Turbo-mist
SLIMLINE MANUFACTURING LTD.

Salton Sea Project Testing

Feb 28/2000 Test results

Three tests were conducted and data collected in the following manner by US Bureau of Reclamation and Slimline employees.

Collection pods were placed in a circle around the operating Turbo-mist evaporator at both 100 feet and at 200 feet. These collection basins were positioned at 45 degrees positions on the circle with a total of 16 locations monitored. Each collection pod was one square foot in size, the total collected during a 35 minute run cycle was measured and the average collected was multiplied by a total of 15,000 sq ft, which represented the maximum area of fallback. (100 ft x 150 ft)

This assumption is extremely conservative in that even during high wind conditions, in all three tests, we never recorded any measurable fallout in the outer ring at the 200-foot distance. In addition the 15,000 sq ft assumption is assuming a width of fallout to be a full 100 feet, when in fact, during these tests, that pattern was certainly never more than 100 ft in width at the most, even under windy conditions.

Conditions at the site would represent the most severe winter conditions with temperatures of 66 degrees, humidity levels of 39 and 40% recorded during the test. During most of the year at the Salton Sea you will see much higher temperatures and lower humidity levels, which will both greatly increase the evaporation rate.

Utilizing these conservative figures, chosen by Slimline Manufacturing Ltd to ensure we were not overstating the capability of our unit, we determined the following results.

Test #1 30nozzles, DC6 with 25 cores, utilizing water droplet size of approximately 180 microns, we achieved an conservative **evaporation rate of 72.8%**

Test #2 90 nozzles DC12 with 45 cores, utilizing water droplet size of 300 microns, we achieved a conservative **evaporation rate of 82.2%**

Test #3 30 nozzles, Spiral jet pigtail design, 120 angle, utilizing water droplet of about 150 microns, we achieved a conservative **evaporation rate of 92.8%**

Since this test we have tested a 90 degree spiral jet pigtail design with water droplet size of 100 microns prior to wind shear. This nozzles is far superior for evaporation to the 120 degree nozzle that achieved 92.8%