

P2 Assessment Metrics



A P2 assessment consists of getting accurate answers to the following questions:



- Where the wastes are generated (process, machine, department)
- Why the wastes are generated (spills or leaks, by-products, inefficiencies)
- What wastes are being generated (type and amount)
- Where do the wastes go (treatment, recycling, or disposal)
- What does it cost (treatment, handling, labor, chemicals, disposal)

Every P2 assessment requires teamwork because P2 can be impacted not only by production, but also by purchasing, maintenance, inventory management, and other activities or processes.

We developed a questionnaire to use at the autobody, wood finishing and airline maintenance facilities we visited, as follows:

1	What is the annual quantity of paints and coatings sprayed (in gallons)?
2	What is the total dollar cost of the paints and coatings sprayed in a year?
3	What amount (or percentage) of Hazardous Air Pollutants do you spray each year?
4	If you are under AQ permit, what compounds that you spray are regulated as Hazardous Air Pollutants?
5	What is your hazardous waste generator status? a. Does this status include wastewater? b. Does it include solid wastes like used PPE, masking, filters, etc.?
6	Are your booth air filters considered hazardous waste? a. If so, for what component(s)?
7	Did you notice your spray booth filters last longer after the painters were trained in spray efficiency? a. Can you estimate or calculate how much longer?
8	Since the spray efficiency training, have you noticed a reduction in clean-up materials, wastewater generation, and/or paint use?
9	How many painters are spraying each year?
10	How many painters have received Spray Efficiency Training from PPRC?
11	Do you use disposable paint cups/liners, or use other methods to reduce the use of cleaning solvents?
12	Do your shop manually clean spray guns, or use a fully enclosed spray gun washer that recirculates and collects spent solvent and minimizes evaporation?

P2 Assessment Results: Aircraft Maintenance Facility

1	What is the annual quantity of paints and coatings sprayed (in gallons)?	33.36 gallons (8 months)
2	What is the total dollar cost of the paints and coatings sprayed in a year?	\$800 p/g \$1000 w/epoxy
3	What amount (or percentage) of Hazardous Air Pollutants do you spray each year?	100% 11.66 lbs. chromium (8 months)
4	If you are under AQ permit, what compounds that you spray are regulated as Hazardous Air Pollutants?	all
5	What is your hazardous waste generator status? a. Does this status include wastewater? b. Does it include solid wastes like used PPE, masking, filters, etc.?	SQG yes
6	Are your booth air filters considered hazardous waste? a. If so, for what component(s)?	yes chromium
7	Did you notice your spray booth filters last longer after the painters were trained in spray efficiency? a. Can you estimate or calculate how much longer?	They change every 3-4 weeks instead of every 2 weeks but due to less painting
8	Since the spray efficiency training, have you noticed a reduction in clean-up materials, wastewater generation, and/or paint use?	unknown
9	How many painters are spraying each year?	2
10	How many painters have received Spray Efficiency Training from PPRC?	2
11	Do you use disposable paint cups/liners, or use other methods to reduce the use of cleaning solvents?	some
12	Do your shop manually clean spray guns, or use a fully enclosed spray gun washer that recirculates and collects spent solvent and minimizes evaporation?	n/a

Notes: RayDome paint is the only paint with mill specifications. A challenge is that the paint includes a two-part epoxy that, when mixed, must be used or thrown away. They mix the quantity from experience, no measures, but always mix a little extra “just in case”. The training was in March 2024, and we have the paint use data from January through August 2024. We extrapolated an 8-month dollar savings based on a 10% reduction of paint waste from spray efficiency.

P2 Assessment Results: Autobody Repair

1	What is the annual quantity of paints and coatings sprayed (in gallons)?	1-2 quarts per week or about 2 gals per month
2	What is the total dollar cost of the paints and coatings sprayed in a year?	A range from \$50 to \$300 per pint
3	What amount (or percentage) of Hazardous Air Pollutants do you spray each year?	~75%
4	If you are under AQ permit, what compounds that you spray are regulated as Hazardous Air Pollutants?	yes, standard
5	What is your hazardous waste generator status? a. Does this status include wastewater? b. Does it include solid wastes like used PPE, masking, filters, etc.?	VSQG no yes
6	Are your booth air filters considered hazardous waste? a. If so, for what component(s)?	unknown
7	Did you notice your spray booth filters last longer after the painters were trained in spray efficiency? a. Can you estimate or calculate how much longer?	unknown
8	Since the spray efficiency training, have you noticed a reduction in clean-up materials, wastewater generation, and/or paint use?	20-25% reduction in paint use
9	How many painters are spraying each year?	1 main, 2 extra
10	How many painters have received Spray Efficiency Training from PPRC?	2
11	Do you use disposable paint cups/liners, or use other methods to reduce the use of cleaning solvents?	some
12	Do your shop manually clean spray guns, or use a fully enclosed spray gun washer that recirculates and collects spent solvent and minimizes evaporation?	n/a