

MINUTES
CENTRAL VALLEY WATER RECLAMATION FACILITY
Thursday, November 16, 2023
Central Valley Board Room
4:00 p.m.

Board Members Present:

Chair Debra Armstrong	Granger-Hunter Improvement District
Vice Chair Don Russell	Taylorsville-Bennion Improvement District
Member Wesley Fisher	Cottonwood Improvement District
Member Jeff Monson	Kearns Improvement District
Alternate Member Giles Demke	Mt Olympus Improvement District
Member Brett Hales	Murray City
Member LeAnne Huff	City of South Salt Lake

Staff Members Present:

Phillip Heck	General Manager
Brandon Heidelberger	Assistant General Manager
Justin Zollinger	Chief Financial Officer
Graham Gilbert	Legal Counsel
David Gittins	Network Administrator
Sharon Burton	Plant Superintendent
Kevin Gallagher	Construction Supervisor
Bryan Mansell	Chief Engineer
Navneet Prasad	Electric Controls Engineer
Cindie Foote	Employee Services Manager

Staff Members Present Electronically:

Jake Crookston	IT Manager
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Member Entity Representatives Present:

Spencer Evans	Cottonwood Improvement District
Kerry Eppich	Mt Olympus Improvement District
Stephen Rohwer	Mt Olympus Improvement District
Dean Ayala	Mt Olympus Improvement District
Brandon Richards	Murray City
Mark Chalk	Taylorsville-Bennion Improvement District

Visitors Present:

Trevor Lindley	Brown and Caldwell Engineers
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Visitors Present Electronically:

Dan Griffin	Department of Water Quality
Skylar Davies	Department of Water Quality

A complete copy of each exhibit referred to in these minutes is filed in the official Central Valley Water Reclamation Facility Board Book. Chair Debra Armstrong conducted the meeting. Jeff Monson led the Pledge of Allegiance.

WELCOME NEW BOARD MEMBER – KEITH LORD

Keith Lord was not in attendance at this meeting, and he will be welcomed at the December meeting.

APPROVAL OF MINUTES

Jeff Monson made a motion to approve the minutes of the October 25, 2023 Board meeting as presented.

MOTION: Jeff Monson

SECOND: Brett Hales

The motion passed with the following individuals voting in the affirmative: Debra Armstrong, Don Russell, Giles Demke, LeAnne Huff, Jeff Monson, Brett Hales, and Wes Fisher.

PUBLIC COMMENTS

No comments were received.

GENERAL MANAGER COMMENTS

1. **Reminder of Date for December Board Meeting** – Because of the holiday in December, the Board Meeting date is Thursday, December 21, 2023 at 12:00 noon – with a luncheon.
2. **Reminder of CVWRF Holiday Party** – The holiday party will be held at Caffe Molise on Monday, December 4th 2023 beginning at 6:00 p.m.

BOARD SERVICE APPRECIATION AWARD – GILES DEMKE

Debra Armstrong presented a Board service award to Giles Demke who served on the Board representing the Mt. Olympus Improvement District. Mr. Demke served on the Board from January 2019 to November 2023. The Central Valley Water Reclamation Facility appreciates the dedication and service to the Facility and in representing the Mt. Olympus Improvement District.

QUARTERLY FINANCIAL REPORT

Mr. Justin Zollinger presented the quarterly financial report. Target percentage as of the end of October is 83 percent. All departments are below target, with Operations at 75 percent; Administration 76 percent; Laboratory 78 percent; Board 45 percent; Pretreatment 80 percent; Engineering & Safety 63 percent. No funds have been expended in the Contingency line item. Overall, the Facility is at 74 percent year-to-date.

The Capital budget is at 54 percent used, while the Pay-Go Capital is 39 percent used. We will begin using Pay-Go Capital funding in November for the Blower Building Project.

Our anticipated bond draw down schedule estimates bonding in July 2024.

STATE AUDITOR FRAUD RISK ASSESSMENT CHECKLIST

Mr. Zollinger stated this checklist is required to be filled out each year and presented to the Board. It is a self-assessment tool with nine different categories. Each category has an associated point value. Based on the total score the assessment tool rates the entity's risk between the following risk categories: very low, low, moderate, high, very high. Central Valley scored 375 out of a possible 395, earning the Facility a Very Low Risk level.

PERMIT EXTENSION FOR COMPLIANCE WITH THE TBPEL RULE TO JULY 1, 2026

Dr. Heck updated the Board on our UPDES permit. Several years ago, and at the beginning of the Covid pandemic, we began construction of our nutrient removal project to address the new Phosphorus Rule limits. At that time, our permit required us to come into compliance with the phosphorus limits by January 1, 2025.

The Division of Water Quality contacted CVWRF and indicated that if we believed we would need an extension to the Phosphorus Rule due to the pandemic, that we should begin immediately documenting all delays, supply chain issues, construction delays, etc. We provided over one thousand pages of documentation from our engineers, contractors, and their suppliers. This was submitted to DWQ this past spring requesting an extension in the deadline. In October we received a revised permit giving an 18-month extension with a new compliance date of July 1, 2026.

DISCUSSION AND APPROVAL OF BROWN AND CALDWELL 2024 CONSTRUCTION MANAGEMENT TASK ORDER

Mr. Brandon Heidelberger stated that in 2024 we will continue construction activity directly relating to the nutrient removal project and other projects in CVWRF's Capital Improvement Plan. Brown and Caldwell (BC) is the Engineer of Record for many of these projects and we recommend that BC provide Construction Management Services to verify the projects are built in accordance with the contract documents and also provide ongoing design for elements of the nutrient removal project.

Projects at the end of 2023 that are either in construction or bidding include:

- Blower Building (CC 30A) – In Construction (nearing completion, mid-2024)
- BNR Basins/PEPS (CC 30B) – In Construction
- Sidestream P removal (CC 30C) – In Construction (nearing completion)
- Sidestream N Removal (CC 30E) – In Construction
- Fire Alarm System Upgrades – In Construction
- Cathodic Protection System – In Construction
- Thickening/Straining (CC 30D) – In Construction
- TACO/HVAC Improvements (CCo8D) – In Construction
- Dewatering Improvements (CCo8E) – Currently Bidding (Bids Due Dec. 12th)

BC will provide a full-time on-site Construction Manager (CM), Assistant Construction Manager/Resident Engineer, Construction Inspector, Construction Administrator and Discipline Lead/Inspectors (on an as needed basis) to oversee the day-to-day construction activities at the site for these projects (see Organization Chart below). These staff are housed at CVWRF in a CVWRF provided construction trailer; BC will provide these staff while fulltime in the field at a reduced 'field' labor rate. They will facilitate work on projects already in construction (i.e., Blower Building, BNR Basins, SSP, SSN, Thickening/Straining, Fire Alarm and Cathodic Protection System) and those anticipated to begin in 2024 (Dewatering Improvements). BC will also provide office support staff including subconsultant staff (architect, building structural engineer, geotechnical engineer, etc.) for each of the projects listed above to provide engineering services during construction. BC will assist and coordinate with CVWRF and its contractors during the construction and commissioning of the projects by providing engineering construction services.

A detailed scope and fee estimate for the work has been submitted by BC and reviewed by CVWRF staff. The work will be completed under the 2015 Master Service Agreement (as amended in 2022) with Brown and Caldwell on a time and materials basis with a not-to-exceed budget. The proposed budget for this task order matches with CVWRF's approved 2024 budget for the work noted.

Don Russell made a motion to approve the task order with Brown and Caldwell for Construction Services (Task Order 2024-01) for a not-to-exceed amount of \$6,012,000.

MOTION: Don Russell
SECOND: Jeff Monson

The motion passed with the following individuals voting in the affirmative: Debra Armstrong, Don Russell, Giles Demke, LeAnne Huff, Jeff Monson, Brett Hales, and Wes Fisher.

CAPITAL PROJECTS UPDATE

Mr. Kevin Gallagher presented a drone video of the following projects:

Blower Building Project	BNR Basins Project
Side-Stream Phosphorus Removal Project	Side-Stream Nitrogen Removal Project
Thickening and Straining Building Project	

Dr. Heck presented a PowerPoint presentation authored by Dustin Gloor, CVWRF Process Coordinator, which was presented at the WEAU Mid-Year Conference. The title of the presentation is *Short-Cut Nitrogen Removal Process: Our experiences with startup and operation at CVWRF*. A copy of this presentation is attached to these minutes.

Dr. Heck explained the conventional process for ammonia and total nitrogen removal through the mainstream liquid treatment process and the shortcut process for ammonia and total nitrogen removal from the dewatering process filtrate which takes place in the Side-stream Nitrogen reactors. Each process uses different types of bacteria to remove nitrogen

and ammonia. The bacteria in the conventional process are nitrifying and denitrifying organisms that occur naturally in wastewater treatment systems. The bacteria used in the shortcut process is called Anammox bacteria and does not grow naturally in wastewater systems. It was imported from a wastewater treatment plant in Durham, North Carolina that is already using this shortcut Anammox process.

By using this much more efficient anammox process, there is a significant savings in oxygen and carbon used to remove the nitrogen. A diagram was shown with the savings associated with deammonification with Anammox bacteria.

The plastic carrier media which houses the Anammox biomass in the reactor, was depicted in its virgin media form, seeded media that we received from North Carolina, and the state of growth on our media after two months of growth in the reactor. The Anammox biomass is starting to grow and perform.

The process is performing above expected levels for ammonia removal, providing 85-90 percent removal, while the specification requires a minimum of 75 percent removal. We are adding between 1,100-1,200 pounds of ammonia per day and will stabilize there for a few weeks. We anticipate after the new year putting our full side-stream ammonia load through the process, which is approximately 2,000 pounds of ammonia per day.

Dr. Heck gave a background of how the Anammox bacteria was discovered in 1999 from a marine sediment and developed into a viable wastewater treatment process.

Mr. Heidelberger stated that the Dewatering Design Project bids will be opened December 12, 2023. We anticipate a bid award recommendation in the December Board meeting.

INFORMATIONAL ITEMS

Debra Armstrong stated that the performance/flow monitoring, and engineering projects reports are included in the board packet.

There were no further comments or questions.

ADJOURNMENT

Jeff Monson made a motion to adjourn.

MOTION: Jeff Monson

SECOND: LeAnne Huff

The motion passed with the following individuals voting in the affirmative: Debra Armstrong, Don Russell, Giles Demke, LeAnne Huff, Jeff Monson, Brett Hales, and Wes Fisher.

The meeting adjourned at 5:07 p.m.

Cindie Foote
Board Secretary