

Appendix F4
**Water Recycling Facility Odor
Control Measures**



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Mr. Daniel Hansen
FivePoint
1 Sansome Street, Suite 3200
San Francisco, CA 94104

Via electronic mail: Daniel.Hansen@fivepoint.com

Subject: **Hunters Point Odor Control Measures for Water Recycling Facility**

Dear Mr. Hansen,

Continuing on our discussions of managing odor at water recycling facilities, below, please find information on how each potential source of odor will be controlled to reduce odor impacts on the community at the proposed Hunters Point Water Recycling Facility.

- 1) General – The process tanks that can cause odors are those that are gravity tanks containing partially process wastewater where there is an air space above the tank. The primary odor control mechanism is a carbon scrubber system which works as follows.
 - a) We enclose/cover process tanks
 - b) The air in the area above the water line is captured via a suction blower capturing air from one or more unit processes
 - c) Captured air is conveyed to a common granular activated carbon scrubber system
 - d) In the scrubber system air enters a dry tank and passes through a carbon bed
 - e) Carbon is periodically removed and replaced (usually once per year or as needed)
- 2) Screen Box: Screens garbage out
 - a) Box is small and is enclosed
 - b) Screenings so straight to a bag
 - c) Air goes to Scrubber system
- 3) Equalization Tanks: Raw sewage
 - a) Tank is covered
 - b) Air goes to the scrubber system
- 4) Anoxic Tanks: This tank treats the fluid at a relatively low oxygen concentration
 - a) The tank is mixed and covered
 - b) Air goes to the scrubber system
- 5) Aeration and Membrane tanks. These tanks are process tanks that work by passing a lot of air through the water to activate the biological process and to scour membranes.
 - a) We will cover the tanks
 - b) Air goes to the scrubber system

- 6) Finished water tanks
 - a) Not an odor issue
 - b) We will enclose the tank
- 7) Sludge Processing. Waste activated sludge
 - a) We will not process sludge on site
 - b) Our plan is to waste sludge directly to the SFPUC sewer system

Please let me know if you have questions or need additional information.

Respectfully,



Andre Zinkevich, P.E.
Vice President
Natural Systems Utilities-CA, Inc.