

HAZMAT and HAZWASTE Reduction for 3D MAW's F-35 Squadrons

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Background

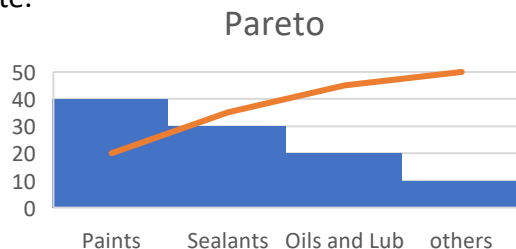
The F-35 program wastes the most hazardous material due to the shelf-life expiration that is created from Lockheed Martin (LM) after testing. This LM expiration date is not the same as the manufacturer's expiration date, so these in theory should be able to be reutilized by other squadrons. The reutilization should be handled by installations hazmat site. This reduction in Hazwaste would minimize our environmental footprint and reduce health hazards for personnel.

Methods

The first step that was conducting a Voice of the Customer assessment. This determined the following:

- Sporadic work-load
- Once product is opened its waste
- Expiration dates are sometimes short timelines

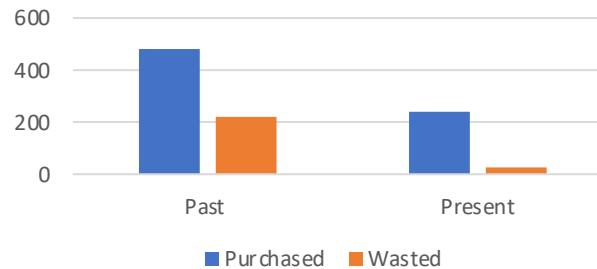
Measured all waste, and determined partial usage and complete usage, and determined the total waste.



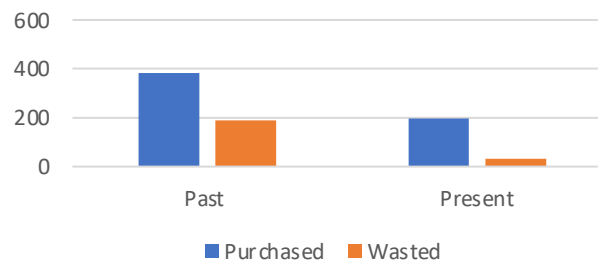
Needs Assessment

By determining the needs assessment from the Pareto Principle graph it was determined that minimizing the waste on the two highest waste streams (paints and sealants) would benefit this project the most. The goal was to minimize waste by 50% or more for each of the waste streams.

Paint Purchased/Wasted



Sealant Purchased/Wasted



Intervention & Outcomes

In attempts to reduce the hazardous waste this project conducted two Kaizen events (rapid improvement events).

- The first was implementing the reuse of expired LM materials to squadrons that could also use on their aircraft.
- The second was ordering reduced quantity sizes of paints and sealants to reduce the amount of wasted unused hazardous materials. Changed the order quantity from quarts to pints.

Summary

Each of the 6 squadrons saved the following amounts annually:

- \$31,252 on paint size container changes
- \$31,200 on sealant size container changes
- \$33,030 on the reuse of LM expired materials
- \$572,891 total saves across 6 squadrons

These changes will be controlled and maintained by the implementation of annual CSA's, bi-annual CGI, and through ALMAT inspection to ensure proper reuse and reduce procedures are being followed.