

WATER, WATER *Anywh*

Tank repaint draws attention in water-sensitive Los

AT A GLANCE

- Maintenance repaint of a 55-year-old potable water storage tank in Los Alamos, N.M.
- Painting performed by Rickert Industrial Coatings
- Sherwin-Williams epoxy system that included a moisture-cure primer

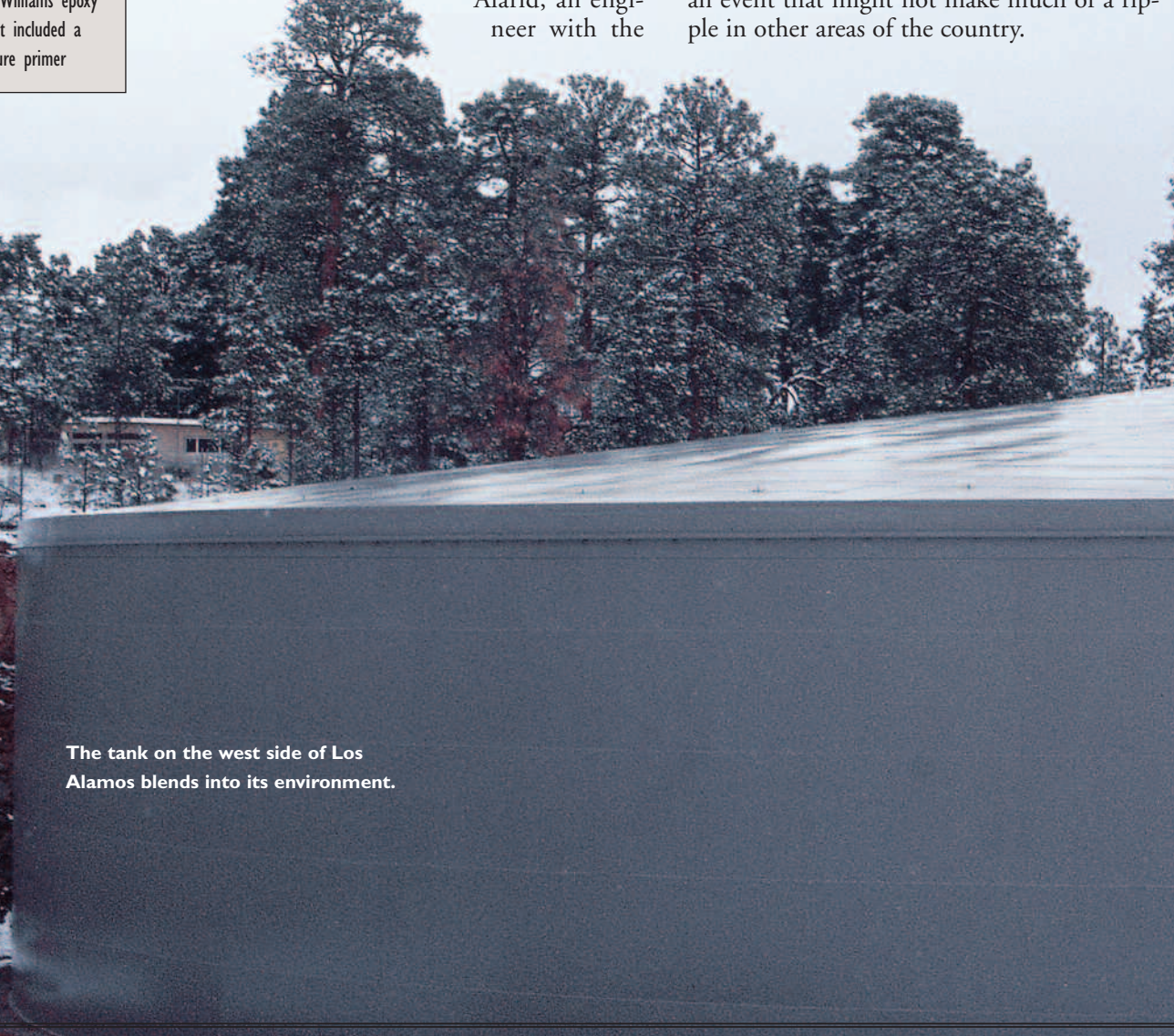
In arid central New Mexico, a single issue tends to grab headlines. And it's neither the economy, the election, nor world affairs.

These concerns are often topped in their newsworthiness by water — its availability, its cost and its relative abundance.

"We're in the middle of an extended drought," says James Alarid, an engineer with the

Los Alamos County Department of Public Utilities. "So as issues go, water is huge. It's high-profile, and it's very political. Water is in the headlines almost daily here."

As a result, when one of Los Alamos's largest potable water storage tanks faced a maintenance repaint and another was to be torn down, this city of 11,000 took notice of an event that might not make much of a ripple in other areas of the country.



The tank on the west side of Los Alamos blends into its environment.

R ere?

Alamos

ONE DOWN

Tucked away in a residential neighborhood at the west end of Los Alamos once sat twin potable water storage tanks, resting side-by-side as inconspicuously as 8-million-gallon, 200-foot-diameter tanks built with steel up to 1 1/4 inches thick can be. Built in 1949 by Chicago Bridge & Iron, the tanks had served the city well, and according to Alarid, both were nowhere near the end of their able service lives. But as the city developed around



PASSING THE TASTE TEST

Questions of taste often yield intangible results. But Tim Glasco knows that if local residents have their say, any future potable water tank lining projects will be finished with a Sherwin-Williams epoxy system.

The Los Alamos County Deputy Utilities Manager won't forget that a new potable water storage tank built locally in 2003 was finished with an epoxy system from another coatings manufacturer.

"They had mild weather, dehumidification equipment and basically a torrent of air rushing through the tank when they painted it," recalls Glasco. "The spec called for 15 days of cure and most of it cured for 30 days before we put it back on line."

Then the phone calls started.

"People called us and said their water tasted like paint thinner," he says. "We had samples analyzed for VOCs and THMs (trihalomethanes) and they came in under allowable limits, but people still complained about the taste of their water."

In the fall of 2003, an existing tank of comparable size was refinished using a Sherwin-Williams system that called for an interior prime coat of Corothane I Galvapac Zinc and two topcoats of MacroPoxy 646 NSF, requiring a total system cure time of just seven days. In spite of comparatively cold and damp weather conditions during application, the results were different when they put this tank on line.

"Not one single complaint," says Glasco.



Getting an up-close look at a tank seam is James Alarid, an engineer with the Los Alamos County Department of Public Utilities. The seam is the result of an opening painters had cut into the tank wall to move equipment and personnel inside (right).

them, water needs grew at different rates in different parts of the area. So last year the county decided that one of the tanks would be repainted and the other would be dismantled, while a similar-sized tank of new construction would be built in the area where it was now needed.

The county contracted RMCI, Inc., of Albuquerque to build the new tank and coordinate the dismantling of the tank that would come down. Camp, Dresser & McKee, Inc., was hired as the engineer and Rickert Industrial Coatings of Wichita, Kan., was subcontracted to perform painting duties of the tank that would be left standing.

Before being torn down, however, one of the large tanks would work double duty while its lot mate was being painted. An initial inspection in the spring of 2003 revealed that the original lead-based paint interior had worn, but the high volume of silicates in the water supply had protected the steel well.

"There was some light scale, no real signs of pitting, and just a few localized areas of corrosion," says Deputy Utilities Manager Tim Glasco. "We spot-welded to patch up those areas."

By the last week of June, Rickert Industrial personnel could begin lead abatement procedures on the tank's 110,000 square-foot interior.

"We had to get in and out of there pretty quickly," recalls Stan Rickert, the president of the company. "Lead abatement and blasting really eats up the time. You've got to send in samples for lead analysis, contain the debris, move it into dumpsters and have it hauled away. If there was no surface prep, we'd be done painting in two or three weeks."

As Rickert workers neared the end of interior blasting, they concurrently began applying a Sherwin-Williams epoxy system that called for a prime coat of Corothane I Galvapac Zinc followed by two coats of Macropoxy 646 NSF. Rickert had requested a change from the initial spec to a Sherwin-Williams system due to the local service he knew he'd receive from Sherwin-Williams.

"They're right there," Rickert says, noting the proximity of a Sherwin-Williams facility. "If we needed product, we wouldn't have to wait three or four days to get it.

An added benefit was the moisture-cure properties of the primer.

"That allowed us to cut back on the DH equipment," says Rickert. "You couldn't go too far or you'd have some flash rusting, but it did help us out."

On the outside of the tank, personnel power-washed before applying a coat of Corothane I — Mio-Aluminum, followed by a coat of Acrolon 218 HS Polyurethane. Due to the proximity of homes, the exterior coats were roll-applied.

"We bid it as a one-coat topcoat and I had assumed we would spray it, so I was concerned that we wouldn't get the coverage we needed when we found out we'd have to roll it," says Rickert. "But the Acrolon 218 Polyurethane rolled real well



and one coat was all we needed."

By October — on schedule after the application of 2,500 gallons of paint — the county was able to bring the newly finished tank back on line and RMCI could turn its attention to dismantling the other tank on the site. Alarid and Glasco figure the repainted tank will serve the city well into the future.

"I don't ever want to have to mess with that paint job in my lifetime," says Glasco, who notes that he has about 17 years till retirement. "The fact is — and the manufacturer might not admit it and I won't be around to see it — but I think this is a 50-year paint job." ▣