

# CASE STUDY



## WATER STORAGE TANK LA MESA, CALIFORNIA

### BACKGROUND

A four million gallon water storage tank owned by the Helix Water District in La Mesa, CA was scheduled to have an old coating of lead based paint removed from its roof and roof support structure. The water district had required that the tank be returned to service by the coming dry summer months — the time when California communities can experience severe water shortages, and extreme fire damage. The advent of summer also threatened to cause dangerously high temperatures inside the tank. This created concerns about worker safety and productivity. The contractor had been given a tight schedule to complete the job, while observing complicated lead abatement decontamination mode operating procedures.

### THE PROBLEM

Under this tight deadline, the contractor could not afford to proceed without dehumidification protection. Laborious and time-consuming methods required when blasting away a lead contaminated paint can create severe “slowdowns” in daily operations. With pressures to have the tank in service by summer, a continuous process, including: uninterrupted blasting, followed by a single clean up period, and finally a monolithic coat was desired. All risk of re-blasting mid job to correct newly formed moisture related corrosion had to be eliminated.

*Above: Munters desiccant dehumidifiers held-the-blast and saved more than \$4000 per week in a Southern California water tank coating job. A four million gallon municipal storage tank was blasted and re-coated, while a white metal blast was held for over three weeks.*



## THE SOLUTION

The contractor had originally planned to use their own dehumidification equipment. However, their plan to use their own dehumidifiers—which were to be regenerated by electrical heat—was causing two serious problems: First, excessive set up cost—the one-time charge for the temporary power line was more than \$10,000! Secondly, the alternative, to supply the 436 amp electrical requirement using diesel powered electrical generators, would create unacceptable noise levels in the nearby residential area.

Looking for a better solution, the contractor reviewed its situation with Munters. It quickly became clear that Munters could offer a new, innovative propane gas regenerated dehumidification technology that would:

- **Provide substantial cost reductions.**
- **Keep the project ahead of schedule.**
- **Meet unique concerns created by the working environment.**

By renting four Munters 4500 propane regenerated dehumidifiers, the contractor reduced its operating expenses by \$4000 per week, as compared to the projected cost of using its own equipment!

The savings were realized in four ways: 1) eliminating the need to rent large generators, 2) greatly reduced consumption of electrical power, 3) eliminating the cost of a temporary power supply, 4) reduced generator fuel consumption.

## THE BENEFITS

### ■ **Faster Coating**

With dry air protection, you can blast and coat around-the-clock, during any weather and hold the blast as long as necessary. Munters controls the dew point temperature to meet NACE guidelines, eliminating any chance of corrosion.

### ■ **Improved Coating**

You can achieve improved coating life through a monolithic application. Use high performance coatings, knowing that dry air protection will allow you to begin the second coat within 24-hours.

### ■ **Agreeable Working Conditions**

MCS can combine chillers and desiccant dehumidification to provide cool, dry air to the tank. You meet OSHA temperature standards and achieve higher worker productivity.

### ■ **Quiet Operation**

Munters propane regenerated dehumidification systems run silently. No large diesel generators are required.

### ■ **Remote Operation**

Munters propane regenerated systems are configured to draw lower amperage, in most situations requiring no supplementary power at the coating site.

### ■ **Contaminant Free**

Munters dehumidifiers introduce no foreign matter into the coating environment. You get dried air of the same quality as the air found outside the tank.

### ■ **Lower Coating Costs**

With Munters your labor costs are reduced by up to 35%, since delays from weather changes or daily start up and clean up are eliminated.

### ■ **Lower Equipment Costs**

Munters lets you reduce or eliminate generator rental and fuel costs.

### ■ **Lower Energy Costs**

A Munters dehumidification system lowers power costs in two ways: 1) we can combine refrigeration with desiccants for more efficient electrical consumption, 2) we provide propane gas regenerated desiccant dehumidifiers, reducing electrical costs 80% or more!

**MUNTERS CORPORATION**  
**MOISTURE CONTROL SERVICES**  
79 Monroe Street, P.O. Box 640  
Amesbury, MA 01913-0640  
TEL: 1-800-I-CAN-DRY (422-6379)  
978-388-4900  
FAX: 978-388-4939  
WWW: <http://www.muntersmcs.com>  
E-Mail: [moreinfo@muntersmcs.com](mailto:moreinfo@muntersmcs.com)

**NORTHEAST**  
Philadelphia, PA  
Baltimore, MD  
Boston, MA  
Hartford, CT  
NYC/New Jersey  
Norfolk, VA  
Pittsburgh, PA

**SOUTHEAST**  
Atlanta, GA  
Charlotte, NC  
Miami, FL  
Orlando, FL  
**GULF COAST**  
Houston, TX  
Dallas, TX  
San Antonio, TX  
New Orleans, LA

**MIDWEST**  
Chicago, IL  
Cincinnati, OH  
Cleveland, OH  
Detroit, MI  
Kansas City, MO  
Milwaukee, WI  
Minneapolis, MN  
St. Louis, MO

**WEST COAST**  
Los Angeles, CA  
Denver, CO  
Portland, OR  
San Francisco, CA  
Seattle, WA  
**CANADA**  
Toronto, ONT  
Montreal, PQ  
Vancouver, BC

