



WEST BASIN MUNICIPAL WATER DISTRICT
17140 S. Avalon Blvd., Suite 210
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AGENDA NO. 28

OCTOBER 16, 2008 – Water Resources
Smith (Chair), Little
OCTOBER 27, 2008 – Board Meeting
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Approved by: Rich Nagel

INFORMATION CALENDAR

WEST COAST BARRIER EXPERT PANEL

SUMMARY:

West Basin received a precedent setting permit in 2006 from the Los Angeles Regional Water Quality Control Board allowing for the eventual injection of 100% advanced treated recycled water to the West Coast Barrier (Barrier). As part of that permit, West Basin was required to reconvene an expert panel to review the Barrier operations and water quality results following one year of operation at 75%. In accordance with the State Department of Health Services Recharge Regulations, the panel was formed last year and included:

- Michael J. McGuire (Chair - Prof Eng in Drinking Water);
- Dennis Williams (Hydrogeologist);
- Richard Bull (Epidemiologist/Toxicologist);
- George Tchobanoglous (Chemist & Wastewater Expert);
- Shane Snyder (Chemists); and
- Jennifer Clancy (Microbiologist).

The first panel meeting took place on October 1-2, 2007 at the Edward C. Little Water Recycling Facility. Staff prepared an extensive binder filled with well data, water quality information, process diagrams and included presentations on the Barrier from numerous other agencies. The panel later submitted to West Basin pages of questions for staff to address and then met again on February 27, 2008 to discuss the answers. Final recommendations were released last month.

Overall, the panel found that it *“unanimously supports the West Basin Municipal Water District’s proposal to increase the percentage of recycled water delivered to the seawater barrier from 75 to 100% following compliance with a number of recommendations.”* Of the ten recommendations that require some action on the part of West Basin, only two (2) must occur before West Basin can begin injecting 100% recycled water into the Barrier. In addition, a new brine permit is required. The two (2) immediate actions recommended by the panel are:

1. Travel Time: The panel recommends that the draft technical memorandum by Dr. Motzer on the intrinsic tracer study and travel time determination be finalized and expanded. Specifically, the technical memorandum should address the anticipated directions and travel times of recycled water injected into the Barrier (i.e. from the point of injection to the intake of potable water supply wells). A groundwater monitoring program and ongoing data assessment to track future recycled water should also be included in Dr. Motzer’s final report.

2. Industrial Waste Pretreatment: The draft Memorandum of Agreement dated August 1, 2007 should be approved by both parties. Negotiations should begin immediately between the City of Los Angeles (City) and West Basin to provide a mechanism for West Basin to develop with the City prohibitions against discharge of non-treatable contaminants into the sewer system serving the Hyperion plant.

Additional recommendations will require longer term report generation or studies that will be on-going during 100% recycled water injection. These additional recommendations include in summary:

1. Seawater Barrier Integrity: Close coordination with the County of Los Angeles Public Works to prepare Barrier operations manuals, annual status reports, well repair status reports and contour mapping of seawater intrusion.
2. Basin Re-dox Conditions: The panel recommends Re-dox conditions in the Barrier be monitored and analyzed in a report by September 2010.
3. Trace Organic Monitoring: The panel compiled an additional list of organic compounds that should be monitored in the Barrier on a quarterly basis.
4. Microbiological Monitoring: The panel recommends that West Basin immediately institute weekly monitoring of *E. coli* in water sent to the Barrier.
5. Calcium Carbonate Stability: The panel recommends the permit be revised to allow pH values in the treated water to increase from 8.5 to 9.0 to preserve the integrity of the pipe materials.
6. UV/AOP: The panel recommends continuation of UV light to reduce the concentration of NDMA and continuation of the current dose of three parts per million of hydrogen peroxide, but allows for studies to demonstrate if this could be changed.
7. Formaldehyde: Sources of formaldehyde in the West Basin plant effluent should be determined in a report on the sources and fate of formaldehyde for CDPH by September 2010.

West Basin has allowed the Los Angeles County of Public Works one month to respond to the Expert Panel Recommendations so that their response may be attached to the document. Once the County's response is received, the response will be forwarded with the Panel recommendations to DPH. DPH will then write a written response to the recommendations for both West Basin and the Los Angeles Regional Water Quality Control Board. The Board will be provided regular updates on specific Barrier projects as a result of panel recommendations as they begin to be developed and implemented.

STRATEGIC BUSINESS PLAN IMPLEMENTATION:

Reliability – Maintain a level of local water reliability that supports the regional economy, our community and customer agency needs.

COMMITMENT STATEMENT:

Water Quality – West Basin is committed to providing safe, high quality water by meeting current and anticipated water quality requirements.

FISCAL IMPACTS:

Funds are included in the Fiscal Year 2008-09 Operations and Maintenance Budget.

ENVIRONMENTAL COMPLIANCE:

Required per the 2006 West Coast Barrier Injection Permit from the Regional Water Quality Control Board.

COMMITTEE STATUS:

This item was reviewed by the Water Resource Committee October 16, 2008 and agendaized to the October 27, 2008 Board meeting as information for discussion.

RECOMMENDED MOTION:

This item is for information only.

LIST OF EXHIBITS:

None.