

Fountain Hills Sanitary District Fountain Hills, Arizona

Project Background

Owner:

Fountain Hills Sanitary
District
16941 E. Pepperwood Cr
Fountain Hills, AZ
85268-2901

Contact:

Mr. Ron Huber, P.E.
General Manager
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"We tried every odor control technology over the years and have standardized on the Peacemakers because of performance, no maintenance, and it is the most economical solution.

-Ron Huber

Special Points of Interest:

- **Wet scrubbers** replaced at plant
- **Odor Controlled at 15 Pumping Stations**
- **Manhole Inserts used in collection system**
- **\$40K saved on inlet station alone.**

The Fountain Hills Sanitary District originally had a chemical scrubber installed to control odors from their influent pump station, headworks, and EQ basin. Into the distribution system, they were add-



Chemical scrubber (in background) which was replaced by the Syneco unit in the foreground.

ing a biological odor control product. This chemical scrubber and the biological product proved to be quite costly from a maintenance standpoint as the climate conditions consisting of high temperatures and direct sunlight adversely took their toll on the instrumentation and associated tubing on these scrubbers.

In addition to the climate-induced conditions, the Fountain Hills Sanitary District takes in approximately 60%-70% of the plant's influent

from a two-mile long force-main. The district found that by the time the force-main emptied into the plant during the afternoon hours, the heat had enhanced the already-high odor level, and the chemical scrubber, located at the Influent Pumping Station, could not handle the high H₂S spikes it was seeing.

There had also been carbon scrubbers installed at some of the collection system pumping stations which did not work effectively for the owner.

Odor Problems Defined

Ron Huber, the District Manager, prepared a complete cost-benefit-analysis showing the savings in using Syneco Systems oxidizing dry-air scrubbers. In Ron's analysis, the Syneco Solution saved the district approximately \$40,000.00 annually in labor,

chemicals, parts costs, and inconvenience. Not included in Ron's analysis, (which would be an added savings), were the costs for power consumption which were also greatly reduced.



"Retired" pumping station carbon scrubbers replaced by Syneco Systems Peacemakers.

The Syneco Solution

Syneco Systems, Inc. leased to the district three dry-air scrubbers that are located at the wastewater treatment facility and 15 that are located at pump stations throughout the system. The district chose to lease their odor control scrubbers on an annual basis which works well for their budget cycle.

At the headworks, the district has two Model 6000 scrubbers. There is also a 6' diameter



scrubber located at the equalization basin.

The pumping station scrubbers range in size from our smallest standard scrubber, a model 300, to a model 3000.

As a result of stellar performance with the plant and collection system scrubbers, the district also installs manhole inserts on all lines where a force-main empties into the gravity sewer system. All contractors and developers are mandated by the District to install manhole inserts upon project completion.

