



TEMPORARY  
HUMIDITY CONTROL

# Moisture Crisis: 16 Million Pounds of Peanuts Saved



Property Damage  
Restoration



Temporary  
Humidity Control



Property Performance  
Services

Clint Williams Co. is one of the nation's largest processors and exporters of peanuts. At its Madill, Oklahoma site, Clint Williams can grade, process, and store up to 18 million pounds of unshelled peanuts or 36 million pounds of shelled peanuts. The peanuts arrive at the plant with a moisture content of 10% after field drying in forced hot air wagons. While warehoused at Clint Williams, the moisture content is further reduced to 7% to maximize grade rating at sale. After processing, the peanuts are kept in cold storage -38-42° F - until shipped to market. During this period, Clint Williams carefully monitors the moisture content. Peanuts which become too dry lose weight and thus value at sale. Peanuts with greater than a 9% moisture content

exceed grading standards and lose value, as well. Should moisture content reach 12%, the inventory becomes threatened by the likelihood of mold and mildew formation - a catastrophic occurrence!

## The Problem

High summer humidities were threatening the peanut stores at The Clint Williams Co. Orders were up and shipping activity had been constant during the humid summer months, allowing outside air to regularly infiltrate the plant. As a result, humidity readings inside the cold storage areas had climbed to 80-90% RH. Ollie Hall, CWC plant manager, was alarmed.

"Our grade rating was threatened as moisture content was beginning to exceed the 9%

maximum required for trading. Beyond that, increasing moisture content could very well bring with it mold and mildew formation. If the moisture content continued to climb, we would have been forced to reprocess the inventories using heat. This type of reprocessing would have kept us from shipping peanuts for three months and would have cost \$800,000 to \$1 million."

A crisis was just days away. It was too late to purchase equipment in time to avert the impending disaster. However, Polygon could offer a unique solution to Ollie - emergency dehumidification services from Polygon.

## The Solution

Polygon is the nation's leading provider of temporary humidity control equipment to industry. Organized to offer short-term and emergency dehumidification services, it has more than 20 offices throughout the U.S. and Canada with rental equipment for state-of-the-art dehumidification and temperature control.

Within the hour, plans were put in place to rush eight HC-4500 dehumidifiers to the Clint Williams site. Along with the equipment, Polygon would send experienced technicians to configure the temporary dehumidification system for optimum performance. Polygon's solution would be turnkey, and the Polygon team would work closely with Clint Williams staff members to make sure the process went smoothly.

In just days, the desiccant industrial dehumidifiers were on site and the temporary system up and running. "Both the equipment and the Polygon people were first class," said Ollie.



Polygon controlled humidity throughout The Clint Williams Co. plant saving 16 million pounds of peanuts.



# 16 Million Pounds of Peanuts Saved Using Rental Dehumidifiers



“They worked quickly, and left with everything running perfectly.”

Within hours of start up, readings showed that humidity levels were falling in the cold storage areas. The high volume of extremely dry air produced by the Polygon dehumidifiers was replacing the high humidity of summer inside the facility, and, in turn, drawing the moisture out of the peanuts. The moisture content, which had been regained during several months of storage, would be quickly stabilized and then reduced.

## The Results

Within four days after the Polygon installation, the crisis was over. The environment was stabilized and moisture content was dropping in the peanuts. “We had calculated that the desired moisture level in the peanuts would be reached in about three to four weeks,” said the Polygon business development specialist. “That’s just about what it took, but the significant change in the conditions, achieved within a few days, was extremely important to prove to the customer just how effective the long-term use of desiccant dehumidification would be. Ollie told me that he considered the effectiveness of the Polygon equipment truly remarkable.”



Polygon rental dehumidifiers controlled humidity for four months.

After the moisture content of the peanuts had returned to the desired levels, the fleet of eight rental dehumidifiers was reduced to two HC-4500s. This equipment controlled humidity in the plant, preventing moisture from again being absorbed by the peanuts.

The total cost of the equipment rental over a four month period was \$75,000. Compared to the prospect of nearly \$1 million in reprocessing and significant costs associated with business delays, the rentals proved extremely cost-effective. “We will be eternally indebted to Polygon,” said Ollie Hall. “There is no doubt that without Polygon we would have had to reprocess 16 million pounds of peanuts. Polygon allowed us to ship and sell peanuts.”

## The Benefits

### No Business Interruption

A major business disruption was avoided. Fast-acting Polygon crews arrived promptly and built up a temporary, cost-effective system.

### Preserved Product Quality

Valuable inventories of peanuts were saved and their quality enhanced by desiccant

humidity control. Just as thousands of companies protect their operations full-time with dehumidification equipment, companies with temporary humidity control needs can count on Polygon for short-term solutions.

### An On-site Test Before Purchase

Polygon allows companies to test dehumidification solutions without a capital expenditure. Whether a test or an emergency, companies get “real time” data to evaluate their long-term needs.

### Flexible Configurations

Polygon services allowed the option of reducing the rental equipment on-site after initial goals were met. Whether you need to expand or contract your initial configuration, Polygon is prepared to react.

### Technical Support

Polygon turnkey service brings with it years of industrial process experience. As the leading supplier of dehumidification equipment to industry, Polygon can advise as you plan to meet even difficult requirements.



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