

Project Overview



Industrial Assessment

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Major: Electrical Engineering

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Nebraska National Guard Mission

The primary mission of the Army Aviation Support Facility #1 (AASF) is to provide mechanical services to the Nebraska Army National Guard (ANG) UH-60 Blackhawk Helicopter. This facility consists of one large hangar area with supporting maintenance shops on three sides. The AASF employs approximately forty full-time workers. Maintenance shops consist of aircraft maintenance, allied trades and avionics.

Project Description

Although the ANG has a pollution prevention program; the AASF requested a program tailored for their maintenance facility. The current program was evaluated and variations of more sustainable program designs and management practices were presented to the ANG. Suggestions for chemical inventory locations and quantities of chemicals on hand were also presented.

Results

The analyses and pollution prevention recommendations made have the potential for reducing the quantities of hazardous chemicals on hand, which is illustrated below in Table 1. Appointing key personnel to manage and provide guidance to others will increase the benefits of the pollution prevention program. Additionally, centralizing both new chemical storage and hazardous material storage for the ANG installation will reduce chemical waste, reduce costs associated with redundant storage locations, reduce regulatory burdens and increase efficiency of chemical processing. These changes will help to initiate a change in the mindset of ANG personnel. Ideally this mindset will be one that inspires individuals to go beyond compliance with established environmental standards. It will foster ideas for more environmentally friendly processes and future pollution prevention opportunities.

Table 1. Summary of Quantity on hand with Estimated Quantity Reductions

	Quantity on hand	Potential Quantity Reduction
Total non-aerosol items	33 gallons	29 gallons
Total Aerosol items	83 gallons	67 gallons
Combined Total	116 gallons	96 gallons