

Solvent Recycling

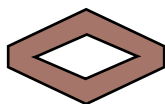


DEPARTMENT OF TOXIC
SUBSTANCES CONTROL

Automotive refinishing shops use a significant amount of paint thinner and solvent for spray gun cleaning. Used solvent combined with paint waste is often the largest waste stream in the shop and is managed by shipping it to an off-site recycling facility or by recycling the waste on-site. In both on-site and off-site recycling, waste solvent is distilled to separate and reclaim solvent from the waste paint and solvent mixture. Recycling solvent on-site may help shops reduce regulatory requirements and future liability, and save money.

On-Site Recycling

Shops that use on-site solvent recycling systems have gained significant savings from reduced material and waste disposal costs. Shops have reduced solvent purchases by as much as 80% by recycling on-site. Various kinds of recycling equipment are available. Some units are integrated with a paint gun cleaner where the recycled solvent is transferred back to the cleaning unit without pouring or handling. Evaluate your specific needs before selecting a distillation unit.



Check with local agencies before you invest in an on-site recycler

On-site recycling may not be an option for your shop if the reclaimed solvent has a higher Volatile Organic Compound (VOC) content than is allowed for paint gun cleaning in your air district. If you recycle solvent on-site, the reclaimed solvent should be used only for paint spray gun cleaning. Avoid using reclaimed solvents for other purposes, such as degreasing or parts cleaning. Those activities are subject to air districts' solvent cleaning regulations that may have lower VOC limits than those for paint gun cleaning.

Make sure the unit is compliant with the Uniform Fire Code. Local fire departments may have additional restrictions for on-site solvent recyclers.

Off-Site Recycling

If you ship solvent waste off-site, look for a facility that processes waste solvent and returns clean solvent to you. If that kind of facility is not available in your area, look for one that recycles for reuse as cleaning or other solvent, not fuel. Choose a recycler or hazardous waste management facility that is permitted by Department of Toxic Substances Control (DTSC) and check their compliance history.

Consider the following when evaluating recycling options:

| Solvent Recycling Options | On-site Solvent Distillation | Off-site Solvent Recycling Service |
|--|---|---|
| Cost | \$2,500 to \$6,000 capital cost \$3,400 per year O&M and HW disposal | \$18,000 per year for off-site recycling |
| Recycled product quality | Mixture of cleaning solvent and paint reducers depends on input | Recycled product composition should be known, but may include unknown contaminants depending on input sources. |
| Hazardous waste storage, handling, and disposal concerns | Owner responsible for properly managing still bottoms and unusable waste solvent; and for proper on-site storage and spill prevention. | Owner is responsible for proper waste storage, using a registered hazardous waste transporter and permitted recycling facility. |
| Fire and electrical safety concerns | Distillation unit heats solvent creating potential fire hazard | Safe storage on-site until picked up |
| Regulatory concerns | Reclaimed solvents may exceed air district limitations on VOC content in gun cleaning solvents. Some local CUPAs and Fire Departments may not allow the use of on-site recyclers. | Off-site recyclers are responsible for obtaining all necessary permits and maintaining regulatory compliance at their facility. |
| End use concerns | Use recycled product for spray gun cleaning. Recycled solvent that is not used on-site is subject to hazardous waste regulations. | Some off-site facilities create fuel instead of cleaning solvent as an end product. Look for a service that produces recycled cleaning solvent. |



Vendor Contact Information

While the table below provides the names of some vendors, other vendors may provide similar or identical products and services. Mention of trade names, products, or services does not convey, and should not be interpreted as conveying any government approval, endorsement, or recommendation.

| Vendor/ Manufacturer | Website | Telephone | Products |
|---------------------------|---|--------------|---|
| Becca | http://www.beccainc.com | 800-655-5649 | Solvent recycler and combination spray gun cleaner/recycler |
| Sidewinder | http://www.solvent-recycler.com/ | 702-362-9432 | Solvent recycler |
| Herkules | http://www.herkulesequipment.com/ | 800-444-4351 | Paint spray gun washers |
| Onsite Recycling Services | http://onsiterecyclingservices.com/ | 651-247-7414 | Recycler, recycling gun washer |
| Safety-Kleen | http://www.safety-kleen.com | 800-669-5740 | Recycler, recycling gun washer, automatic spray gun washer |
| System One | http://systemonetechnologies.com | 800-711-1414 | Combination spray gun cleaner/recycler |
| Uni-ram | http://uniram.com/products.html | 800-735-4331 | Solvent recycler and combination spray gun cleaner/recycler |



Hazardous Waste Regulatory Requirements

For information on regulatory requirements contact your local CUPA online at

http://www.dtsc.ca.gov/InformationResources/local_contacts.cfm

or contact the Department of Toxic Substances Control (DTSC) at (800) 728-6942,

http://www.dtsc.ca.gov/ContactDTSC/duty_officers.cfm



To Get An EPA Id Number, Contact:

DTSC
Generator Information Services Unit
(916) 255-1136
(800) 618-6942

For additional information on auto body and paint shop pollution prevention practices and a list of available publications contact:

DTSC
Office of Pollution Prevention and Technology Development
P.O. Box 806
Sacramento, CA 95812-0806
(916) 322-3670
(800) 700-5854
<http://www.dtsc.ca.gov/PollutionPrevention/index.cfm>

