## **Tower Alert**

- To: Tower Owners and Contractors
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- **Date:** 31 August 2005
- Re: Tower Collapse Due To Anchor Corrosion

## **Tower Collapse Due to Anchor Corrosion**

Recently a tower in San Bernardino County, CA collapsed due to guy anchor failure. Further investigation uncovered other towers with severely corroded anchors in Riverside County, CA; La Paz County, AZ; & Maricopa County, AZ. We felt it necessary for life-safety and asset protection to inform tower owners of this problem.

It is becoming increasingly clear that structural damage due to underground corrosion is not an isolated problem, but is widespread throughout the U.S. and Canada. Guy anchors are coming of age and if not inspected and protected soon, many more tower anchors are likely to fail. Additionally, large areas of the U.S. and Canada have highly corrosive soils, increasing the rate of corrosion on anchors.

## **Recommended Action**

- A. Perform an underground investigation of the anchors to the concrete block to determine if structural damage has occurred. The condition of the anchor shaft 12 inches below the ground (the typical depth for most current inspections) is not an accurate predictor of the level of corrosion along the entire shaft. View photos below for more detail.
- B. Install a corrosion control system that allows for continuous monitoring such as the one offered by ANCHORGUARD<sup>®</sup> Corrosion Control System for Tower Anchors (800)-653-3392. <u>www.anchorguard.com</u>
- C. Regularly inspect the corrosion control system to ensure it is working properly.

On the next page you can view pictures of the failed tower and anchors mentioned above.



August 2005 - The collapsed tower in San Bernardino County, CA.



Notice the weakest point was 8 feet below ground level.



August 2005 - This tower, in Maricopa County, AZ did not collapse. Note that the condition of the anchor shaft at the surface shows no corrosion. Deterioration at two points further down the shaft show significant corrosion.