

Citizens Advisory Panel Meeting No. 1


6:30 p.m.

March 5, 2012

Street's East Lunch Room
4602 Sycamore Avenue



Discussion of VOC Stripper Design/Construction Opportunities

- ▶ Construct Facility on the Existing Site
 - ▶ Construct Facility on top of Existing Reservoir
 - ▶ Update Motor Control Center for more efficient Operation
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Discussion of VOC Stripper Design/Construction Challenges

The Site


- ▶ Small Site (110' x 60')
- ▶ Existing Structure (35' by 66')
- ▶ Engine Generator Set
- ▶ Overhead Utility Relocation
- ▶ Construction Space Needs
- ▶ Maintaining Operation During Construction
- ▶ Bike Path
- ▶ Working Around Existing Facility



Discussion of VOC Stripper Design/Construction Challenges

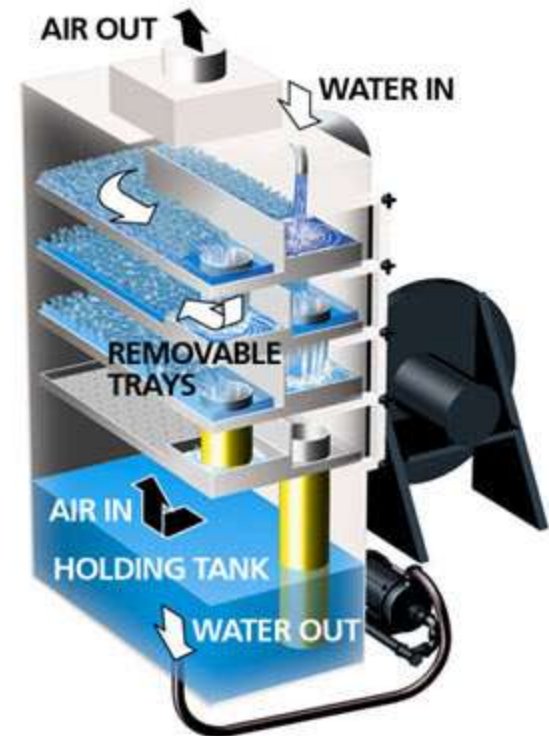
- ▶ **Structural Capacity of Existing Reservoir**
 - Preliminary analysis suggests the structure is capable of supporting a facility being built on it.
 - Geotechnical analysis is needed to verify that existing soil conditions can handle additional load.
- ▶ **DNR Concerns**
 - Current DNR code discourages below grade construction of reservoirs
 - Occupied spaces and uses above reservoir may require special considerations.
- ▶ **Noise Considerations**
 - VFD drives create more motor noise
 - Blower for air stripper
- ▶ **Perception of Air Stripper Discharge**
- ▶ **Site Security**

Discussion of VOC Stripper Design/Construction Design Criteria

- ▶ Well Pump Capacity – 2200 gpm
 - ▶ Capacity will be variable speed controlled
 - ▶ Assumed Maximum Contaminate Level – 20 ppb (> 5 times actual)
 - ▶ Target Finished Water Contaminate Level – < 0.5 ppb
 - ▶ Noise to be limited to 45 dB at the property line
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Discussion of VOC Stripper Design/Construction Preliminary Information/Assumptions


- ▶ **Review of Low Profile Air Stripping Equipment**
 - Two Units 1,100 gpm each
 - Two Blowers 5,200 cfm of air each
 - The operating weight is 25,000 pounds each
- ▶ **Operation and Maintenance**
 - Trays require occasional cleaning
 - Design requires space for cleaning, storage of spare trays, and cleaning chemicals.
 - Weak acid may be required for cleaning trays
 - Flow needs to be split between units
 - Air flow to also vary with well flow



Discussion of VOC Stripper Design/Construction Approval Schedules

- ▶ City Planning Process –Tentative Timeline
 - Urban Design Commission – March through May 2012
 - Informational Meeting
 - Initial Approval
 - Final Approval
 - Conditional Use – April Through June 2012
 - Plan Commission
 - Common Council
 - Final Plan Submission – July 2012
- ▶ DNR and PSC Approval – July 2012
- ▶ Bidding Approval – July 2012
 - Board of Public Works
 - City Council
- ▶ Start Construction – September 2012
- ▶ Complete Construction – July 2013

Discussion of VOC Stripper Design/Construction Anticipated CAP Schedule/Activities

- ▶ CAP Meeting No. 1 Introduction (Today)
 - ▶ CAP Meeting No. 2 Conceptual Design and Exterior Appearance (end of March)
 - ▶ Public Meeting Present and Receive Comments on Conceptual Design and Exterior Appearance (End of April)
 - ▶ CAP Meeting No. 3 Review Comments from Public Meeting Modify and Prepare for Water Utility Board Approval (Early May)
 - ▶ Water Utility Board Public Hearing and Approval (End of May)
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Questions and Discussion



Thank You!

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