

Rejuvenation, Inc

A Pollution Prevention Success Story

Background

Rejuvenation, Inc is a leading manufacturer and retailer of period reproduction lighting and house parts. Founded as an architectural salvage store in 1977 by Jim Kelly, the company currently employs 230 people and has 2 retail stores with 2 more planned within the next few years.

Environmental Management System

Rejuvenation decided that an Environmental Management System (EMS) was the best tool to direct an approach to decreasing the company's impact on the environment. With assistance from EPA, DEQ, City of Portland and The Natural Step, Rejuvenation developed the first EMS to measure global sustainability impacts from the actions taken on a manufacturing floor. The result is a nationally recognized Environmental Management System that incorporates the highest standards of environmental and social responsibility.

Elimination of Two Pollution Permits

Rejuvenation's past use of a dip tanks with solvent borne acrylic dip lacquer for brass clear coatings and an air drying process required them to have an air permit to discharge nearly four tons of combined hazardous air pollutants per year. After research and development initiated within the EMS, the company converted to spray and bake coatings that provide the same quality of finish with about 75% less hazardous air emissions. The change eliminated the need for an air discharge permit. The change-over required a significant up front capital cost but the increase in coating quality and other performance benefits as well as reductions in solvent and permit costs over the long run will add up.

Economic & Environmental Benefits

Jeff Shay, Engineering Manager for Rejuvenation, a principal developer of the EMS and of the process and material changes for the company, also set out to achieve zero discharge into the sewer. By adding a closed-loop recycling system that uses a filter to eliminate the selenium and copper from the water, Rejuvenation no longer discharges this process water to the sewer. Annual results equal 30,000 gallons of water and sewer costs. While Rejuvenation does have a degreasing discharge to the sewer containing trace amounts of oil and metals, they are non hazardous.



Jeff Shay points out to Dave Kunz, a feature of new closed loop recycling unit

Other Environmental Results

Currently two other liquid waste streams contain about 90% water but are being treated as hazardous wastes. The goal is to install an evaporation system to reduce the volume of the direct discharge and to put the ultra filtration dregs in the evaporator with a goal of no discharge into the sewer. Another research area is in the buffing of fixture parts. The buffing waste contains lead. Mr. Shay is doing tests to determine if the lead can either be recycled or if there are products available that can be introduced into the buffing system that make the lead non-hazardous to the environment. If those challenges are met, Rejuvenation will become one of the very few manufacturers that have moved from a large quantity generator of hazardous waste to a conditionally exempt generator.

"By welcoming the DEQ HW technical assistance program as partners to help us reduce our hazardous materials use, we have completely eliminated one state permit and have become focused on reducing our generator status from SQG to CEG!"

- Jeff Shay, Rejuvenation, Inc.

Additional Information

Please search the DEQ Website for 'HW Technical Assistance'

Alternative formats

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us



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