by checking the "yes" or "no" box as appropriate.

NOTE: While you may think you can answer most of the questions in the checklist from your desk in the front office, remember that the checklist is asking whether your workers have actually implemented the control, not whether you've purchased the equipment. For example, you don't get points for purchasing or installing a vacuum sanding system or paint spray booth, you get points for consistently using the equipment in shop operations. As a result, you will need to observe your actual shop operations while completing the checklist.

✓ **Determine your point totals**

1. Write in the points earned for each question in the “Points” column for the question. The points awarded for each answer are indicated underneath each check box (e.g., “yes = 3” means you get 3 points if you answered yes to the question).
2. At the end of each of the 5 sections, add the total number of points you received for that section and write the number in the subtotal box at the end of the section.
3. Enter in your subtotals for each section in the Point Summary Table at the end of the checklist. Add the subtotals and enter the result in the TOTAL POINTS OVERALL row at the bottom of the table.

✓ **Interpret your results**

Use your overall point total and the Evaluation Table below to assess how well you’re doing at minimizing emissions and protecting your workers and the surrounding communities. Consider your subtotals for each of the five areas (and your responses to the individual questions) to help you focus your improvement efforts. For example, if you lost most of your points in the spray painting area, that’s where you’ll want to focus your improvement efforts.

✓ **Perform follow-up evaluations to monitor your improvement efforts**

Allow a reasonable length of time (3-6 months) to ensure that improvements you’ve made become standard operating practice. Then, use the checklist again to re-evaluate your shop and check on the effectiveness of your improvement efforts. Your score should go up! (The checklist has “Baseline Evaluation” and “Follow-up Evaluation” columns to help you compare your results and assess your progress).

You should continue to use the checklist periodically to ensure consistent use of appropriate best practices and to identify other areas for improvement.

EVALUATION TABLE

POINTS	EVALUATION OF OVERALL TOTAL POINTS
0-20	The shop has taken little if any positive steps to minimize emissions of isocyanates and other hazardous materials (or to protect workers and the surrounding community from such emissions) generated during refinishing tasks.
21-60	The shop has taken some positive steps to minimize emissions of isocyanates and other hazardous materials (or to protect workers and the surrounding community from such emissions) generated during refinishing tasks but much work is still needed.
61-85	While the basics are in place, some critical best practices still need work to ensure effective emission reduction and worker and community protection.
86-107	Congratulations. It appears that the shop has implemented most if not all of the key best practices. Keep up the good work and continue efforts to implement all best practices to ensure a healthy and safe environment for your workers and the surrounding community.

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
I.	SURFACE PREPARATION				
	Sanding				
1a	Does the shop consistently use vacuum sanding, a ventilated prep deck, and/or wet sanding methods? [29 CFR 1910.94(b)(2); 29 CFR Subpart Z]	<input type="checkbox"/> Yes=3	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=3	<input type="checkbox"/> No=0
1b	If you answered "No" to question 1a above -- Do workers performing dry sanding tasks consistently use a half-mask air purifying respirator (APR) with an appropriate particulate filter (N95 or better)? [29 CFR 1910.134(a)(2)] <i>The best protection to the person performing sanding and to all others in the workplace is provided by using one of the methods listed in item 1.a above. If such methods are not used, the person performing dry sanding tasks should use appropriate respiratory protection to prevent inhalation of hazardous dusts.</i>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
2	Are vacuum sanders and/or prep decks well maintained? <i>Well maintained equipment will ensure proper capture of sanding dusts.</i>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
3	Workers wear nitrile (or other impermeable gloves) when performing wet sanding tasks? [29 CFR 1910.138] <i>Many abrasive compounds used for wet sanding are potential skin irritants. Refer to the product's MSDS for more information on hazards and required protective equipment.</i>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
	Solvent Wipe Down				
	Do painters/technicians perform all wipe down tasks:				
4a	In a ventilated booth or prep station? [If you answered "Yes", skip to item 5 below; if "No", answer questions 4b and 4c below] [29 CFR Subpart Z] <i>Performing solvent wipe down tasks in a ventilated booth or prep station protects both the painters and technicians as well as other workers in the shop by removing solvent vapors from the shop area.</i>	<input type="checkbox"/> Yes=6	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=6	<input type="checkbox"/> No=0
4b	If you answered "No" to question 4a above -- Near another source of ventilation? [29 CFR Subpart Z]	<input type="checkbox"/> Yes=4	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=4	<input type="checkbox"/> No=0

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
4c	<p>If you answered "No" to question 4a above -- Do painters/technicians consistently use a half-mask APR with an organic vapor filter (or more protective respiratory protection) when performing solvent wipe down tasks. [29 CFR 1910.134(a)(2)]</p> <p><i>The best protection for the person performing solvent wipe down tasks and for all other personnel in the workplace is provided by using a ventilated booth or prep station. Performing the work near another source of ventilation will help remove vapors from the work area but may not be as effective as a booth or prep station. If a booth or prep station is not used, the person performing solvent wipe down tasks should use appropriate respiratory protection to prevent inhalation of hazardous vapors.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
5	<p>If you answered "Yes" to questions 4a or 4b above -- Are booths/prep stations or other ventilation systems well maintained and operating properly?</p> <p><i>Well maintained ventilation systems will ensure proper capture of solvent vapors.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
6	<p>Do painters/technicians performing solvent wipe down tasks consistently use nitrile gloves or other appropriate types of gloves? [29 CFR 1910.138]</p> <p><i>Check with glove manufacturers for suggested glove types.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
7	<p>Do painters/technicians change gloves frequently enough to ensure continued skin protection? [29 CFR 1910.138]</p> <p><i>Torn, damaged, or leaking gloves could actually be more hazardous to workers than not using gloves at all. Such gloves allow solvents in and keep them in close contact with the skin. Workers must change gloves frequently to ensure proper skin protection.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
<p>SUB-TOTAL FOR SURFACE PREPARATION ACTIVITIES (Out of a maximum of 14)</p>					

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
II.	PAINT MIXING				
	Keep Containers Closed				
	Are all containers in the mixing room kept shut when not in use (answer only one question out of 8a, 8b, and 8c below, as they apply to your situation)				
8a	No containers left open?	<input type="checkbox"/> Yes=2	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=2	<input type="checkbox"/> No=0
8b	1 to 3 containers left open?	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
8c	4 or more containers left open? <i>Open containers allow evaporation of solvents into the mixing room and shop area. By keeping containers closed when not in use, your shop can prevent such emissions and minimize product loss.</i>	<input type="checkbox"/> Yes=0	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
9	Is the solvent waste drum equipped with a funnel with a spring loaded cover or other type of cover that remains closed except when opened to transfer wastes into the container? <i>As discussed in item 8 above, by keeping containers closed when not in use, your shop can minimize solvent vapor emissions.</i>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
	Mixing Room Ventilation				
10	Is the mixing room equipped with general exhaust ventilation? <i>General exhaust ventilation usually consists of an exhaust vent at or near floor level on one side of the room with make up air provided through a vent on the opposite side of the room at ceiling level. General exhaust ventilation is a good way to prevent the accumulation of solvent vapors that are emitted from a variety of sources in the mixing room (e.g., mixing activities, gun cleaning activities, trash containers with solvent laden rags, waste drums, etc.). [29 CFR 1910.106(e)(3)(v)(a); 29 CFR Subpart Z]</i>	<input type="checkbox"/> Yes=2	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=2	<input type="checkbox"/> No=0
	If you answered "Yes" to item 10 above, answer questions 11a through 11e below to assess whether the system is designed and maintained to ensure efficient air flow through the entire room. If no to item 10 above, skip to item 12.				

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
11a	<p>Make up air and exhaust vents provided on opposite sides of room with exhaust at floor level and make up air at ceiling level.</p> <p><i>Solvent vapors are heavier than air and will accumulate near the floor level. Locating the make up air vent and exhaust vent on opposite sides of the room and at opposite levels (floor level for exhaust vents and ceiling level for makeup air vents) will help ensure a good flow of air across the entire room.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
11b	<p>Space in front of exhaust vents is kept clear.</p> <p><i>Storing containers or other materials in front of exhaust vents can block the vents and significantly reduce ventilation in the room.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
11c	<p>The door to the mixing room is kept closed.</p> <p><i>Keeping the mixing room door closed is particularly important if the exhaust vent is located near the door. In such cases, the open door serves as a make up air vent and "short circuits" the ventilation in the room.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
11d	<p>Sources of solvent emissions are located near the exhaust vent where feasible.</p> <p><i>Locating sources of solvent emissions (such as the gun cleaning unit, the paint/solvent waste drum, the trash can) near the exhaust vent will maximize the effectiveness of the ventilation system by capturing vapors close to the source before they can mix with the air in the rest of the room.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
11e	<p>Ventilation system designed to draw solvent vapors away from workers.</p> <p><i>The air flow created by the ventilation system should pull vapors away from the workers' breathing zone.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

		Date:		Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
12	<p>Is the mixing room equipped with local exhaust ventilation to control emissions from mixing activities?</p> <p><i>Local exhaust ventilation for mixing rooms typically consists of an exhaust vent just above or along the back wall of the mixing table. Local exhaust ventilation systems remove solvent vapors at the source before they can enter worker breathing zones or mix with air in the rest of the room.</i></p>	<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
<p>Answer question 13 below only if points earned for questions 10 - 12 above are less than 6. <u>Note: If total points earned for questions 10 - 12 above are less than 6, the mixing room may not be effectively ventilated.</u></p>					
13	<p>If ventilation systems do not effectively ventilate the mixing room, do painters/technicians wear half-mask APRs with organic vapor filters (or more protective respirators) during paint mixing activities? [29 CFR 1910.134(a)(2)]</p> <p><i>Proper mixing room ventilation prevents the accumulation of hazardous solvent vapors in the mixing room and during paint mixing activities. Respirators are only needed if ventilation systems do not effectively ventilate the area.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
Proper Mixing Equipment/Practices					
14	<p>Does the shop use a computerized mixing system to reduce waste?</p> <p><i>Computerized mixing systems provide painters more flexibility in determining the amount of color to mix. This allows painters to mix smaller amounts of color and prevents waste when performing smaller jobs.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
15	<p>Do painters mix only the amount of coating needed for the job?</p> <p><i>This practice reduces paint waste and related emissions and saves money.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
16	<p>Do painters store and reuse remaining primers and basecoats where feasible?</p> <p><i>Storing and reusing left over primers and basecoats (where feasible) also reduces waste. Left over basecoats often can be used as a first coat when painting a vehicle with a similar color.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
17	<p>Do painters/technicians consistently wear nitrile gloves (or other appropriate gloves) when working with paints and solvents? [29 CFR 1910.138]</p> <p><i>Check with glove manufacturers for suggested glove types.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
18	<p>Do painters/technicians change gloves frequently enough to ensure continued skin protection? [29 CFR 1910.138]</p> <p><i>Torn, damaged, or leaking gloves could actually be more hazardous to workers than not using gloves at all. Such gloves allow solvents in and keep them in close contact with the skin. Workers must change gloves frequently to ensure proper skin protection.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
19	<p>Do painters/technicians wear safety glasses or goggles when working with paints and solvents? [29 CFR 1910.133(a)(1)]</p> <p><i>Paints and solvents can be potentially damaging to the eye and splashes of these materials into the eye can be very painful. The use of goggles (or even safety glasses with side shields) during paint mixing activities can minimize the potential for paints or solvents splashes into the eye. Refer to the MSDSs for the paint products used for information regarding potential eye and other hazards associated with the products.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
<p>SUB-TOTAL FOR PAINT MIXING ACTIVITIES (Out of a maximum of 20)</p>					

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
III.	SPRAY PAINTING				
	Spray Booth/Prep Station				
20	<p>Are all spray applications (including primer, basecoat and, clearcoat applications) performed in a spray booth or ventilated and enclosed prep station? [40 CFR 63.11173(e)(2); 29 CFR 1910.94(c)(2); 29 CFR Subpart Z]</p> <p><i>The best way to minimize painter and other worker exposures to isocyanates, solvents and other harmful components of paints and coatings during spray applications is to ensure that all spray applications (primer, basecoat, clearcoat) without exception are performed in a ventilated spray booth or prep station. The ventilation systems for spray booths and prep stations capture overspray and solvent vapors at the source and immediately remove these harmful materials from the workplace before they can mix with general shop air. In addition, particulate filters in the ventilation system can minimize the release of overspray to the environment. Some ventilation systems also include filters or other mechanisms to prevent the release of VOCs to the environment.</i></p>	<input type="checkbox"/> Yes=16 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=16 <input type="checkbox"/> No=0	
21	<p>Are spray booth/prep station ventilation systems in good operating condition? [40 CFR 63.11173(e)(2); 29 CFR 1910.107(b)(5)(i)]</p> <p><i>Spray booths/prep stations must be properly maintained and operated according to the manufacturers specifications to ensure the ventilation systems effectively capture overspray and solvent vapors.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
22	<p>Are ventilation filters changed regularly according to manufacturer's recommendations? [40 CFR 63.11173(e)(2); 29 CFR 1910.107(b)(5)(i)]</p> <p><i>As ventilation filters become clogged, they restrict airflow and can reduce the effectiveness of the system in capturing and removing overspray and vapors. Changing air filters regularly will help ensure the continued effectiveness of the system.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
Personal Protective Equipment					
23	<p>Do painters consistently use loose-fitting supplied-air-respirators (SARs) or better (assigned protection factor (APF) of at least 25) when spray painting? [29 CFR 1910.134(a)(2)]</p> <p><i>Although spray booths and prep stations are effective at reducing painter exposures during spray applications, additional respiratory protection is required by OSHA and recommended by the paint and coating manufacturers (refer to your products' MSDSs). Required protection typically includes a hooded or full-facepiece SAR. Loose fitting models typically provide an APF of 25 while tight fitting models provide an APF of 50 or higher depending on the type of system used. Note, the higher the APF, the greater the level of protection (an APF of 50 is twice as protective as an APF of 25). As discussed in item 27 below, hooded and full-facepiece respirators also provide eye protection during spray applications.</i></p>	<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0	
24	<p>Do painters/technicians consistently wear nitrile gloves (or other appropriate gloves) when working with paints and solvents? [29 CFR 1910.138]</p> <p><i>Check with glove manufacturers for suggested glove types.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
25	<p>Do painters/technicians change gloves frequently enough to ensure continued skin protection? [29 CFR 1910.138]</p> <p><i>Torn, damaged, or leaking gloves could actually be more hazardous to workers than not using gloves at all. Such gloves allow solvents in and keep them in close contact with the skin. Worker must change gloves frequently to ensure proper skin protection.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
26	<p>Do painters/technicians consistently wear coveralls and a headsock (unless a hooded respirator is used) when spraying paints and coatings? [29 CFR 1910.132(a)]</p> <p><i>The isocyanates and solvents used in coatings can be damaging to the skin. Skin exposure to isocyanates could even lead to sensitization and serious respiratory problems. As a result painters and technicians should wear appropriate gear to prevent or minimize skin exposure to coatings.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
27	<p>Do painters/technicians wear eye protection when spraying coatings? [29 CFR 1910.133(a)(1)]</p> <p><i>Ideally, proper eye protection is provided by a hooded or full-facepiece respirator. Where such protection is not worn, goggles should be worn.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
HVLP or Equivalent Spray Guns and Spray Technique					
28	<p>Do painters consistently use HVLP spray guns or spray guns that provide equivalent transfer efficiencies? [40 CFR 63.11173(e)(3)]</p> <p><i>Use of HVLP spray guns or spray guns with equivalent transfer efficiencies can significantly reduce overspray which will reduce harmful emissions and save paint.</i></p>	<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0	
29	<p>Are guns properly set up to ensure the correct pressure at the gun tip? [40 CFR 63.11173(e)(1)]</p> <p><i>HVLP spray guns (and other equivalent guns) are designed to achieve advertised transfer efficiencies at operating pressures specified by the gun manufacturer. Painters must ensure their guns are properly set up to ensure the correct operating pressure at the gun tip to achieve the advertised transfer efficiency.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
30	<p>Is the shop compressor capable of delivering sufficient air to the spray gun and other shop equipment?</p> <p><i>As discussed in item 29 above, spray guns are designed to work best in specified air pressure ranges. If the shop compressor is not capable of delivering that pressure to the gun, the gun will not operate as intended.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
31	<p>Have painters been trained on proper spray techniques? [40 CFR 63.11173(e)(1)]</p> <p><i>Proper spray technique is important for ensuring not only a good finish but also for achieving a good transfer efficiency. Periodic training can help painters learn and maintain proper spray techniques.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
32	<p>Do painters consistently demonstrate proper spray technique (i.e., keep gun square to target and equidistant from target throughout stroke)? [40 CFR 63.11173(e)(1)]</p> <p><i>As discussed in item 31 above, proper spray technique is important for ensuring not only a good finish but also for achieving a good transfer efficiency.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
SUB-TOTAL FOR SPRAY PAINTING ACTIVITIES (Out of a maximum of 36)					

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
IV.	SPRAY GUN CLEANING				
33	<p>Do painters/technicians consistently use an automated gun cleaning unit? [40 CFR 63.11173(e)(4)]</p> <p><i>Automated gun cleaners reduce painters'/technicians' exposures to harmful cleaning solvents by allowing painters/technicians to perform part of the cleaning process remotely. Automatic cleaning cycles are accomplished in enclosed containers which also reduces potential emissions of solvent vapors during the cleaning process. Automatic cleaners also typically reuse solvents in the cleaning process which reduces solvent waste and saves money on purchasing new solvents.</i></p>	<input type="checkbox"/> Yes=2	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=2	<input type="checkbox"/> No=0
34a	<p>Is the unit well maintained:</p> <p>Lid seats properly?</p>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
34b	<p>Hoses and connections intact to prevent leakage?</p> <p><i>Improperly fitted or damaged lids, leaking hoses, or other damage to the units can allow harmful solvent vapors to escape into the workplace.</i></p>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
34c	<p>Cleaning solvent routinely replaced to ensure effectiveness?</p>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0
34d	<p>Guns precleaned to remove gross contamination and extend the service life of the cleaning solvent?</p> <p><i>Dirty cleaning solvent can reduce the effectiveness of the gun cleaning unit and discourage use. Cleaning solvent should be replaced regularly and painters/technicians should use cleaning procedures that help extend the life of the cleaning solvent.</i></p>	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0	<input type="checkbox"/> Yes=1	<input type="checkbox"/> No=0

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

		Date:		Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
35	<p>Is the lid kept closed on the unit when not in use?</p> <p><i>Keeping the lid closed when not in use will prevent evaporation of the cleaning solvent and will minimize emissions of vapors into the work area.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
36	<p>If vented, does the exhaust duct lead to the outside or to an exhaust vent that leads to the outside?</p> <p><i>If the automatic gun cleaner is vented, the exhaust duct should vented to the outside to remove solvent vapors from the work area.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
37	<p>Is the shop equipped with a solvent recycler to minimize solvent wastes?</p> <p><i>Solvent recyclers reduce solvent waste and save money on new solvent purchases.</i></p>	<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=4 <input type="checkbox"/> No=0	
38a	<p>Is the gun cleaning station located in an area with effective exhaust ventilation that captures and removes solvent vapors before they enter the worker's breathing zone?</p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
38b	<p>If you answered " No" to question 38a above, do painters/technicians wear half-mask APRs with organic vapor filters (or more protective respirators) during gun cleaning activities? [29 CFR 1910.134(a)(2)]</p> <p><i>Effective exhaust ventilation at the gun cleaning station may capture and remove solvent vapors before they enter the worker's breathing zone during spray gun cleaning activities. In such cases respiratory protection may not be necessary.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
39	<p>Do painters/technicians consistently wear nitrile gloves (or other appropriate gloves) when working with paints and solvents? [29 CFR 1910.138]</p> <p><i>Check with glove manufacturers for suggested glove types. Note, 12 mil or thicker nitrile gloves may be needed when working with gun cleaning solvents.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
40	<p>Do painters/technicians change gloves frequently enough to ensure continued skin protection? [29 CFR 1910.138]</p> <p><i>Torn, damaged, or leaking gloves could actually be more hazardous to workers than not using gloves at all. Such gloves allow solvents in and keep them in close contact with the skin. Worker must change gloves frequently to ensure proper skin protection.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
41	<p>Do painters/technicians wear safety glasses or goggles when working with paints and solvents? [29 CFR 1910.133(a)(1)]</p> <p><i>Paints and solvents can be potentially damaging to the eye and splashes of these materials into the eye can be very painful. The use of goggles (or even safety glasses with side shields) during gun cleaning activities can minimize the potential for paints or solvents splashes into the eye. Refer to the MSDSs for the paint products used for information regarding potential eye and other hazards associated with the products.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
SUB-TOTAL FOR SPRAY GUN CLEANING (Out of a maximum of 17)					

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
V.	HEALTH AND SAFETY MANAGEMENT				
	Assign Health and Safety Responsibility				
42	<p>Has the shop designated a health and safety manager for the shop and established specific duties for the manager?</p> <p><i>By designating a health and safety manager for the shop, the owner will ensure that someone in the shop is focusing on health and safety issues on a daily basis and ensuring that health and safety procedures are consistently followed by shop workers.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
43	<p>Is the health and safety manager given sufficient time, resources, and owner support to implement the health and safety program?</p> <p><i>The health and safety manager must have the support of the owner (including sufficient time, resources, and authority) to effectively perform health and safety duties.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
44	<p>Does the manager perform frequent health and safety walk throughs in the shop to ensure health and safety controls are in place?</p> <p><i>Frequent health and safety walk throughs will provide a continual reminder to all workers to follow shop health and safety practices. The practice will also help identify potentially hazardous conditions before an accident or injury can occur.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
	Respiratory Protection Program				
45	<p>Does the shop have a written respiratory protection program? [29 CFR 1910.134(c)]</p> <p><i>A written respiratory protection program is required by the OSHA Respiratory Protection standard, 29 CFR 1910.134. This OSHA standard is intended to ensure that workers are provided and use appropriate respiratory protection when needed to control inhalation of airborne hazardous chemicals in the workplace. Key components of the program are addressed in 46 through 50 below.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
46	<p>Does the shop use only NIOSH-certified respirators that provide an appropriate level of protection for each task? [29 CFR 1910.134(d)]</p> <p><i>The OSHA Respiratory Protection standard requires that only NIOSH-certified respirators can be used in the workplace.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
47	<p>Does the shop provide medical evaluations to workers that must wear respirators? [29 CFR 1910.134(e)]</p> <p><i>The OSHA Respiratory Protection standard requires that all workers that must wear a respirator be provided with a medical evaluation before they can wear a respirator in the workplace. The evaluation is intended to ensure that workers are physically able to wear a respirator. See the OSHA standard for more information on acceptable medical evaluations.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
48	<p>Do workers that wear tight-fitting facepiece respirators receive annual fit tests with the type and size of respirator that they use? [29 CFR 1910.134(f)]</p> <p><i>Fit tests are required on an annual basis to ensure the proper fit and effectiveness of tight fitting respirators. Fit tests must be performed with the type and size respirator that the worker uses in the workplace.</i></p>	<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=2 <input type="checkbox"/> No=0	
49	<p>Does the shop owner/manager ensure that workers that wear tight-fitting facepiece respirators do not have facial hair that would interfere with the respirator seal? [29 CFR 1910.134(g)(1)(i)(A)]</p> <p><i>Facial hair in the area where the respirator facepiece for a tight-fitting respirator meets the face can prevent a good seal and reduce the effectiveness of the respirator. Positive pressure loose-fitting respirators are an option for persons with facial hair.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
50	<p>Has the shop implemented an appropriate filter change out schedule for all air purifying respirators worn in the shop? [29 CFR 1910.134(d)(3)(iii)(B)(2)]</p> <p><i>If workers use APRs with organic vapor filters, the shop must develop and implement a filter change out schedule to ensure that the organic vapor filters are changed before break through occurs and the filters are no longer effective.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
Hazard Communication Program					
51	<p>Does the shop have a written hazard communication program? [29 CFR 1910.1200(e)]</p> <p><i>A written hazard communication program is required by the OSHA Hazard Communication standard, 29 CFR 1910.1200. This OSHA standard is intended to ensure that workers are informed of the hazards of the chemicals in their workplace. Key components of the program are addressed in 52 through 54 below.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
52	<p>Does the shop have copies of MSDSs for all hazardous chemicals in the shop? [29 CFR 1910.1200(g)(1)]</p> <p><i>The shop must have a current MSDS for each hazardous chemical used or present in the shop. Shops should receive MSDSs with the chemicals they purchase, however, if a shop cannot locate an MSDS for a product, the shop can obtain a copy of the MSDS from the product manufacturer or distributor. Note, chemical manufacturers and distributors are required to provide MSDSs for all of the hazardous chemicals they sell or distribute in accordance with the OSHA Hazard Communication standard.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
53	<p>Are the MSDSs available to all shop workers and are workers aware of where the MSDSs are stored? [29 CFR 1910.1200(g)(8); 1910.1200(h)(2)(iii)]</p> <p><i>The OSHA Hazard Communication standard requires that MSDSs be made available to all workers in the workplace.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
54a	<p>Have shop workers received training on the hazards of the chemicals they use? [29 CFR 1910.1200(h)]</p> <p><i>The OSHA Hazard Communication standard specifies that workers must be trained on the hazards of the chemicals they use or could be exposed to in the workplace.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
54b	<p>If yes to 54a above, is the training documented?</p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	

Evaluators Name: _____

Shop/School Name: _____

SELF-EVALUATION CHECKLIST

				Follow-Up Evaluation	
		Date:		Date:	
		Check Yes or No	Points	Check Yes or No	Points
55	<p>Are shop workers prohibited from using solvents and thinners to wash their hands? Is a suitable alternative cleaning material available for workers to safely clean their hands.</p> <p><i>Solvents and thinners are damaging to the skin and should never be used to wash hands or any other part of the body. For information on the hazards of a specific solvent or thinner refer to the product's MSDS.</i></p>	<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0		<input type="checkbox"/> Yes=1 <input type="checkbox"/> No=0	
SUB-TOTAL FOR HEALTH AND SAFETY MANAGEMENT (Out of a maximum of 20)					

POINTS SUMMARY TABLE

Controls, Equipment, and Practices	Total Points		
	Maximum	Baseline Evaluation	Follow-Up Evaluation
Sections			
I. SURFACE PREPARATION ACTIVITIES	14		
II. PAINT MIXING	20		
III. SPRAY PAINTING	36		
IV. SPRAY GUN CLEANING	17		
V. HEALTH AND SAFETY MANAGEMENT	20		
TOTAL POINTS OVERALL	107		