Case History

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Cutting Hazardous Waste Costs and Liability

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The AH-64A Apache Combat helicopter, a prominent fixture in Operation Desert Storm, is manufactured by McDonnell Douglas Helicopter Systems of Mesa, Arizona, using the latest and most technologically advanced methods and techniques. However, outdated technology and equipment were being used in the management and minimization of the company's hazardous waste.

The manufacturing processes at the facility result in solvent- and paint-contaminated hazardous waste in the form of rags, paper cups, gauze, paint brushes, cans, and filters. The waste is disposed of in DOT 17C/17H steel 55-gallon drums. An aging and outdated baling machine had been converted to a compactor by attaching a round platen in place of the standard square head. This increased the weight of each drum to approximately 150 to 225 pounds from the 75 pounds of the uncompacted drums. However, the baling machine was not designed for such use and posed potential safety issues.

The company embarked on an aggressive program to upgrade the methods and equipment used in the management of the company's hazardous waste. Priorities included minimizing potential Resource Conservation and Recovery Act (RCRA) liability and reducing costs, while raising the level of safety for employees.

Once this came to McDonnell Douglas' attention, an extensive search for a better method of compacting hazardous waste was underway. The company reviewed and researched several different alternatives. Ultimately, the CTI PRO 8560 Hazardous Waste Compaction System was chosen because of its demonstrated record of reliability and safety. Additionally, the compaction tests performed on the waste stream with the CTI PRO resulted in superior compaction ratios. Since installation of the CTI PRO in 1992, the company's drums of hazardous waste have consistently weighed in excess of 350 pounds, with some drums weighing up to 500 pounds.

Several unique features of the CTI PRO unit influenced the decision. The patented zero tolerance compaction chamber, which provides support to the drum, minimizing drum distortion; an energy-efficient and durable two-stage hydraulic system; complete and keyed access enclosure of all hydraulic components; and a full stainless steel exterior machine skin. In addition, the CTI PRO offered projected annual savings of $80,000. Finally, the CTI PRO more than doubled the amount of material that McDonnell Douglas had been packing into each drum, reducing the number of drums shipped offsite by nearly half. The company's potential "cradle-to-grave" liability was similarly slashed. ❑