

BOARD OF PUBLIC UTILITIES

ADDITIONAL MEETING DOCUMENTS

Additional or revised information or documents are often passed out to the Board at the meetings. Whenever possible, this informational cover page will accompany those documents.

MAKE 20 COPIES OF ANY DOCUMENTS, INCLUDING THIS COVER SHEET, AND RETURN TO JAIME KEPHART PRIOR TO THE MEETING.

MEETING DATE	04/19/2017
AGENDA ITEM	7.C. Options for the White Rock Wastewater Treatment Plant
DOCUMENT TITLE(S)	Presentation on the White Rock Wastewater Treatment Plant
FROM	James Alarid
NEW OR REVISED? Is this a revision that is different than what was in the agenda packet or is it something entirely new?	New
RECOMMENDED ACTION If you have a new or revised recommended motion for the Board, enter it here.	<u>N/A</u>
ADDITIONAL INFORMATION Please VERY BRIEFLY explain the purpose of this information or document.	Attached is a copy of the presentation staff will give to expand on the information provided in the staff report in the packet.

WHITE ROCK WASTEWATER TREATMENT PLANT

UTILITY BOARD BRIEFING
APRIL 2017

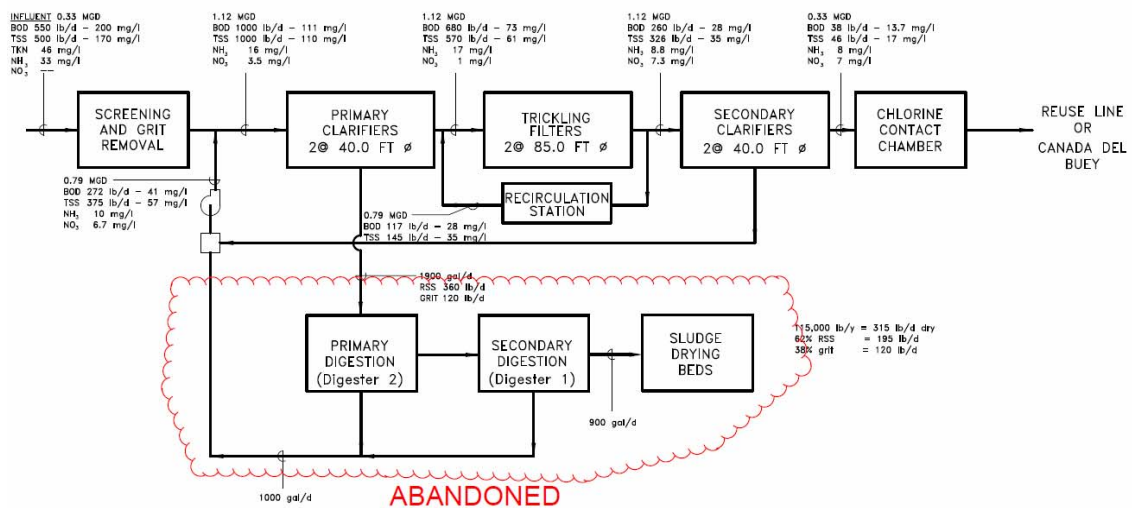
EXISTING FACILITY

- The White Rock Wastewater Treatment Plant was constructed in the mid 1960's. Plant addition in the mid 1970's.
- Design flow of the treatment plant is 0.8 million gallons per day (MGD). Flows received by the plant are less than 0.5 MGD.
- Originally planned for replacement in phases between FY2010 and FY2014
- In 2008 decision was made to defer replacement to 2019
- Engineer hired to evaluate risks and identify improvements to reliably meet permit until 2019

GENERAL LAYOUT



PROCESS FLOW DIAGRAM



IMPROVEMENTS TO OPERATE UNTIL 2019

- 2010 - Purchased septic Hauler for \$126,000 and hauled sludge to LAWWTP/Pojoaque Septic Facility. Abandoned existing digesters, boiler and associated pumps (2009 cost \$805,000 to return to reliable operation).
- 2011 - Replaced one trickling filter center column and distribution arms for \$172,000
- 2012 – New fine screen for \$100,000
- 2014 – Replace chlorination equipment and metering for \$64,000

FINE SCREEN



TRICKLING FILTER ASSEMBLY



CHLORINATORS



CURRENT PATH FORWARD

- Design new plant in 2019
- Construct and bring online by 2022
- Estimated cost in 2017 dollars
 - Engineering Design \$1,011,000
 - Construction Engineering/Inspection \$515,000
 - Construction \$12,750,000
- Funded by Clean Water State Revolving Loan
- Loan is contingent on rate increase

PRIMARY CLARIFIER



PHOTOS EXISTING FACILITY



DIGESTERS & BOILER



REGULATORY CONSIDERATIONS

- WR NPDES permit
 - Issued – 2/1/2017
 - Expires - 1/31/2022
- WR Groundwater Discharge Permit
 - Issued – 5/20/2015
 - Expires - 5/20/2020

PERMIT VIOLATIONS

NATIONAL POLLUTANT DISCHARGE ELIMINATION PERMIT						GROUNDWATER DISCHARGE PERMIT			
<u>BOD (MG/L)</u>		<u>TOTAL SUSPENDED SOLIDS (MG/L)</u>		<u>E-COLI (MPN/100ML)</u>		<u>TOTAL NITROGEN (MG/L)</u>			
2008	2	2010	1	2009	1	2008	2		
2010	1	2011	1	2010	2	2010	2		
2011	3	2013	1	2011	1	2014	1		
2012	3	2014	1	2013	1	2015	1		
2016	2	TOTAL	4	2014	3	2016	1		
TOTAL	11			2015	1	2017	2		
				2017	1	TOTAL	9		
				TOTAL	10				

POSSIBLE REGULATORY MANDATES

- IF VIOLATIONS ARE TOO FREQUENT, EPA CAN ISSUE AN ADMINISTRATIVE ORDER – MANDATE A SCHEDULE FOR COMPLIANCE WITH PENALTIES FOR NOT MEETING DATES.
- AT THE TIME PERMITS ARE RENEWED CONDITIONS CAN BE MADE TO MEET COMPLIANCE.

FINANCING NEW PLANT

- Clean Water State Revolving Loan – administered by the New Mexico Environment Department (NMED).
- Need to build revenues and cash reserves to finance new plant. Rate increase required.
- Possible infrastructure grants available in the next year for engineering and/or design. Must apply for loan to NMED to qualify.
- Refinance existing debt for Los Alamos wastewater plant.

RISK & CONTINGENCY PLANNING

- To keep the plant running to 2022 there are risks.
- Currently preparing a detailed contingency plan.
 - Identify high risk scenarios – unable to meet permit
 - Loss of key equipment / processes
 - Immediate replacement needs (pumps, controls, valves etc.)
 - Identify suppliers, procurement avenues and funding for fast replacement in the event of these emergencies – packaged process units
 - Operational adjustments
- Beyond 2022 a temporary package plant will be required.
 - More reliable, cost effective and efficient than replacement of antiquated technology in place.