

Environmental Standard Operating Procedure			
Originating Office: <b>MCAS Miramar Environmental Management Department</b>	Revision:  Original	Prepared By:  Environmental Management Department	Approved By:  William Moog
File Name: PRH-ESOP	Effective Date: 24April 2007	Document Owner: EMD	

## Title: Paint Removal - Chemical Stripping

### 1.0 PURPOSE

The purpose of this Standard Operating Procedure (ESOP) is to provide environmental guidelines for managing solvent during paint removal - chemical stripping activities aboard Marine Corps Air Station (MCAS) Miramar.

### 2.0 APPLICATION

This guidance applies to those individuals who perform paint removal/chemical stripping activities.

### 3.0 REFERENCES

- 29 CFR (Code of Federal Regulations)
- 40 CFR
- 22 CCR (California Code of Regulations)
- SDAPCD Permit No. 970080
- MCO P5090.2A (USMC Environmental Compliance and Protection Manual)
- COMNAVAIRFORINST 4790.2 (Command Naval Air Force Instruction)
- MCAS Miramar Hazardous Waste Management Plan
- MCAS Miramar Hazardous Materials Business Plan

### 4.0 PROCEDURE

#### 3.1 Discussion:

Paint removal from aircraft wheels and brake housings is required to facilitate testing of the metal and anodized plating surfaces. Chemical stripping and bead blasting are used to remove the paint layer.

Because solvent use has the potential to impact the environment, it must be properly managed as part of paint removal - chemical stripping operations. Process tanks shall be kept covered except when open for operation or maintenance. Solvents and solvent containing compounds must be stored in closed containers in accordance with Rule 67.17 as specified in San Diego Air Pollution Control District (SDAPCD) Operating Permit No. 970080.

Units have been equipped with approved containers for disposal of used solvent as hazardous wastes. Units should contact the Marine Aviation Logistics Squadron (MAL5)-11 S-4 (Squadron SAFETY / Hazmat) office for

replacement, or if additional containers are needed.

### 3.2 Operational Controls:

The following procedures apply:

1. MSDSs (Material Data Safety Sheets) for Fine Organics (FO) 606 (or equivalent solvent), and any other materials involved in this process must be available and current. The solvent Aero strip 5182 (NSN 8010-01-374-4336) is the approved equivalent solvent for this tank, and any other materials involved.
2. Personal Protective Equipment (PPE) must be worn during performance of operations including: goggles and face shields, steel toe boots, hearing protection (when using an impact gun to remove the two-piece wheel from the tire), thermal gloves (when removing wheels from oven-associated with bearing race removal).
3. Use stripping tank equipped with internal drainage device, automatic cover and associated safety features as specified in Operating Permit No. 970080.
4. Keep fire extinguishers nearby in a known location to all shop personnel.
5. Keep a Spill Kit nearby in a designated location known to all shop personnel.
6. Turn on exhaust hood when using stripping tank.
7. Use a proper stripping tank with internal drainage device, automatic cover and other features as specified in Operating Permit No. 970080 when conducting solvent stripping operations.
8. Ensure that a conspicuous, legible label listing the applicable operating requirements is posted on or near the above permitted equipment.
9. Minimum free board ratios for cold solvent dip tanks shall be maintained as follows:
  - A) No less than 0.5 for solvents having a vapor pressure of organic compounds less than 33 mm Hg at 38° C; or
  - B) No less than 0.75 for solvents having a vapor pressure of organic compounds greater than 33 mm Hg at 38° C, or heated above 50° C (refer to Operating Permit). To meet these requirements, each tank shall have a visible and permanent mark or line indicating the maximum allowable solvent level.
10. Spent solvent is drained and removed on a periodic cycle by an outside vendor/ contractor.
11. Spills must be cleaned up as soon as they are identified and according to established spill response procedures.
12. Report spills to Command Safety (fill out spill event reporting form if used).
13. Store used rags in an approved red rag container, which is taken to the HAZMAT Center when full and contents swapped out for clean rags.

14. If there are any specific situations or other concerns not addressed by this procedure, contact the MCAS Miramar Environmental Management Division (EMD) office.

### **3.3 Documentation and Record Keeping:**

The following records must be maintained for the chemical stripping process:

1. MSDS for all chemicals used in the shop including the solvent Aero strip 5182.
2. Inspection and training records.
3. SDAPCD Permit No. 970080.
4. Records of types, amounts, dates of solvents added to and removed from each solvent cleaner. (Must be maintained for 3 years in accordance with Operating Permit).
5. Monthly Usage Reports.
6. Spill Kit log book.
7. Indoctrination (INDOC) Safety Sheet (one for each practice: lists potential hazard classes, control measures and reporting forms for the specific practice).

### **3.4 Training:**

All applicable personnel must be trained in this Standard Operating Procedure and the following:

1. Hazard Communication (HazCom) Training.
2. General Environmental Awareness Training.
3. 40-hour Hazardous Waste Operations Emergency Response (HazWOPER) Training.
4. 8-hour HazWOPER Refresher Training (annually).
5. First Responder Operations (FRO) Training.
6. Safety and Hazardous Materials Coordinator (3 day course).
7. General shop safety.
8. On the job training (OJT).

### 3.5 Emergency Preparedness and Response Procedures:

Refer to Marine Corps Order (MCO) P5090.2A, Subject: Oil/Hazardous Substance Spill/Spill Prevention Control & Countermeasures (OHSS/SPCC) for MCAS Miramar.

### 3.6 Inspection and Corrective Action:

The Environmental Compliance Coordinator (EWC) shall designate personnel to perform inspections. The ECC shall ensure deficiencies noted during the inspections are corrected immediately. Actions taken to correct each deficiency shall be recorded on the inspection sheet.

Paint Removal-Chemical Stripping – Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector's Name:	Signature:

Inspection Items	Yes	No	Comments
1. Are the MSDSs for all chemicals, including the solvent Aero strip 5182, available and current? (29 CFR 1910)			
2. Are spill kits, fire extinguishers, and appropriate PPE kept nearby? (29 CFR 1910)			
3. Is a proper stripping tank with attached drainage device used? (SDAPCD Permit 970080)			
4. Is a working exhaust hood present and used when performing chemical stripping? (SDAPCD Permit 970080)			
5. Are all solvents and solvent containing compounds stored in closed containers? (rule 67.17 SDAPCD permit 970080)			
6. Are records of types, amounts, dates of solvent changes current and available for inspection? (SDAPCD permit 970080)			
7. Are records available of spent solvent being drained from the stripping tank and removed periodically by contractor? (MCO P5090.2A)			
8. Are spills properly cleaned up immediately?			

(CCR 66265.31)			
9. Are spill reports/logs and accident records current and available for inspection? <i>[CCR 66265.56(j), HWMP Sec: 4.2]</i>			
10. Are used rags placed in approved containers for recycling? <i>(MCO P5090.2A)</i>			
11. Are training and inspection records maintained and available for inspection? <i>(MCO P5090.2A 9104.1(k)(5)- inspection only)</i>			

**ADDITIONAL COMMENTS:**

---



---



---



---

**CORRECTIVE ACTION TAKEN:**

---



---



---



---

**Environmental Compliance Coordinator:**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_