



**ENGINEERING, OPERATIONS, AND
WATER RESOURCES
COMMITTEE MEETING
OF THE BOARD OF DIRECTORS
INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS, CHINO, CALIFORNIA**

**WEDNESDAY, MAY 9, 2018
9:45 A.M.**

CALL TO ORDER

PUBLIC COMMENT

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to complete and submit to the Board Secretary a "Request to Speak" form which is available on the table in the Board Room. Comments will be limited to five minutes per speaker. Thank you.

ADDITIONS TO THE AGENDA

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

1. ACTION ITEMS

A. MINUTES

The Committee will be asked to approve the Engineering, Operations, and Water Resources Committee meeting minutes of March 14, 2018 and the Special Engineering, Operations, and Water Resources Committee meeting minutes of April 4, 2018.

B. PURCHASE OF REPLACEMENT CRANE

Staff recommends that the Committee/Board:

1. Authorize the purchase of a new Terex BT70100 Boom Truck Crane from TEREX for a not-to-exceed amount of \$375,000 (including tax and delivery); and

2. Authorize the General Manager to execute the purchase.

C. RP-1 DIGESTER 6 AND 7 ROOF REPAIRS CONSULTANT CONTRACT AMENDMENT

Staff recommends that the Committee/Board:

1. Approve a consultant contract amendment for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to GHD Inc., for a not-to-exceed amount of \$167,609; and
2. Authorize the General Manager to execute the contract amendment subject to non-substantive changes.

D. PROPOSITION 1 GRANT PROFESSIONAL SERVICES CONTRACT AMENDMENT

Staff recommends that the Committee/Board:

1. Award an engineering services contract amendment to GEI Consultants, Inc., for a not-to-exceed amount of \$95,000; and
2. Authorize the General Manager to execute the contract subject to non-substantive changes.

E. PROJECT MANAGEMENT, ENGINEERING, AND STAFF AUGMENTATION SUPPORT SERVICES CONTRACT AGGREGATION

Staff recommends that the Committee/Board authorize the General Manager to reallocate the previously approved spending authorization from individual not-to-exceed amounts of \$1,500,000 to a single aggregate not-to-exceed amount of \$6,000,000 to the following four contracts:

- 4600002051 Wallace & Associates Consulting, Inc.
- 4600002052 Carollo Engineers, Inc.
- 4600002053 MWH Constructors
- 4600002054 GK & Associates

F. ADOPTION OF RESOLUTION NO. 2018-5-1, REGIONAL PRETREATMENT PROGRAM LOCAL LIMITS

Staff recommends that the Committee/Board adopt Resolution No. 2018-5-1, establishing the Regional Pretreatment Program Limits applicable to SIUs

G. FISCAL YEAR 2018-2027 TEN YEAR CAPITAL IMPROVEMENT PLAN

Staff recommends that the Committee/Board adopt the proposed Fiscal Year 2018-2027 Ten Year Capital Improvement Plan.

2. INFORMATION ITEM

- A. RP-5 LIQUIDS TREATMENT EXPANSION MEMBRANE BIO-REACTOR PRE-SELECTION REQUEST FOR PROPOSAL UPDATE (WRITTEN/POWERPOINT)
- B. OPERATIONS DIVISION UPDATE (POWERPOINT)
- C. PLANNING & ENVIRONMENTAL RESOURCES UPDATE (ORAL)

RECEIVE AND FILE INFORMATION ITEM

- D. ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT UPDATES (POWERPOINT)

3. GENERAL MANAGER'S COMMENTS

4. COMMITTEE MEMBER COMMENTS

5. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

6. ADJOURN

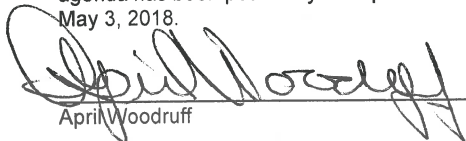
*A Municipal Water District

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary (909-993-1736), 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

Proofed by: sh

DECLARATION OF POSTING

I, April Woodruff, Board Secretary of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of the agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Ave., Building A, Chino, CA on Thursday, May 3, 2018.



April Woodruff

**ACTION
ITEM
1A**



MINUTES

ENGINEERING, OPERATIONS, AND WATER RESOURCES COMMITTEE MEETING INLAND EMPIRE UTILITIES AGENCY* AGENCY HEADQUARTERS, CHINO, CA

WEDNESDAY, MARCH 14, 2018
9:45 A.M.

COMMITTEE MEMBERS PRESENT

Michael Camacho, Chair
Kati Parker

STAFF PRESENT

Chris Berch, Executive Manager of Engineering/AGM
Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM
Randy Lee, Executive Manager of Operations/AGM
Christina Valencia, Executive Manager of Finance & Administration/AGM
Adham Almasri, Senior Engineer
Lucia Diaz, Facilities Program Supervisor
Christian Gomez, Engineering & Construction Intern
Nel Groenveld, Manager of Laboratories
Joel Ignacio, Senior Engineer
Chander Letulle, Manager of Operations and Maintenance
Lisa Morgan-Perales, Senior Water Resources Analyst
Matthew Poeske, Construction Project Manager, P.E.
Jim Spears, Associate Engineer
Shaun Stone, Manager of Engineering
Teresa Velarde, Manager of Internal Audit
April Woodruff, Board Secretary/Office Manager

OTHERS PRESENT

None

The meeting was called to order at 9:41 a.m. There were no public comments received or additions to the agenda.

ACTION ITEMS

The Committee:

- ◆ Approved the Engineering, Operations, and Water Resources Committee meeting minutes of February 14, 2018.

◆ Recommended that the Board:

1. Authorize the purchase of 14 new fleet vehicles from National Auto Fleet Group for a not-to-exceed amount of \$500,000 (including tax and delivery); and
2. Authorize the General Manager to execute the purchase;

as a Consent Calendar Item on the March 21, 2018 Board meeting agenda.

◆ Recommended that the Board:

1. Award a construction contract for the RP-5 DynaSand Filter Rehabilitation Project, to GSE Construction Co., in the amount of \$476,800; and
2. Authorize the General Manager to execute the contract;

as a Consent Calendar Item on the March 21, 2018 Board meeting agenda.

◆ Recommended that the Board:

1. Award a construction contract for the RP-1 Power System Upgrades Phase II, Project No. EN13048, to Henkels & McCoy in the amount of \$358,812.54; and
2. Authorize the General Manager to execute the contract;

as a Consent Calendar Item on the March 21, 2018 Board meeting agenda.

◆ Recommended that the Board:

1. Approve a consultant contract amendment for the RP-1 Disinfection Improvements, Project No. EN11039, to Carollo Engineers for a not-to-exceed amount of \$56,354; and
2. Authorize the General Manager to execute the contract amendment subject to non-substantive changes;

as a Consent Calendar Item on the March 21, 2018 Board meeting agenda.

INFORMATION ITEMS

The following information items were presented or received and filed by the Committee:

- ◆ Laboratory Semi-Annual Update
- ◆ Water Smart Landscaping in the Inland Empire
- ◆ Engineering and Construction Management Project Updates

GENERAL MANAGER'S COMMENTS

General Manager Halla Razak had no comments.

COMMITTEE MEMBER COMMENTS

There were no Committee member comments.

COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

There were no Committee member requests for future agenda items.

With no further business, Director Camacho adjourned the meeting at 10:18 a.m.

Respectfully submitted,

April Woodruff
Board Secretary/Office Manager

*A Municipal Water District

APPROVED: MAY 9, 2018



MINUTES
SPECIAL
ENGINEERING, OPERATIONS, AND WATER RESOURCES
COMMITTEE MEETING
INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS, CHINO, CA

WEDNESDAY, APRIL 4, 2018
9:45 A.M.

COMMITTEE MEMBERS PRESENT

Michael Camacho, Chair
Kati Parker

STAFF PRESENT

Halla Razak, General Manager
Chris Berch, Executive Manager of Engineering/AGM
Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM
Kevin Asprer, Associate Engineer
Jerry Burke, Deputy Manager of Engineering
Jason Gu, Manager of Grants
Liz Hurst, Environmental Resources Planner II
Chander Letulle, Manager of Operations & Maintenance
Liza Munoz, Senior Engineer
Jason Pivovarovoff, Senior Engineer
Craig Proctor, Source Control & Environmental Resources Supervisor
John Scherck, Senior Engineer
Travis Sprague, Senior Associate Engineer
Shaun Stone, Manager of Engineering
Ken Tam, Senior Associate Engineer
Teresa Velarde, Manager of Internal Audit
April Woodruff, Board Secretary/Office Manager

OTHERS PRESENT

Katie Gienger, City of Ontario

The meeting was called to order at 9:47 a.m. There were no public comments received or additions to the agenda.

ACTION ITEMS

The Committee:

◆ Recommended that the Board:

1. Award a design-build contract for the Napa Lateral, Project No. WR15021, to Ferreira Construction Company, in the amount of \$5,332,122; and
2. Authorize the General Manager to execute the design-build contract subject to non-substantive changes;

as an Action Item on the April 11, 2018 Special Board meeting agenda.

- ◆ The RP-4 Aeration Basins Wall Repair Construction Contract Award Board letter was pulled off from the Agenda.
- ◆ Recommended that the Board:
 1. Approve a five-year electrical testing and emergency maintenance master service contract to Power Systems Services for a not-to-exceed amount of \$466,000; and
 2. Authorize the General Manager to execute the master service contract subject to non-substantive changes;

as a Consent Calendar Item on the April 11, 2018 Special Board meeting agenda.

- ◆ Recommended that the Board:
 1. Approve a five-year electrical engineering master service contract to Power Engineering Services for a not-to-exceed amount of \$202,000; and
 2. Authorize the General Manager to execute the master service contract subject to non-substantive changes;

as a Consent Calendar Item on the April 11, 2018 Special Board meeting agenda.

- ◆ Recommended that the Board:
 1. Approve a contract amendment for the RP-1 Primary Effluent Conveyance Improvements, Project No. EN15012, to Stantec Consulting Services, Inc., for the not-to-exceed amount of \$232,000; and
 2. Authorize the General Manager to execute the contract amendment subject to non-substantive changes;

as a Consent Calendar Item on the April 11, 2018 Special Board meeting agenda.

- ◆ Recommended that the Board authorize the General Manager to sign the letter to withdraw the sphere adjustment and reorganization application;

as a Consent Calendar Item on the April 11, 2018 Special Board meeting agenda.

- ◆ Recommended that the Board authorize the General Manager to enter into negotiations with IEUA member agencies for SARCCUP performance within the Chino Basin and develop the Memorandum of Understanding.

as a Consent Calendar Item on the April 11, 2018 Special Board meeting agenda.

INFORMATION ITEMS

The following information items were presented or received and filed by the Committee:

- ◆ Fiscal Year 2018/19 Ten Year Capital Improvement Plan
- ◆ 3rd Quarter Planning and Environmental Resources Update
- ◆ Planning and Environmental Resources Update
- ◆ Engineering and Construction Management Project Updates

GENERAL MANAGER'S COMMENTS

General Manager Halla Razak had no comments.

COMMITTEE MEMBER COMMENTS

There were no Committee member comments.

COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

There were no Committee member requests for future agenda items.

With no further business, Director Camacho adjourned the meeting at 10:21 a.m.

Respectfully submitted,

April Woodruff
Board Secretary/Office Manager

*A Municipal Water District

APPROVED: MAY 9, 2018

**ACTION
ITEM
1B**

Date: May 16, 2018

To: The Honorable Board of Directors

From: Halla Razak, General Manager

Committee: Engineering, Operations & Water Resources

HR

05/09/18

Executive Contact: Randy Lee, Executive Manager of Operations/AGM

Subject: Purchase of Replacement Crane

Executive Summary:

The Agency owns two boom truck cranes; one 1988 National 556B crane with a 12.5 ton lift limit and one 2007 Terex BT3470 crane with a 17 ton lift limit. The 1988 National crane is 30 years old and has had numerous mechanical issues in recent years. It is unable to lift many of the Agency assets due to boom length and lift limits. Additionally, this crane does not meet the California Air Resources Board (CARB) fleet regulation if used full-time.

Staff recommends replacing the 1988 National crane with a new Terex BT70100 Boom Truck crane with a 34 ton lift limit, a 155 foot boom length, and a certified engine that meets CARB fleet regulations. Staff plans to surplus the 1988 National crane.

To obtain the best value for the Agency, staff requested pricing from National Joint Power Alliance (NJPA) and issued a Request for Proposal (RFP) on BidNet. Terex is under contract with the NJPA, and provided the Agency with a 16% discount on the specified equipment, which meets all regulatory requirements. Additionally, the proposals received from the RFP did not meet CARB requirements. Therefore, staff recommends this purchase from NJPA and it is in accordance with the Agency's Purchasing Ordinance 101.

Staff's Recommendation:

1. Authorize the purchase of a new Terex BT70100 Boom Truck Crane from TEREX for a not-to-exceed amount of \$375,000 (including tax and delivery); and
2. Authorize the General Manager to execute the purchase.

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval: \$ 375,000

Account/Project Name:

Regional Wastewater O&M (RO) Fund, Projects EP18003 and EP19003 Major Equipment and Asset Replacement

Fiscal Impact (explain if not budgeted):

Full account coding (internal AP purposes only):

- - -
- - -

Project No.:

Prior Board Action:

On June 21, 2017, Board approved the Agency's Biennial Budget which included Projects EP18003 and EP19003 Major Equipment and Asset Replacement authorizing the purchase of maintenance required assets and major equipment through the standard procurement process.

Environmental Determination:

Not Applicable

Business Goal:

The purchase of the replacement crane aligns with the Agency's environmental stewardship goal to enhance and promote environmental sustainability.

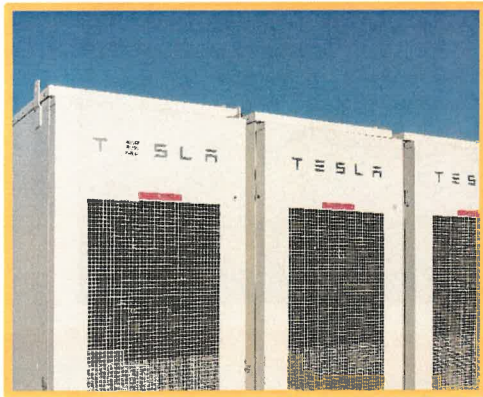
The purchase of the replacement crane also aligns with the Agency's goal of providing a reliable and cost effective water supply.

Attachments:

Attachment 1: Purchase of Replacement Crane PowerPoint

Attachment 1

Purchase of Replacement Crane



Agency Boom Truck Cranes



1988 National Boom Truck Crane

- Model 556B
- 12.5 ton lift limit
- 30 years old



2007 Terex Boom Truck Crane

- Model BT3470
- 17 ton lift limit
- 11 years old

Limitations for 1988 National Boom Track Crane

California Air Resources Board (CARB)

- The use of this crane negatively impacts Agency fleet emissions reporting average

Limited reach and lift capability

- Unable to lift many Agency assets due to boom length and lift limits
- Hire outside cranes for larger jobs

High Maintenance Cost

- Requires high maintenance resources to keep safe and operational



Summary

Request to purchase and replace 1988 National crane with:

- Terex BT 70100 Boom Truck Crane
- Able to reach and lift most assets within Agency facilities
- Certified engine that meets Best Available Control Technology requirements per CARB Fleet regulation



Recommendation

- Authorize the purchase of a new Terex BT70100 Boom Truck Crane from TEREX for a not-to-exceed amount of \$375,000; and
- Authorize the General Manager to execute the purchase.

The purchase of the replacement crane aligns with the Agency's environmental stewardship goal to enhance and promote environmental sustainability.

The purchase of the replacement crane also aligns with the Agency's goal of providing a reliable and cost effective water supply.

**ACTION
ITEM
1C**

Date: May 16, 2018

To: The Honorable Board of Directors

From: Halla Razak, General Manager

Committee: Engineering, Operations & Water Resources

HRP
05/09/18

Executive Contact: Chris Berch, Executive Manager of Engineering/AGM

Subject: RP-1 Digester 6 and 7 Roof Repairs Consultant Contract Amendment

Executive Summary:

In June 2017, IEUA awarded an engineering services contract to GHD Inc., for the preliminary design report on the Regional Water Recycling Plant No. 1 (RP-1) Digester 6 and 7 Roof Repairs Project. In March 2018, GHD completed the preliminary design work and condition assessment on Digester 6. The work on Digester 7 will start after putting Digester 6 in service.

Due to the unknown nature of the work within the digesters, staff developed the initial requests for proposals to be multi-step based on knowledge gained in the previous stage. Contract amendments would be recommended based on a fully developed scope.

Staff is recommending a contract amendment to GHD Inc., for the final design and engineering services during construction for Digester 6 in the amount of \$167,609, increasing GHD's contract from \$146,560 to \$314,169.

Staff's Recommendation:

1. Approve a consultant contract amendment for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to GHD Inc., for a not-to-exceed amount of \$167,609; and
2. Authorize the General Manager to execute the contract amendment subject to non-substantive changes.

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): Y Amount for Requested Approval:

Account/Project Name:

EN17042/RP-1 Digester 6 and 7 Roof Repairs

Fiscal Impact (explain if not budgeted):

None.

Prior Board Action:

On June 21, 2017, the Board of Directors approved a consultant engineering services contract for the RP-1 Digesters 6 and 7 Roof Repairs (predesign), Project No. EN17042, to GHD Inc., for the not-to-exceed amount of \$130,406.

On April 19, 2017, the Board of Directors approved a digester cleaning service contract for RP-1 Digesters 6 and 7, Project No. EN17042, to Synagro-WWT in the amount of \$1,750,200.

Environmental Determination:

Statutory Exemption

CEQA exempts a variety of projects from compliance with the statute. This project qualifies for a Statutory Exemption as defined in Section 15262 of the State CEQA Guidelines. When the project will be implemented will be subject to future environmental evaluation.

Business Goal:

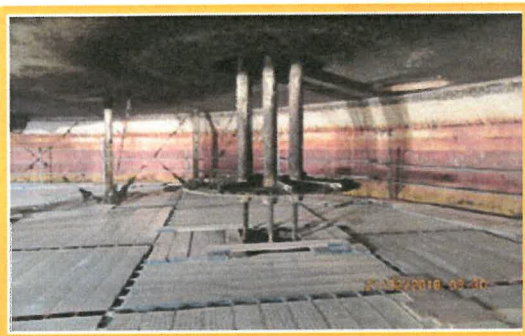
The Digester 6 and 7 Roof Repairs Project is consistent with IEUA's Business Goal of Wastewater Management, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

Attachments:

Attachment 1 - PowerPoint

Attachment 2 - Contract Amendment

RP-1 Digesters Nos. 6 and 7 Roof Repairs Consultant Contract Amendment Project No. EN17042



Regional Water Recycling Plant No. 1 Project Location



Project Background

- Digesters originally constructed in 1988
- Multiple roof cracks
- Deteriorated condition of roof foam insulation
- Suspected failure of internal protective coating
- Aging of mechanical piping system



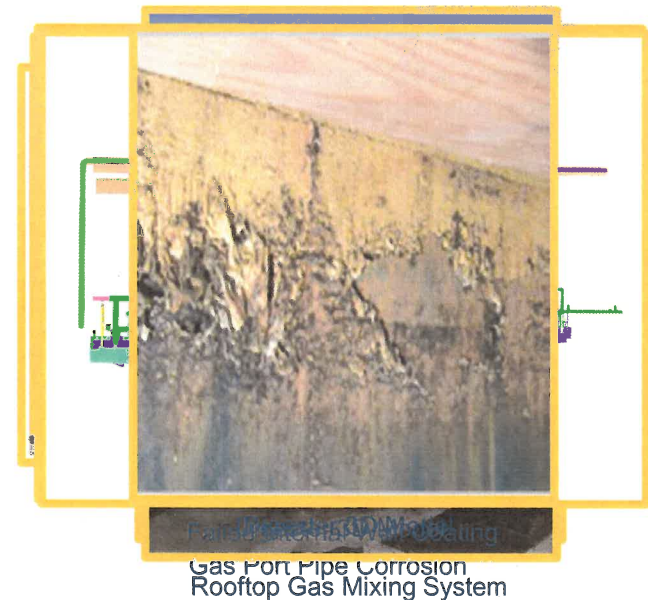
Cracking of Foam Roofing Insulation



Failed Internal Roof Coating

Project Scope

- GHD completed the predesign phase including:
 - Condition assessment
 - Gas mixing system evaluation
 - Piping CCTV
 - 3-D scan
 - Predesign Report
- Amended Scope
 - Final design phase
 - Engineering services during construction



Project Budget and Schedule

Description	Estimated Cost	Project Milestone	Date
Design Services	\$341,177	Consultant Contract Award	June 2017
Consultant Predesign Contract	\$146,560	Digester 6	
Final Design Amendment – Digester 6 (this action)	\$62,102	Consultant Contract Amendment Approval	May 2018
IEUA Design Services – Digester 6	\$87,500	Design Completion	August 2018
Project Development	\$45,015	Construction/Repair Contract Award	October 2018
Construction Services	\$190,507	Construction/Repair Completion	March 2019
Design Consultant Construction Services Amendment – Digester 6 (this action)	\$105,507	Digester 7	
IEUA Construction Services (5%) – Digester 6	\$85,000	Cleaning (Synagro)	June 2019
Construction	\$2,965,255	Inspection/Repair Design	November 2019
Digester Cleaning/Services (Synagro) – Digesters 1 and 6	\$1,095,255	Construction/Repair	June 2020
Construction (Roof Repairs Estimate) – Digester 6	\$1,700,000		
Contingency (10%)	\$170,000		
Total Project Cost:	\$3,496,939		
Total Project Budget:	\$3,800,000		
Remaining Budget:	\$303,061		

FY 2019/20 TYCIP will be updated to reflect Digester 7 repairs

Recommendation

- Approve a contract amendment for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to GHD, Inc., for the not-to-exceed amount of \$167,609; and
- Authorize the General Manager to execute the contract subject to non-substantive changes.

The RP-1 Digester 6 and 7 Roof Repairs Project is consistent with the *IEUA's Business Goal of Wastewater Management*, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.



CONTRACT AMENDMENT NUMBER: 4600002328-002
FOR
FOR CONSULTING ENGINEERING SERVICES
DIGESTER 6 & 7 ROOF REPAIRS AT REGIONAL PLANT NO. 1 (RP-1)
PROJECT NO. EN17042

THIS CONTRACT AMENDMENT TWO is made and entered into this _____ day of _____, 2018 by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to interchangeably as "IEUA" and "Agency") GHD Inc. of Irvine, California (hereinafter referred to as "Consultant") for professional engineering consulting services for the RP-1 Digester 6 & 7 Roof Repairs, Project No. EN17042, and shall revise the Contract as herein amended:

SECTION FOUR, SCOPE OF WORK AND SERVICES, IS REVISED TO ADD: Contractor's additional services and responsibilities shall include and be in accordance with **Attachment 2**, referenced herein, attached hereto, and made a part hereof.

SECTION SIX, PAYMENT, INVOICING AND COMPENSATION, ADDS THE FOLLOWING PARAGRAPH:

G. As compensation for the additional work performed as represented by Contract Amendment-002, Agency shall pay Contractor a ***not-to-exceed maximum of \$314,168.65***, as established in accordance with **Attachment 2**, for all additional work satisfactorily provided.
Note: This represents an increase to the Contract of \$167,609.00.

ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.

INLAND EMPIRE UTILITIES AGENCY:
(A Municipal Water District)

GHD INC.:

Halla H. Razak
General Manager

(Date)



Paul Hermann
Principal

4/25/18
(Date)

Attachment 2



April 24, 2018

IEUA Reference No. EN17042
GHD Reference No. 11136888

sent via email

Jamal Zughbi, P.E.
Senior Engineer/Project Manager
Inland Empire Utility Agency
6075 Kimball Avenue, Bldg. "B"
Chino, California, US
91708

To Mr. Zughbi:

**Re: Request for Amendment to Contract No. 2 – Contract No. 46-2328 PO No. 45-28238 rev
Digester 6 and 7 Roof Repairs at Regional Plant No. 1**

This request is intended to amend the subject Contract made between the Inland Empire Utility Agency (IEUA) and GHD Inc. (GHD) that became effective the 21st day of June 2017, and amended on the 18th day of January 2018. To date, only initial phases of the project has been approved corresponding with pre-design activity. The subject of this request pertains to approval for remaining project phases pertaining to detailed design; contract and construction administration; and commissioning services for Digester 6 only.

Scope of Work Amendment Description – Digester 6

This revised fee estimate incorporates an updated understanding of engineering services required to complete the detailed design based on the pre-design activity completed to date. In addition, the revised fee estimate considers the full duration of the project and incorporates estimated effort associated with an updated understanding of contract and construction inspection services based on a 180-day construction period and identification of the level of weekly inspection and directions by engineering staff needed during upcoming Digester 6 repairs. The repairs are estimated to consist of a high degree of quality control as it relates to preparations of interior and exterior concrete surfaces followed with application of specialized coating system primers, top coats, and insulations. In addition the construction activity has a degree of parallel activity involving demolitions and improvements associated with the mechanical piping and insulation components.

Detailed Design Service (Digester #6)

Added design components identified during the condition assessment, including:

- Gas mixing and sludge feed pipe replacements
- Pipe penetration replacements through ceiling
- Pipe replacement inside digester



Construction and Contract Administration Services (Digester 6)

The following additional services has been considered:

Piping and Pipe Supports

- i. Review pipe, insulation, and instrument materials when they arrive on-site
- ii. Observe installation including leak testing and instrument commissioning

Foam Roofing

- i. Observe the progress on the removal of the existing foam roofing materials
- ii. Observe the completion of the removal of the existing foam roofing materials
- iii. Conduct a condition assessment of the structural condition of the exterior of the concrete roof, after the existing foam roofing has been removed
- iv. Direct any correction or repairs to the exterior concrete roof structure prior to continuing with the exterior positive seal system

Coatings

- i. Interior – a higher degree of inspection activity commensurate with the estimated area of impact has been identified. GHD's consideration for work plan amendment includes onsite professional services to complete the following over a larger area:
 - o Observe the removal of the existing coating system, prior to proceeding with profile correction
 - o Review profile correction, mortar and coating materials prior to application
 - o Observe the initial application of the profile correction materials
 - o Observe the application of the profile correction materials at the mid-point of completion
 - o Observe the application of the profile correction materials near completion
 - o Observe the completed profile correction material application, prior to continuing with the first coat of the negative coating materials
 - o Observe the initial application of the first coat of the negative coating materials
 - o Observe the application of the first coat of the negative coating materials at the mid-point of completion
 - o Observe the application of the first coat of the negative coating materials near completion
 - o Observe the completed first coat of the negative coating materials application, prior to continuing with the final coat of the negative coating materials
 - o Observe the initial application of the final coat of the negative coating materials
 - o Observe the application of the final coat of the negative coating materials at the mid-point of completion
 - o Observe the application of the final coat of the negative coating materials near completion



- Observe the completed final coat of the negative coating materials application
- Observe the pressure test of the structure and completed interior coating systems prior to completing the exterior positive coating system

Schedule

The milestones for this work will correspond to the Project Schedule, currently tracked under Technical Memorandum No. 8

Updated Fee Estimate

The Contract Price in Section 4 of the aforementioned Contract is modified as follows:

Item Description	Contr. Value As At January 18, 2018	Requested Amendment Contr. Value	Total Contr. Value with Amendments
Pre Design Services (Dig #6)	\$71,092.50	–	\$71,092.50
Detailed Design Services (Dig #6)	–	\$62,102.40	\$62,102.40
Construction Administration Services (Dig #6)	–	\$95,669.20	\$95,669.20
Post Construction Services (Dig #6)	–	\$9,837.60	\$9,837.60
Pre Design Services (Dig #7)	\$59,313.40	–	\$59,313.40
Detailed Design Services (Dig #7)	–	–	–
Construction Administration Services (Dig #7)	–	–	–
Post Construction Services (Dig #7)	–	–	–
Work Plan Amendment 1 (3D Scanning)	\$16,153.65	–	\$16,153.65
	<hr/>		
	\$146,559.55	\$167,609.20	\$314,168.75

Closing

It is noted that GHD will commence with the work of this Change Order immediately upon approval to proceed.



Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours truly,

GHD

A handwritten signature in blue ink, appearing to read "K Muffels", written in a cursive style.

Kyle Muffels

Encl.

Table 2: Fee Estimate Breakdown

cc: Danielle St. Pierre, IEUA
Steven Cano, IEUA
Crystal Eleby, IEUA
Frederick Tack, GHD
Jamal Awad, GHD

**TABLE 2
FEE SCHEDULE FOR CONSULTING ENGINEERING SERVICES
REQUEST FOR CONTRACT AMENDMENT APRIL 24, 2018
EUA PROJECT EN17043
RP-1 DIGESTER 6 7 ROOF REPAIRS**

FEE ESTIMATE WORKSHEET		Project Director/ Senior Technical Advisor													Subtotal Hours	Consumable Costs	Travel/ Expenses	Markup on Sub	Total
		Project Manager/ Preliminary Design and Approval	Project Coordinator/ Field Investigations and Design	CSE Inspection	Lead Structural	Lead Mechanical	Design and CCA Manager	Cost Estimating	Air Quality	Environmental/ Leak Monitoring/Sampling	CADD Process/ Mechanical/Electrical	Administration	Leak Detection RDS						
Rate (\$ USD / HR)		Jamal Awad	Kyle Kurfela	Frederick Teak	David Hilliard	Tom Burkhardt	Matthew Lang	Casey Raines	Michael Fried	Subbarao Nagulapathy	Matthew Smith	Davin Brady	Emily Sonaja	Senior Technician		\$6		5%	
Phase 01 - Digester 6 Preliminary Design																			
1	Background/Preparation draft tech memo #1 and #8		6	2		2	2	2	2	2	2		4		24	\$144.00	\$0.00	\$0.00	\$4,454.00
2	Project Kick Off Meeting	4	4	4									1		13	\$78.00	\$57.60	\$0.00	\$2,915.60
3	Leak Investigation and Measurements																		
3.1	Digester gas leak inspection (prior to cleaning)		9	9							9			18	45	\$162.00	\$3,615.20	\$135.00	\$11,967.20
3.2	Gas mixing system evaluation (prior to cleaning)			4		12	8	8			4				36	\$216.00	\$115.20	\$0.00	\$7,471.20
3.3	Digester interior and exterior inspections following cleaning			8		12									20	\$120.00	\$115.20	\$0.00	\$4,495.20
4	Project Meetings (Quantity of 2) - Workshop setting		8	8											16	\$96.00	\$315.20	\$0.00	\$3,771.20
5	Preparation of draft tech memo #2 through #7	8	18	32				18	8	4	18	32	8		146	\$876.00	\$0.00	\$0.00	\$27,966.00
6	Preparation of final tech memo #1 through #8	4	6	6				6	2	2	6	6	4		42	\$252.10	\$0.00	\$0.00	\$8,052.10
SUB-TOTAL PHASE 01 - DIGESTER 6 PRELIMINARY DESIGN		16	51	73	0	26	10	34	12	8	39	38	17	18	342	\$1,844.10	\$4,218.40	\$135.00	\$71,092.50
		5%	15%	21%	0%	8%	3%	10%	4%	2%	11%	11%	5%	5%					
Phase 02 - Digester 6 Detailed Design																			
1	Prepare scope and fee adjustment for 30% and final design	0.5	1	1		0.5	0.5	0.5	0.5	0.5			1		6	\$36.00	\$0.00	\$0.00	\$1,166.00
2	Detailed Design 90% - Draft and Final	4	12	43		20	16	30	4			80	2		216	\$1,296.00	\$257.60	\$0.00	\$40,963.60
3	30% Design workshop		4	4		4							1		13	\$78.00	\$257.60	\$0.00	\$2,835.60
4	Detailed Design 100% - Draft and Final	4	8	13		4	8	8	4			20	2		74	\$444.00	\$0.00	\$0.00	\$14,244.00
5	100% Design workshop		4	4		4							1		13	\$78.00	\$315.20	\$0.00	\$2,893.20
SUB-TOTAL PHASE 02 - DIGESTER 6 DETAILED DESIGN		8.5	29	73	0	24.5	32.5	38.5	8.5	0.5	0	100	7	0	322	\$1,932.00	\$830.40	\$0.00	\$62,102.40
		3%	9%	23%	0%	8%	10%	12%	3%	0%	0%	31%	2%	0%					

**TABLE 2
FEE SCHEDULE FOR CONSULTING ENGINEERING SERVICES
REQUEST FOR CONTRACT AMENDMENT APRIL 24, 2018
IEUA PROJECT EN17042
RP-1 DIGESTER 6 7 ROOF REPAIRS**

FEE ESTIMATE WORKSHEET		Project Director/ Senior Technical Advisor	Project Manager/ Preliminary Design and Approvals	Project Coordinator/ Field Investigations and Design	CSE Inspection	Lead Structural	Lead Mechanical	Design and O&A Manager	Cost Estimating	Air Quality	Environmental/ Leak Monitoring/Sampling	CADD Process/ Mechanical/Electrical	Administration	Leak Detection IIBS					
		Jamal Award	Kyle Muffels	Frederick Tack	David Hilliard	Tom Burkhardt	Rhithew Lavig	Cowey Raines	Michael Friedl	Subbarao Nagulapaty	Matthew Smith	Devon Brady	Emily Soneja	Senior Technician	Subtotal Hours	Consumable Costs	Travel/ Expenses	Markup on Sube	Total
Rate (\$ USD / HR)		\$250	\$195	\$225	\$155	\$205	\$180	\$205	\$185	\$195	\$175	\$140	\$100	\$150		\$6		6%	
Phase 03 - Digester 6 Construction Administration Services																			
1	Bid administration including meeting, results interpretation	4	4	4				4	4				1		21	\$126.00	\$0.00	\$0.00	\$4,466.00
2	Pre-construction meetings and issued for construction plans	1	4	6		2	2	4				8	2		29	\$174.00	\$257.60	\$0.00	\$5,721.60
3	Contractor liaison including shop drawing/claims/changes	1	2	8		8	4	12				0	2		37	\$222.00	\$0.00	\$0.00	\$7,682.00
4	Weekly construction progress meetings and site inspections		30	100	100	0		100					3		333	\$1,998.00	\$1,545.60	\$0.00	\$68,193.60
5	Development of ESOPM/O&M Manuals	1	2	4				12					4		23	\$138.00	\$0.00	\$0.00	\$4,538.00
6	Development and assistance with startup protocol	4	2	8				8					1		23	\$138.00	\$0.00	\$0.00	\$5,068.00
SUB-TOTAL PHASE 03 - DIGESTER 6 CONSTRUCTION ADMINISTRATION		11	44	130	100	10	6	140	4	0	0	8	13	0	466	\$2,796.00	\$1,803.20	\$0.00	\$95,669.20
		2%	9%	28%	21%	2%	1%	30%	1%	0%	0%	2%	3%	0%					
Phase 04 - Digester 6 Post Construction Services Including Training																			
1	Preparation of "as-builts"		2	4		4	8	2				12	2		34	\$204.00	\$0.00	\$0.00	\$6,044.00
2	Training services			8				8							16	\$96.00	\$257.60	\$0.00	\$3,793.60
SUB-TOTAL PHASE 04 - DIGESTER 6 POST CONSTRUCTION SERVICES		0	2	12	0	4	8	10	0	0	0	12	2	0	50	\$300.00	\$257.60	\$0.00	\$9,837.60
		0%	4%	24%	0%	8%	16%	20%	0%	0%	0%	24%	4%	0%					

TABLE 2
 FEE SCHEDULE FOR CONSULTING ENGINEERING SERVICES
 REQUEST FOR CONTRACT AMENDMENT APRIL 24, 2018
 IEUA PROJECT 0617042
 RP-1 DIGESTER 6 7 ROOF REPAIRS

FEE ESTIMATE WORKSHEET		Project Director/ Senior Technical Advisor													Subtotal Hours	Consumable Costs	Travel/ Expenses	Markup on Sub	Total
		Project Manager/ Preliminary Design and Approvals	Project Coordinator/ Field Investigations and Design	CSE Inspection	Lead Structural	Lead Mechanical	Design and CCA Manager	Cost Estimating	Air Quality	Environmental/ Leak Monitoring/Sampling	CADD Process/ Mechanical/Electrical	Administration	Lead Definition MBS						
Rate (\$ USD / HR)		Jamal Awad	Kyle Huffels	Frederick Tack	David Hilliard	Tom Burkhardt	Matthew Lang	Caesy/Ramesh	Michael Fried	Subbarao Nagulapety	Matthew Smith	Devin Brady	Emily Soneja	Senior Technician		\$6		5%	
Phase 05 - Digester 7 Preliminary Design																			
1	Background/Preparation draft tech memo #1 and #8		2	1		1	1	1	1	1	1		1		10	\$60.00	\$0.00	\$0.00	\$1,920.00
2	Kick Off Meeting	4	6	4									1		15	\$90.00	\$57.60	\$0.00	\$3,317.60
3	Leak Investigation and Measurements																		
3.1	Digester gas leak inspection (prior to cleaning)		8	4							8			18	38	\$120.00	\$3,615.20	\$135.00	\$10,430.20
3.2	Gas mixing system evaluation (prior to cleaning)			4	10	8	8			4					34	\$204.00	\$115.20	\$0.00	\$7,049.20
3.3	Digester interior and exterior inspections following cleaning			8	10										18	\$108.00	\$115.20	\$0.00	\$4,073.20
4	Project Meetings (Quantity of 2)		8	8											16	\$96.00	\$115.20	\$0.00	\$3,571.20
5	Preparation of draft tech memo #2 through #7	4	16	16				16	4	4	16	16	8		100	\$600.00	\$0.00	\$0.00	\$18,960.00
6	Preparation of final tech memo #1 through #8	4	8	8				8	2	2	8	8	4		52	\$312.00	\$0.00	\$0.00	\$9,992.00
SUB-TOTAL PHASE 05 - DIGESTER 7 PRELIMINARY DESIGN		12	48	68	0	21	9	33	7	7	37	24	14	18	283	\$1,590.00	\$4,018.40	\$135.00	\$59,313.40
		4%	17%	18%	0%	7%	3%	12%	2%	2%	13%	8%	5%	6%					
Contract Amendment																			
1	Field survey services (3D scanning)		8	16											24	\$144.00	\$10,333.00	\$516.65	\$10,153.65
SUB-TOTAL CONTRACT AMENDMENTS																			\$16,153.65
TOTAL SCOPE OF WORK		48	182	357	100	86	66	256	32	16	76	182	53	36	1,487	\$8,706.10	\$21,461.00	\$786.65	\$314,168.75
		3%	12%	24%	7%	6%	4%	17%	2%	1%	5%	12%	4%	2%					

**ACTION
ITEM
1D**

Date: May 16, 2018

To: The Honorable Board of Directors

From: Halla Razak, General Manager

Committee: Engineering, Operations & Water Resources

HHF
05/09/18

Executive Contact: Chris Berch, Executive Manager of Engineering/AGM

Subject: Proposition 1 Grant Professional Services Contract Amendment

Executive Summary:

In August 2017, Inland Empire Utilities Agency (IEUA) submitted the Proposition 1 Water Storage and Investment Program (WSIP) grant application for the Chino Basin Environmental Water Program (CBEWP). To help develop and evaluate environmental and ecosystem benefits, GEI Consultants Inc. was retained by IEUA in June 2017. The initial contract was \$89,564. As the application was being developed, additional efforts were needed to fulfill the requirements of the grant application. Three separate amendments were issued and increased the contract amount to \$227,664. In February, IEUA submitted an appeal to the California Water Commission (CWC) which provided additional technical materials for the claimed public benefits.

Since the initial application was submitted, the project evaluation and selection process has evolved from the CWC. It has been uncertain throughout this process as to what supplemental materials would be requested by the CWC. IEUA has accommodated this process by electing to issue contract amendments, as next steps from the CWC are provided. On April 3, the CWC notified IEUA of additional meetings needed for the next round of evaluations. If approved, the total contract amount with GEI Consultants, Inc. would increase to \$322,664.

Staff's Recommendation:

1. Award an engineering services contract amendment to GEI Consultants, Inc., for a not-to-exceed amount of \$95,000; and
2. Authorize the General Manager to execute the contract subject to non-substantive changes.

Budget Impact *Budgeted (Y/N): Y* *Amendment (Y/N): N* *Amount for Requested Approval:*

Account/Project Name:

Budget for this contract is split (50/50) between EN16035 WC (Recycled Water Fund) Planning Documents and WR16025 WW (Water Resources Fund) Planning Documents.

Fiscal Impact (explain if not budgeted):

None

Prior Board Action:

On February 21, 2018, the IEUA's Board of Directors approved a contract amendment to GEI Consultants, Inc., for a not-to-exceed amount of \$82,000, increasing the total contract amount to \$227,664.

Environmental Determination:

Statutory Exemption

CEQA exempts a variety of projects from compliance with the statute. This project qualifies for a Statutory Exemption as defined in Section 15262 of the State CEQA Guidelines. When the project is implemented, it will be subject to future environmental evaluation.

Business Goal:

The contract amendment supports IEUA's business goal of Water Reliability, of implementing an integrated water resources management plan providing a reliable and cost-effective water supply and promoting sustainable water use throughout the region.

Attachments:

Attachment 1 - Consultant Contract



CONTRACT AMENDMENT NUMBER: 4600002389-004
FOR PROFESSIONAL SERVICES
CHINO BASIN ENVIRONMENTAL WATER PROGRAM

THIS CONTRACT AMENDMENT FOUR is made and entered into this 25th day of APRIL, 2018, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to interchangeably as "IEUA" and "Agency"), and GEI Consultants, Inc. of Woburn, MA (hereinafter referred to as "Consultant") for professional services related to Services for Proposition 1 Water Storage Investment Program (WSIP) Grant Application for Chino Basin Conjunctive Use & Environmental Water Storage/Exchange Program (e.g. Chino Basin Environmental Water Program), and shall revise the Contract as herein amended:

SECTION FOUR, SCOPE OF WORK AND SERVICES, ADDS THE FOLLOWING:
Consultant's additional services and responsibilities shall include and be in accordance with the following:

Subsection F. Reference **Exhibit F** which is attached hereto, referenced herein, and made a part hereof.

SECTION SIX, PAYMENT, INVOICING, AND COMPENSATION, IS REVISED TO ADD THE FOLLOWING:

Subsection G. As compensation for the additional Work performed under Contract Amendment-004, Agency shall pay Consultant a **NOT-TO-EXCEED MAXIMUM OF \$322,664.00** for all services satisfactorily provided during the term of this Contract. (This reflects an additional **\$95,000.00** as requested by Consultant via **Exhibit F.**)

All Other Provisions Of This Contract Remain Unchanged, In Full Force, And Effect.

[Signature Page Immediately Follows]

Witnesseth, that the parties hereto have mutually covenanted and agreed as per the above Amendment items, and in doing so have caused this document to become incorporated into the Contract documents.

INLAND EMPIRE UTILITIES AGENCY:
(A MUNICIPAL WATER DISTRICT)

GEI CONSULTANTS, INC:

Halla H. Razak (Date)
General Manager

Naser Bateni 4/25/18

Naser Bateni (Date)
Senior Vice President

[Balance Of This Page Intentionally Left Blank]

April 23, 2018



Ms. Sylvie Lee
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, California 91708

Consulting
Engineers and
Scientists

Re: GEI Contract #4600002389 – Professional Services Proposition 1 WSIP Grant

Dear Ms. Lee:

This letter is requesting amendment to GEI Contract #4600002389 (Contract) for Professional Services for the Inland Empire Utilities Agency (IEUA) Proposition 1 Water Storage and Investment Program (WSIP) Grant Application for the Chino Basin Environmental Water Program (CBEWP Grant). This amendment is in response to IEUA's request to provide additional professional services to address comments expected from the CWC during their review and scoring of IEUA's CBEWP Grant application. The requested amendment is as follows:

- Amend the contract price not-to-exceed from \$227,664 to \$322,664, an increase of \$95,000.
- Amend the scope of services to include the following work activities, which are to be performed on an as-needed basis upon direction from the IEUA Project Manager:
 - Support and attend upcoming meetings with CWC staff and CWC Board public workshops, including PBR Appeal Review Meeting in late April, Final Public Benefit Ratio (PBR) Public Meetings in early May, Application Score Meetings in late May or early June, and ROI Score Public Meetings in late June. And coordinate/support technical project meetings with IEUA staff to coordinate project activities.
 - Review and respond to CWC staff reviews of application and formulating responses to CWC comments, including CWC comments on the PBR, Total Applicant Score, and Return on Investment Score. This may involve additional refinement of project elements, additional project alternatives analysis, additional economics analysis, and additional project costs and benefits analysis.
 - Coordinate with project partner agencies, including State Water Project Contractor (SWPC) agencies and Chino Basin Watermaster, to further refine project elements connected to their systems, including analysis of and operating plans for recharge and delivery of water from the proposed project. This may involve evaluation of operations within Chino Basin, IEUA service area, SWP Contractor (e.g. MWDSC) service areas, and SWP service area. And may involve preparing outreach materials, such as presentations, letters, and brochures, and participating in meetings.
 - Coordinate with project advocates (i.e. NGOs) to further develop project elements and to develop additional support for the proposed project. This may involve preparing outreach materials such as presentations, letters, and brochures, and participating in meetings.
 - Continue to advance institutional arrangements with project partner agencies and regulatory agencies, which may include California Department of Fish and Wildlife, California Department of Water Resources (DWR), SWPCs, Chino Basin Watermaster, and State Water Resources Control Board.
 - Continue to assist IEUA with further development and advancement of proposed project components, as needed.
 - Include the option to retain outside expert consulting services for (i) SWP Operations Analysis, (ii) Water Transfer Analysis, and (iii) Water Transfer Economics. These services are estimated at \$5,000 per analysis, or \$15,000 total. This \$15,000 estimated price is included in the amended contract price above. These optional outside expert consulting services would be activated only upon approval by the IEUA Project Manager.

- The term of the contract is current through December 31, 2018 and does not require amendment at this time.

If you have any questions or require additional information, please contact me at 916-912-4792.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Putty".

Roger Putty, PE, PMP
Project Manager

cc Leo Winternitz

**ACTION
ITEM
1E**

Prior Board Action:

On February 17, 2016, the Board of Directors awarded three-year contracts to Carollo Engineers, Inc., GK & Associates, MWH Constructors, and Wallace & Associates Consulting, Inc., for on-call “as needed” project management, engineering, and construction inspection staff augmentation support services for a not-to-exceed total amount of \$1,500,000 for each contract for a total of \$6,000,000.

Environmental Determination:

Not Applicable

Business Goal:

The project management, engineering, and construction inspection staff augmentation master contract is part of IEUA's Wastewater Management Business Goal that IEUA is committed to meeting regional demands in an environmentally responsible and cost effective manner.

Attachments:

**ACTION
ITEM
1F**

Date: May 16, 2018

To: The Honorable Board of Directors

From: Halla Razak, General Manager

Committee: Engineering, Operations & Water Resources

HR
05/09/18

Executive Contact: Chris Berch, Executive Manager of Engineering/AGM

Subject: Adoption of Resolution 2018-5-1, Regional Pretreatment Program Local Limits

Executive Summary:

Inland Empire Utilities Agency's (IEUA) Regional Pretreatment Program is designed to protect the regional water recycling plants, personnel, effluent and sludge from pass-through or interference from pollutants discharged by Significant Industrial Users (SIUs). The pretreatment program includes certain required elements, including local limits (permit discharge limits). IEUA's current local limits for the Regional Pretreatment Program were adopted in 2006. Due to changes in the National Pollutant Discharge Elimination System (NPDES) permit regulations, pretreatment program revisions and groundwater recharge regulations, Environmental Protection Agency (EPA) required IEUA to reevaluate its local limits. Following a detailed review by IEUA's consultant and member agencies, IEUA's revised local limits were submitted to the Regional Water Quality Control Board (RWQCB) in January 2018. In March 2018, the RWQCB notified IEUA that the local limits submission is a "non-substantial pretreatment program modification" and that IEUA can adopt its revised local limits. Pretreatment staff have met with all SIUs to discuss the planned changes and have confirmed that prior discharge data is in compliance with the proposed limits. Resolution No. 2018-5-1 establishes the updated local limits applicable to the regional sewerage system SIUs. Resolution No. 2018-5-1 will supersede Resolution 2006-11-4 for SIUs of the Regional System only.

Staff's Recommendation:

Adopt Resolution No. 2018-5-1, establishing the Regional Pretreatment Program Local Limits applicable to SIUs.

Budget Impact *Budgeted (Y/N): Y* *Amendment (Y/N): N* *Amount for Requested Approval:*

Account/Project Name:

Fiscal Impact (explain if not budgeted):

Prior Board Action:

On May 21, 2014, the IEUA's Board of Directors approved consulting services contract award to Arcadis for the Regional Pretreatment Program Local Limits Study.

On November 15, 2006, IEUA's Board of Directors adopted Resolution 2006-11-4 establishing Uniform Local Limits applicable to SIUs.

Environmental Determination:

Not Applicable

Business Goal:

The Regional Pretreatment Program Local Limits is consistent with the IEUA's Business Goal of Environmental Stewardship by meeting federal, state and local pretreatment regulations within the IEUA service area and safeguarding public health and the environment.

Attachments:

Attachment 1 - Background

Attachment 2 - PowerPoint

Attachment 3 - Resolution No. 2018-5-1

Background

Subject: Regional Pretreatment Program Local Limits Adoption

Inland Empire Utilities Agency's (IEUA) Regional Pretreatment Program is designed to protect the regional water recycling plants, personnel, effluent and sludge from pass-through or interference from pollutants discharged by Significant Industrial Users (SIUs). The pretreatment program includes certain required elements, including a system of administering legal authority (ordinance), a control mechanism (wastewater discharge permit), and local limits (permit discharge limits).

Local limits are site specific discharge limits to regulate SIUs developed per 40 CFR 403.5 (c) and 403.8 (f)(4). SIUs are defined as those businesses subject to federal categorical pretreatment regulations or industries that discharge a volume greater than 25,000 gallons per day or excessive loading defined in specific numeric terms by federal regulations. IEUA's Regional Pretreatment Program is required to regulate SIUs or any industry that has the potential to upset the regional water recycling plants. All other residential, commercial, non-permitted industrial dischargers or pollutant sources are considered background level and uncontrolled sources when developing local limits.

IEUA's current local limits for the Regional Pretreatment Program were adopted in 2006. In 2013, the Regional Water Quality Control Board (RWQCB) required IEUA to reevaluate its local limits based on the results of a Pretreatment Compliance Audit. This requirement was made based on findings that the IEUA had not reevaluated its local limits in several years. Additionally, changes in the NPDES permit limits, groundwater recharge regulations, improvements in the regional pretreatment program, reduction in permitted industries, and enhancement of the treatment processes at the IEUA's regional water recycling plants also justified the need to reevaluate the local limits.

In May 2014, IEUA retained Arcadis U.S. Inc. to provide consulting services to reevaluate and develop logical, technically based and defensible local limits that would be effective, enforceable, and applicable to all SIUs within the IEUA's service area.

The local limits evaluation process involves calculating the pollutant loading that can be received at each of the water recycling plant headworks, without exceeding specified criteria, such as NPDES permit limits, and then allocating the loading among controllable sources (SIUs) and uncontrollable sources (residential, commercial, and non-permitted industries).

The development of local limits involves the following steps:

- Identify potential pollutants of concern (POCs)
- Analyze historical wastewater and flow data
- Calculate maximum allowable headworks loadings (MAHLs) for each potential POC
- Perform sensitivity analyses to refine potential POCs
- Calculate allowable SIU loadings and determine allocation strategies for each POC

Based on the screening criteria above, data evaluation, and EPA guidance documents the consultant determined there were 29 potential POCs.

In April 2015, the draft local limits report was distributed to the Regional Pretreatment Committee members for review and comment. The comments received from the committee members were incorporated into the final report in June 2015.

In August 2015, IEUA submitted its local limits report to the RWQCB. Subsequently, in September 2015, IEUA received its draft NPDES permit from the RWQCB which included new limits for 2,3,7,8-TCDD (Dioxin). As a thorough review of Dioxin was not originally included in the local limits study, IEUA requested the RWQCB to delay its review of the local limits report until IEUA could conduct a thorough evaluation for Dioxin including sampling and source identification. IEUA has completed this evaluation and determined that Dioxin will not need to be assigned a local limit.

Additionally, the RWQCB has raised concerns with IEUA using fixed Total Dissolved Solids (TDS), for compliance determination. It is the opinion of the RWQCB that fixed TDS may underestimate the TDS concentration in discharges from SIUs with organic TDS in their wastewater. As part of the local limits addendum, IEUA proposes that the method for determining compliance for TDS at food processing industries be changed to TDS by summation.

IEUA also incorporated additional treatment plant and industry monitoring data from January 2015 through October 2016 to account for any impact from more recent monitoring data on the limits proposed in 2015. The 2016 updates are incorporated in the Table 1 addendum below.

Beginning in February 2017, IEUA experienced several daily and monthly average violations for two trihalomethane (THM) compounds Chlorodibromomethane and Bromodichloromethane at the Carbon Canyon Water Recycling Facility (CCWRF). As the precursor to these THM compounds is Bromide, IEUA conducted an extensive source control investigation which identified and eliminated Bromide discharges from several industries. Further assessment determined that once these sources were eliminated, a local limit for Bromide was not needed. While IEUA has been consistently meeting compliance with the THM discharge limits at CCWRF since July 2017, a review of the need for a local limit for Bromide further delayed the local limits addendum to the RWQCB.

Table 1 summarizes the POCs, current local limits, and proposed local limits after completion of the sensitivity analyses. For those POCs where a local limit is not recommended, pollutant monitoring will be conducted as part of the pretreatment compliance monitoring program.

In January 2018, IEUA submitted the addendum to the local limits report to the RWQCB as required by 40 CFR 403.18. In March 2018, the RWQCB notified IEUA that they consider the local limits submission a “Non-Substantial Pretreatment Program Modification” and that IEUA can adopt its revised local limits.

Table 1: Current Local Limits vs. Proposed Local Limits

Pollutants of Concern (POC)	Current Limits (mg/L)	Arcadis Proposed Limits (mg/L)	Updated Proposed Limits (mg/L)	Comments
Cadmium	2.8	--	2.8	Current Local Limit maintained to provide continued protection to the water recycling plants.
Chromium	60	2.79	2.52	Daily max; Based on CCWRF UCL
Copper	45	2.29	0.36	Daily max; Based on CCWRF UCL
Cyanide (free)	1.2	--	1.2	Current Local Limit maintained to provide continued protection to the water recycling plants.
Lead	14	1.38	1.26	Daily max; Based on CCWRF CFL (applied to contributory SIUs, Net Shapes and Envision Plastics); set alert level of 0.02 mg/L for other SIUs
Nickel	45	12.5	3.89	Daily max; Based on CCWRF CFL (applied to contributory SIUs, Evolution Fresh, Inland Powder, Jewlland-Freya, Net Shapes, OW Lee, Parco, Schlosser Forge, Sun Badge, and Envision Plastics); set alert level of 0.19 mg/L for other SIUs
Selenium	--	--	--	Monitor via IEUA monitoring program; work with Sun Badge to assess BMPs
Zinc	50	3.74	3.25	Daily max; Based on CCWRF UCL
Bis(2-Ethylhexyl) phthalate	--	--	--	Monitor via IEUA monitoring program
Chloride	--	--	--	Monitor via IEUA monitoring program
Hardness	--	--	--	Monitor via IEUA monitoring program
Manganese	--	--	--	Monitor via IEUA monitoring program
pH	>5.0 and <12.5	>5.0 and <12.5	>5.0 and <12.5	Instantaneous limit based on pH standard unit
Sodium	--	--	--	Monitor via IEUA monitoring program
Sulfate	--	--	--	Monitor via IEUA monitoring program
Total Dissolved Solids (TDS)*	800/550	800/550	800/550	Monthly average and measured as TDS (by summation)
2,3,7,8-TCDD (equivalents)	--	--	--	Monitor via IEUA monitoring program
Bromide**	--	--	--	Monitor via IEUA monitoring program

Notes:

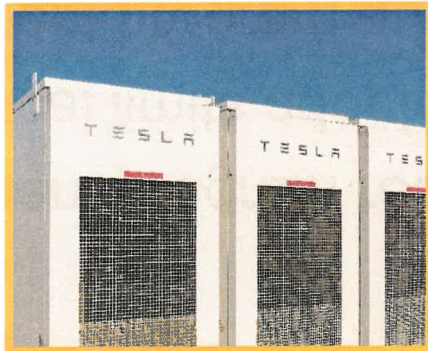
mg/L = milligrams per liter;

* = TDS limits for existing SIUs and new SIUs, an industry in operation and discharging to the Regional Sewerage System at the time of the Local Limits Resolution 2006-11-4 adoption is considered existing. Industries not meeting the Existing Industry definition shall be considered a New Industry.

TDS by summation shall be calculated as follows: (Alkalinity * 0.6) + Na + K + Ca + Mg + Cl + SO₄ + Silica + (NO₃-N * 4.43) + F

** = Bromide as surrogate for parameter for Chlorodibromomethane and Dichlorobromomethane

Regional Pretreatment Program Local Limits Adoption



Why Reevaluate Local Limits

- Pretreatment program requirement
- Current local limits adopted in 2006
- Pretreatment program audit requirement
- Local limits revision needed due to changes in:
 - Pretreatment Program
 - Permit regulations
 - Groundwater recharge regulations

Local Limit Objectives

- Protects Regional Water Recycling Plants and beneficial reuse
- Technically based/defensible
- Supplement federal categorical limits & ordinance prohibitions
- Minimize impact on industrial users
- Easy to administer

Proposed Local Limits

- Identified 31 Pollutants of Concern (POC)
- Calculate maximum loadings for POC entering treatment plants
- Allowance for safety and growth
- Refine POC & calculate limit for industries
- Applicable to Significant Industrial Users

Proposed Local Limits

Pollutant of Concern	Current Limit (mg/L)	Proposed Limit (mg/L)
Cadmium	2.8	2.8
Chromium	60	2.52
Copper	45	0.36
Cyanide (free)	1.2	1.2
Lead	14	1.26
Nickel	45	3.89
Zinc	50	3.25
pH	>5.0 and <12.5	>5.0 and <12.5
Total Dissolved Solids (TDS)*	800/550	800/550

* TDS limits for existing and new SIUs

Recommendation

- Adopt Resolution No. 2018-5-1, establishing the Regional Pretreatment Program Local Limits applicable to SIUs.

The Regional Pretreatment Program Local Limits are consistent with **IEUA's Business Goal of Environmental Stewardship** by meeting federal, state and local pretreatment regulations within the IEUA service area and safeguarding public health and the environment.

RESOLUTION NO. 2018-5-1

RESOLUTION OF THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY, A MUNICIPAL WATER DISTRICT, IN SAN BERNARDINO COUNTY, CALIFORNIA, ESTABLISHING LOCAL LIMITS APPLICABLE TO THE REGIONAL SEWERAGE SYSTEM SIGNIFICANT INDUSTRIAL USERS.

WHEREAS, Inland Empire Utilities Agency, a Municipal Water District (“IEUA”) is a municipal water district established pursuant to Section 71000 et seq. of the California Water Code; and

WHEREAS, the Board of Directors of the IEUA, adopted Regional Wastewater Ordinance No. 97, an Ordinance regulating the availability and use of the Regional Sewerage System; and

WHEREAS, section 2.3 of Ordinance No. 97 provides for the establishment and implementation of pollutant limitations that are technically developed as Local Limits pursuant to 40 Code of Federal Regulations 403.5(c); and

WHEREAS, limitations and requirements are necessary to assure compliance with IEUA’s National Pollutant Discharge Elimination System (NPDES) Permit, including the prohibition against pass through of any pollutants that can cause a violation of the NPDES Permit or cause an interference with the IEUA’s Publicly Owned Treatment Works (POTW); and

WHEREAS, pollutant limitations and requirements shall be continually developed as necessary and shall be adopted by Resolution;

NOW, THEREFORE, the Board of Directors of IEUA hereby establishes, determines and orders:

SECTION 1.

The Local Limits applicable to Significant Industrial Users (SIUs) pursuant to the Regional Wastewater Ordinance shall be as follows:

Pollutant of Concern¹	Local Limit (mg/L)²	Type of Limit
Cadmium	2.8	Daily Maximum
Chromium	2.52	Daily Maximum
Copper	0.36	Daily Maximum
Cyanide (free)	1.2	Instantaneous
Lead	1.26	Daily Maximum
Nickel	3.89	Daily Maximum
Zinc	3.25	Daily Maximum
pH	>5.0 and <12.5	Instantaneous
Total Dissolved Solids (TDS) ³	800/550 ⁴	Daily Maximum

Notes:

1. Users subject to Federal Categorical Pretreatment Standards may be required to meet more stringent discharge limitations.
2. mg/L = milligrams per liter;
3. TDS by summation shall be calculated as follows: $(\text{Alkalinity} * 0.6) + \text{Na} + \text{K} + \text{Ca} + \text{Mg} + \text{Cl} + \text{SO}_4 + \text{Silica} + (\text{NO}_3\text{-N} * 4.43) + \text{F}$;
4. TDS limits for existing SIUs/new SIUs. An industry in operation and discharging to the Regional Sewerage System at the time of the Local Limits Resolution 2006-11-4 adoption is considered Existing. Industries not meeting the Existing Industry definition shall be considered a New Industry.

SECTION 2.

The Local Limits established by this Resolution shall become effective immediately and Resolution 2006-11-4 is hereby rescinded in its entirety.

ADOPTED this 16th day of May 2018.

Steven J. Elie
President of the Inland Empire Utilities Agency*
and the Board of Directors thereof

ATTEST:

Jasmin A. Hall
Secretary/Treasurer of the Inland Empire Utilities
Agency* and the Board of Directors thereof

STATE OF CALIFORNIA)
COUNTY OF) SS
SAN BERNARDINO)

I, Jasmin A. Hall, Secretary/Treasurer of the Inland Empire Utilities Agency, DO
HEREBY CERTIFY that the foregoing Resolution being No. 2018-5-1, was adopted at an
adjourned regular Board Meeting on May 16, 2018, of said Agency by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Jasmin A. Hall
Secretary/Treasurer of the Inland Empire
Utilities Agency* and the Board
of Directors thereof

*A Municipal Water District

(SEAL)

**ACTION
ITEM
1G**

Date: May 16, 2018

To: The Honorable Board of Directors

From: Halla Razak, General Manager

HHR

Committee: Engineering, Operations & Water Resources

05/09/18

Finance & Administration

05/09/18

Executive Contact: Chris Berch, Executive Manager of Engineering/AGM

Subject: Fiscal Year 2018-2027 Ten Year Capital Improvement Plan

Executive Summary:

Each year, the Inland Empire Utilities Agency submits a ten year forecast of capacity demands and capital projects called the Ten Year Capital Improvement Plan (TYCIP) to the Regional Technical and Policy Committees. The current TYCIP identifies projects for the fiscal years of 2018-2027 and includes new equivalent dwelling unit forecasts for wastewater connections, wastewater strength and flow forecasts, a description of planned capital projects, including any necessary facility expansions, major asset replacement and rehabilitation, and major capital equipment purchases. Although the TYCIP is a planning level document, it is instrumental in the development of project budgets consistent with the proposed FY 2018-19 amended budget. Major projects in the TYCIP include: construction of wastewater solids handling facility and expansion of liquids treatment at Regional Water Recycling Facility No. 5; asset management projects at Carbon Canyon Wastewater Recycling Facility, Regional Water Recycling Facility No. 4, and throughout the regional sewer system; and groundwater basin improvements per the 2013 Recharge Master Plan Update. The TYCIP has been presented to and approved by the Regional Technical and Policy Committees.

Staff's Recommendation:

Adopt the proposed Fiscal Year 2018-2027 Ten Year Capital Improvement Plan.

Budget Impact *Budgeted* (Y/N): N *Amendment* (Y/N): N *Amount for Requested Approval:*

Account/Project Name:

Fiscal Impact (explain if not budgeted):

Prior Board Action:

On May 18, 2016, the IEUA Board of Directors adopted the Fiscal Year 2016/17 - 2025/26 Ten Year Capital Improvement Plan.

On April 11, 2018, the draft Fiscal Year 2018/19 - 2027/28 Ten Year Capital Improvement Plan was presented to the IEUA Board of Directors.

Environmental Determination:

Not Applicable

Business Goal:

The TYCIP covers many programs and projects that directly align with several Agency Business Goals, including Water Reliability, Wastewater Management, Environmental Stewardship, and Fiscal Responsibility.

Attachments:

Attachment 1 - PowerPoint

Attachment 2 - TYCIP can be viewed at the following link:

<https://www.ieua.org/regional-technical-committee/>

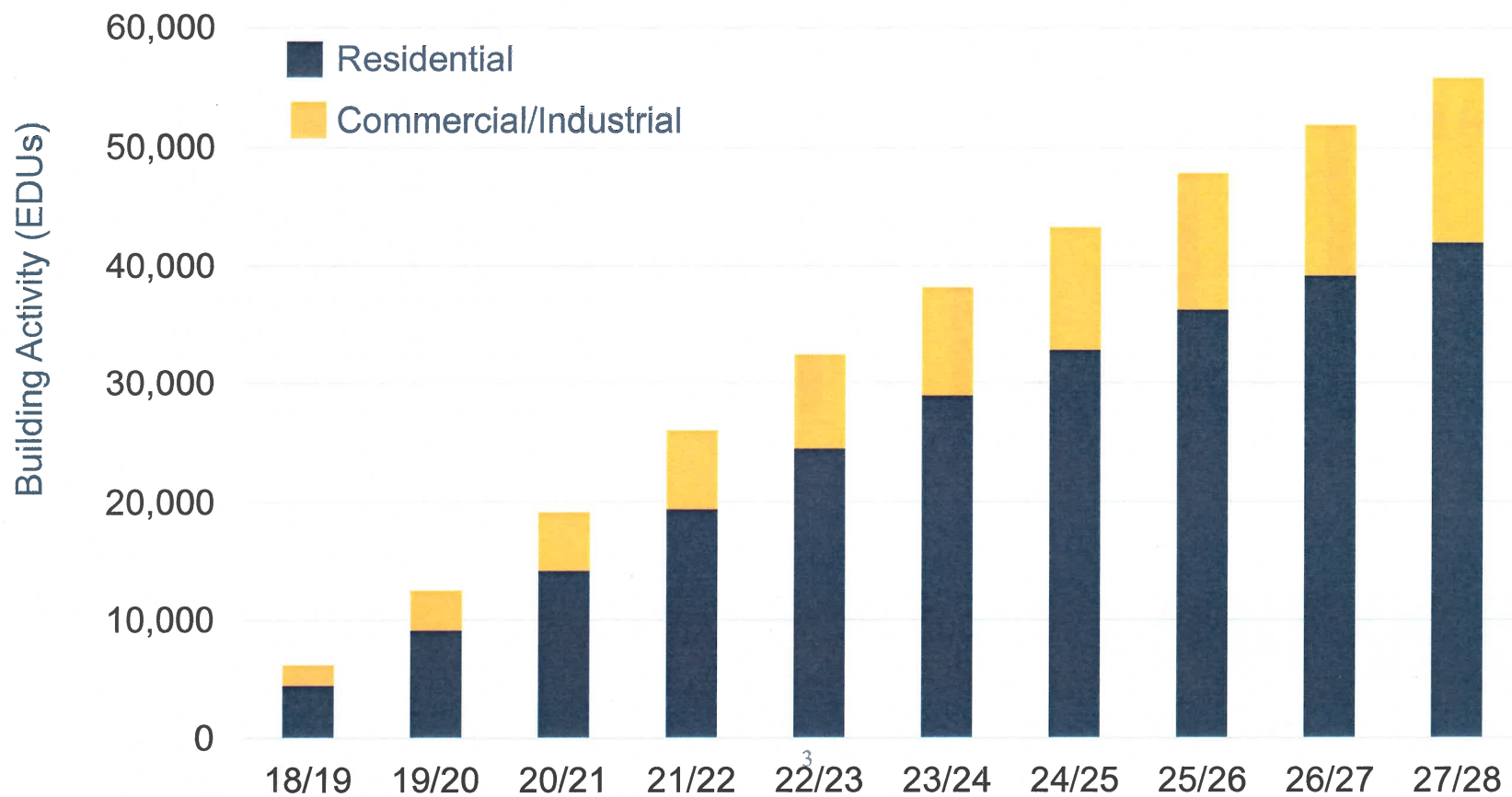
Fiscal Year 2018-2027 Ten Year Capital Improvement Plan



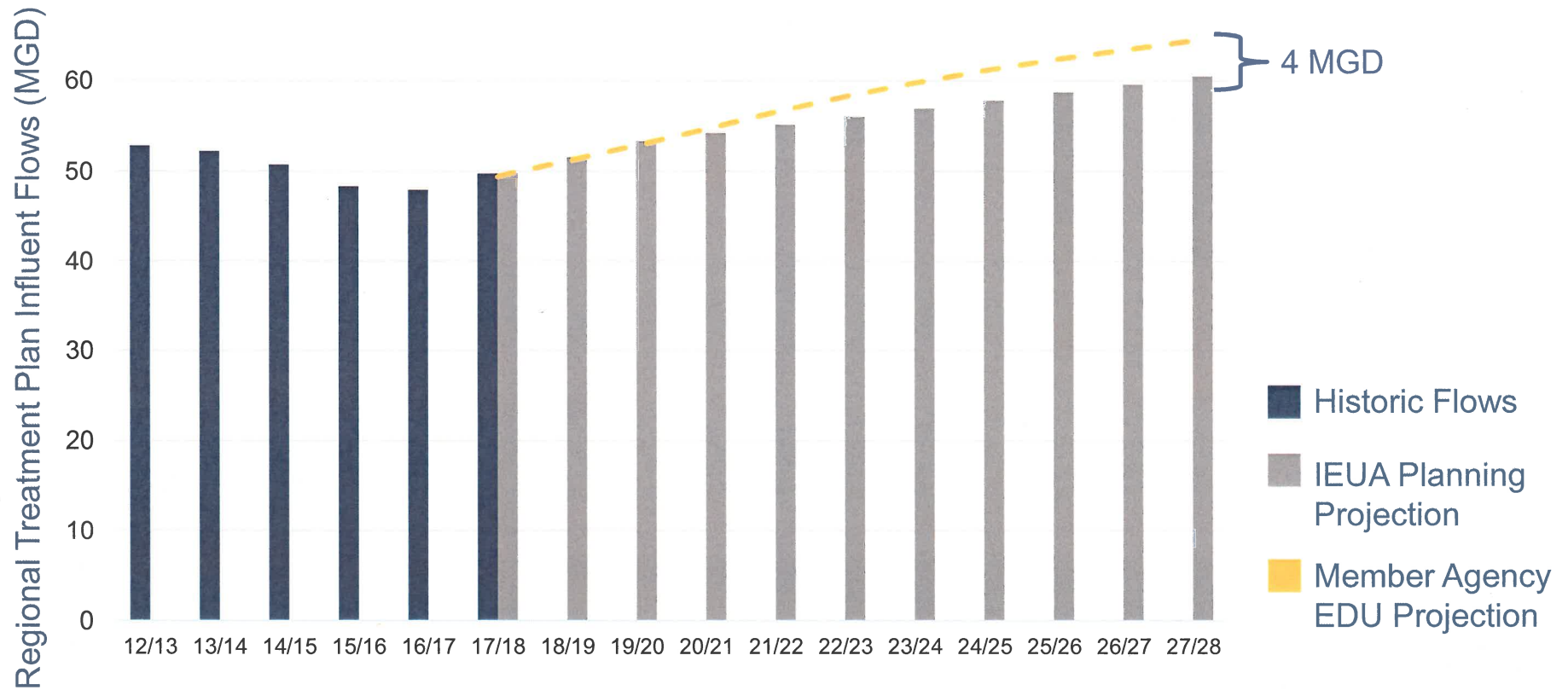
Key Drivers of the Fiscal Year 18/19 Ten Year Capital Improvement Plan

- Member Agency growth projections
- Current wastewater influent flows and concentrations
- Contributing Documents:
 - 2013 Recharge Master Plan Update
 - 2015 Wastewater Facilities Master Plan Update
 - 2015 Recycled Water Program Strategy Update
 - 2015 Energy Management Plan
 - 2016 Integrated Resources Plan
 - 2016 Water Use Efficiency Business Plan

New Equivalent Dwelling Unit (EDU) Forecast (2017 Member Agency Forecast Data - Cumulative)



Fiscal Year 18/19-27/28 Wastewater Flow Projections



Major Treatment Facility Capacity/Expansion Project

Estimated Treatment Plant Expansion Schedule

Ten Year Capital Improvement
Planning Window

Description	15/20	20/25	25/30	30/35	Total Cost
RP-1 Liquids Capacity Recovery			■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	\$182 M
RP-1 Solids Treatment Expansion			■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	\$45 M
RP-2 Decommissioning				■ ■ ■ ■ ■ ■ ■ ■ ■ ■	\$30 M
RP-5 Liquid Treatment Expansion	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■			\$160 M
RP-5 Solids Treatment Facility		■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	\$165 M

Ten Year Capital Improvement Plan Budget Summary

- Fiscal Year 17/18 TYCIP: \$717 Million
- Fiscal Year 18/19 TYCIP: \$716 Million
- No major deviations in capital improvement projects
- Major Capital Projects in the TYCIP:
 - Construction of Regional Treatment Plant No. 5 Solids & Liquids Expansion
 - Regional Treatment Plant No. 1 Capacity Recovery/Expansion Design completion by 2028
 - Includes asset repair and replacement program for all systems

Ten Year Capital Improvement Plan Budget Summary by Fund

Fund Description	FY 18/19 TYCIP Total
Administrative Services Fund	\$13.5 M
Non-Reclaimable Wastewater Fund	\$18.1 M
Regional Capital Wastewater Improvement Fund	\$472.5 M
Regional Wastewater Operations and Maintenance	\$89.1 M
Recharge Water Fund	\$27.3 M
Recycled Water Fund	\$95.0 M
TOTAL	\$715.5 M

Fiscal Year 18/19 Ten Year Capital Improvement Plan Adoption Schedule

- ✓ 3/29/18 Info Item to Tech Committee
- ✓ 4/04/18 Info item to IEUA Committees
- ✓ 4/05/18 Info Item to Policy Committee
- ✓ 4/11/18 Info item to IEUA Board
- ✓ 4/26/18 Action item to Tech Committee
- ✓ 5/03/18 Action item to Policy Committee
- ✓ 5/09/18 Action item to IEUA Committees
- 5/16/18 Action item to IEUA Board



Recommendation

- Adopt the proposed Fiscal Year 2018-2027 Ten Year Capital Improvement Plan.

The TYCIP covers many programs and projects that directly align with several Agency Business Goals, including ***Water Reliability, Wastewater Management, Environmental Stewardship, and Fiscal Responsibility.***

INFORMATION

ITEM

2A

Date: May 16, 2018

To: The Honorable Board of Directors

From: Halla Razak, General Manager

Committee: Engineering, Operations & Water Resources

HH^{AD}
05/09/18

Executive Contact: Chris Berch, Executive Manager of Engineering/AGM

Subject: RP-5 Liquids Treatment Expansion Membrane Bio-Reactor Pre-Selection Request for Proposal Update

Executive Summary:

In January 2018, the RP-5 Expansion Project team conducted the 30% design submittal workshops, a week long event to review the main concepts of the RP-5 Expansion design. With the completion of the 30% design, the project team had an appropriate level of information to begin assembling the Request for Proposals (RFP's) for the pre-selection of the major pieces of equipment for the RP-5 Expansion Project.

On April 3, 2018, IEUA released the RFP for the pre-selection of the Membrane Bio-Reactor (MBR) System for the RP-5 Liquids Treatment Expansion. IEUA will receive the equipment manufacturers proposals for the pre-selection of the MBR system on May 22, 2018. An evaluation team will review the received proposals and evaluate/score them before recommending award by the Board of Directors in July 2018.

The total MBR system cost is anticipated to be in the range of \$15,000,000 to \$20,000,000 and will be part of the contract with the successful general contractor. An initial contract with the equipment supplier, for \$300,000, will be required for engineering services during design to ensure that the equipment is properly incorporated into the project documents.

Staff's Recommendation:

This is an informational item for the Board of Directors.

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval:

Account/Project Name:

EN19001/RP-5 Liquids Treatment Expansion

Fiscal Impact (explain if not budgeted):

None.

Prior Board Action:

On May 17, 2017, IEUA Board of Directors approved a consulting engineering services contract amendment for the design of the RP-5 Liquids Expansion and Solids Treatment Facility to Parsons Water & Infrastructure, Inc., for the not-to-exceed amount of \$17,993,680.

On March 15, 2017, the Board of Directors adopted the RP-1 and RP-5 Expansion Preliminary Design Report.

Environmental Determination:

Program Environmental Impact Report (Finding of Consistency)

Staff is currently completing a Finding of Consistency with IEUA's Program Environmental Impact Report and a CEQA Plus evaluation for potential SRF Loan Funding.

Business Goal:

The RP-5 Liquids Treatment Expansion Project is consistent with IEUA's Business Goal of Wastewater Management, specifically the Water Quality objective that IEUA will ensure that Agency systems are planned, constructed, and managed to protect public health, the environment, and meet anticipated regulatory requirements.

Attachments:

Attachment 1 - Background

Attachment 2 - PowerPoint

Attachment 3 - RFP [Click to Download](#) for the pre-selection of the MBR System for the RP-5 Liquids Expansion

RP-5 Liquids Treatment Expansion Project

Membrane Bio-Reactor Pre-Selection Request for Proposal Update

Project No. EN19001



Jason Marseilles, P.E.
May 2018

Membrane Bio-Reactor Request for Proposal Background

Preliminary Design Report Outlined Process for Pre-Selection of Major Equipment:

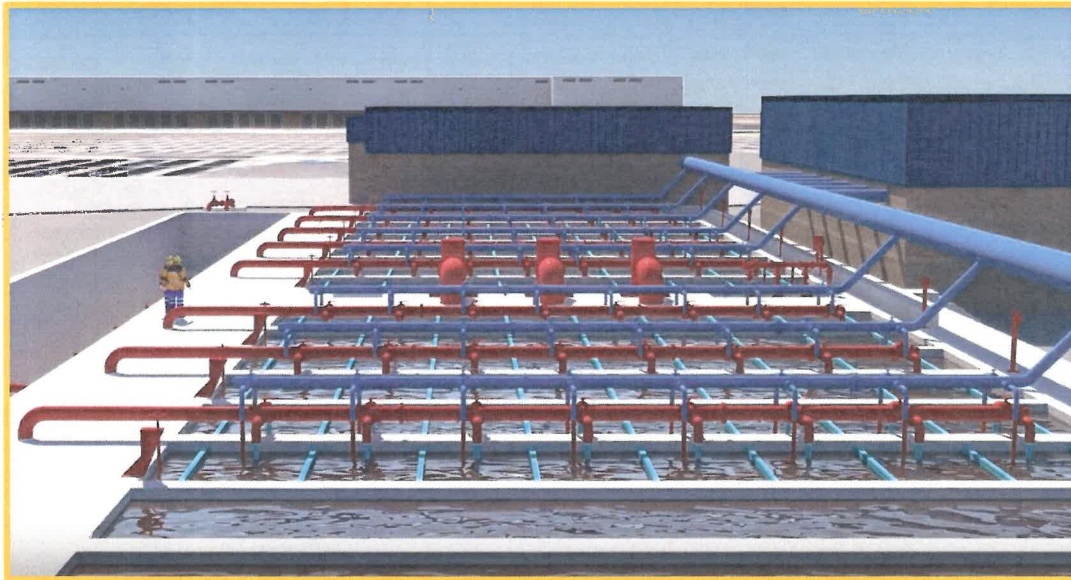
- Aeration Diffusers
- Aeration Process Blowers
- Dewatering Centrifuges
- Fine Screens
- **Membrane Bio-Reactor (MBR) System**
- Rotary Drum Thickeners
- Ultraviolet (UV) Disinfection System



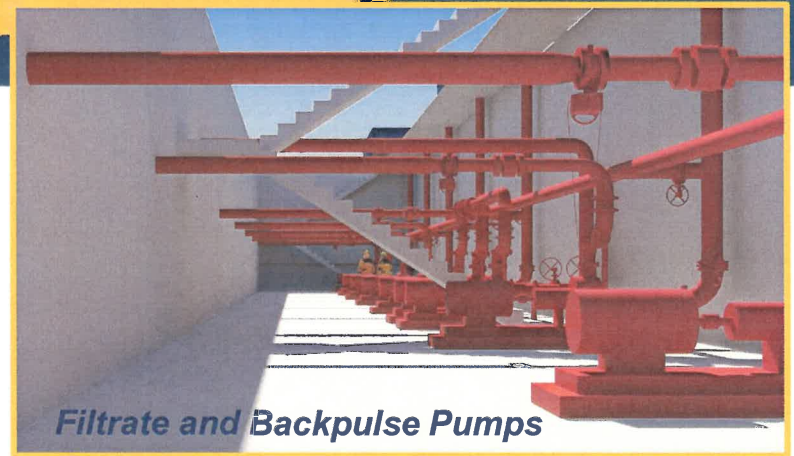
Membrane Bio-Reactor Location



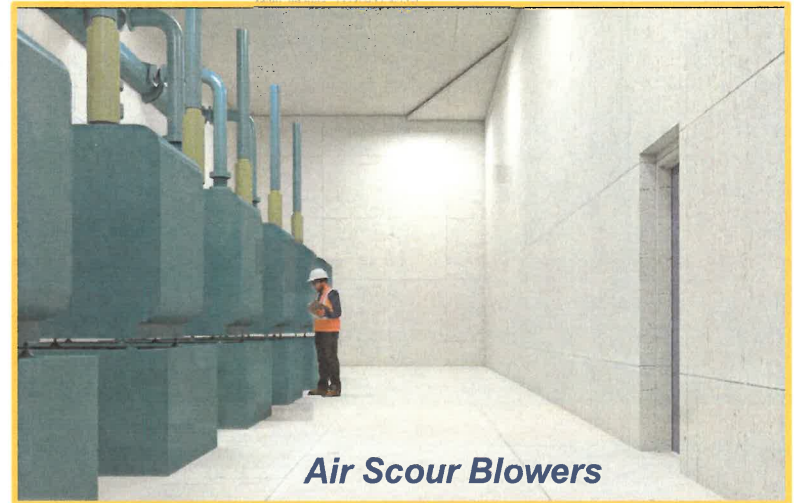
Membrane Bio-Reactor Scope of Supply



Membranes, Filtrate Piping, and Air Scour Piping



Filtrate and Backpulse Pumps



Air Scour Blowers

Membrane Bio-Reactor Request for Proposal Details

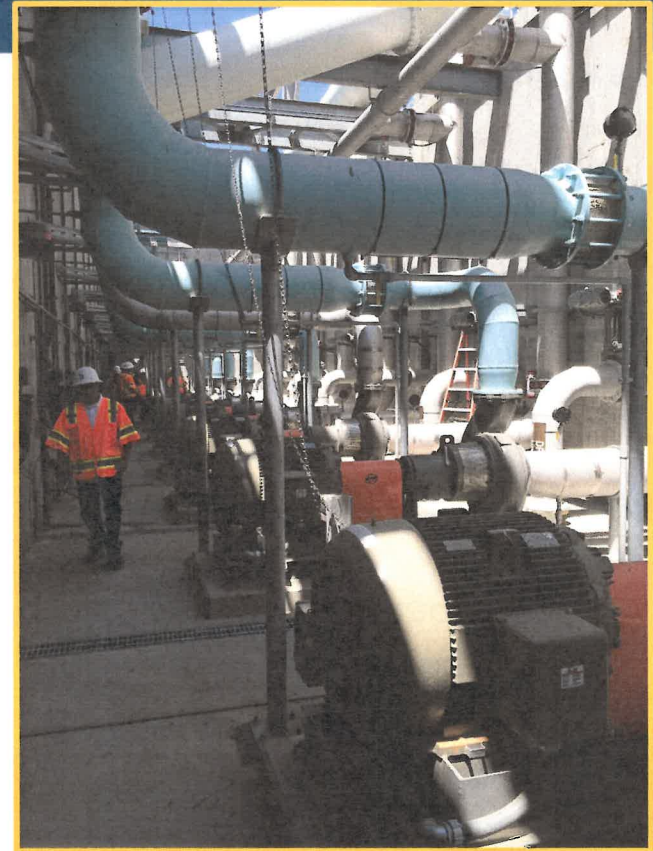


*Visalia Water Recycling Facility
Membrane Bio-Reactor System*

- Pre-Selection Agreement
 - Price Guarantee
 - Purchase through General Contractor
- Selection Criteria
 - Capital Cost
 - Life Cycle Cost
 - Experience and Qualifications
- Qualifications
 - (3) 10 MGD Installs Worldwide with (2) Years Operation
 - (1) 3 MGD Install in US/Canada with (5) Years Operation

Membrane Bio-Reactor Request for Proposal Details (Continued)

- Warranty
 - 10 Years for Membranes
 - 5 Years for Equipment
- Optional Maintenance Service Contract
 - 5 to 20 Years
- Future Membrane Price Guarantee
- Performance Guarantee
 - Water Quality
 - Equipment Performance



*Visalia Water Recycling Facility
Pump Dry Well*

Membrane Bio-Reactor Cost and Schedule

Membrane Bio-Reactor Milestones	Date
Design	
RFP Release	April 3, 2018
Proposal Due Date	May 22, 2018
Board Award	July 18, 2018
Submittals Due	January 2019
RP-5 Expansion Design Completion	June 2019
Construction	
Construction Contract Award	December 2019
Phase I System Startup	July 2021
Phase II System Startup	August 2022
Construction Completion	December 2022

- Engineering Services During Design: \$300k Stipend
- Total MBR System Cost: \$15-\$20M (Equipment, Materials, Controls, & Start-up)
- Costs are within the RP-5 Liquids Treatment Expansion Budget

The RP-5 Liquids Treatment Expansion Project is consistent with **IEUA's Business Goal of Wastewater Management**, specifically the Water Quality objective that IEUA will ensure that Agency systems are planned, constructed, and managed to protect public health, the environment, and meet anticipated regulatory requirements.

INFORMATION

ITEM

2B

Operations Division Update

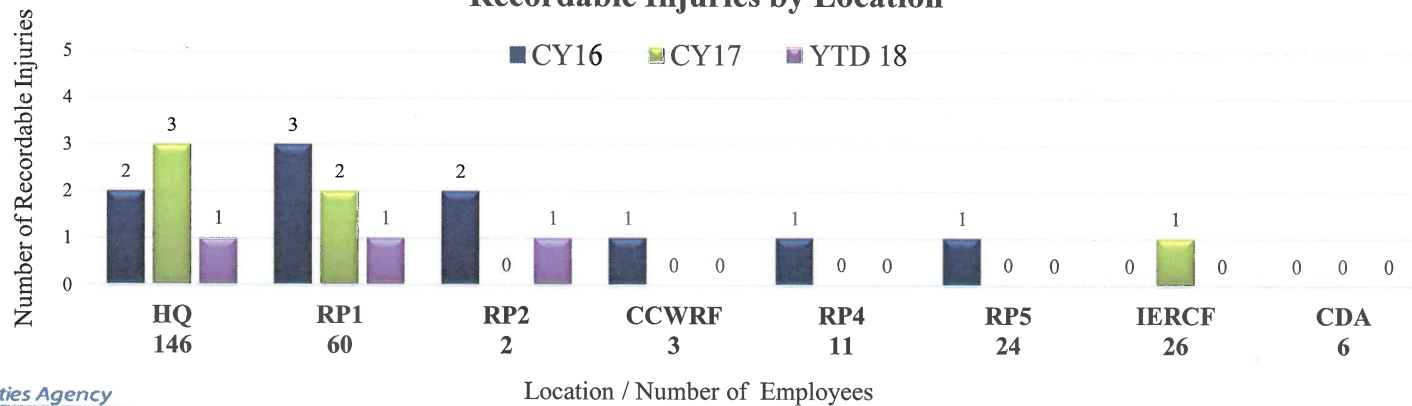


Safety

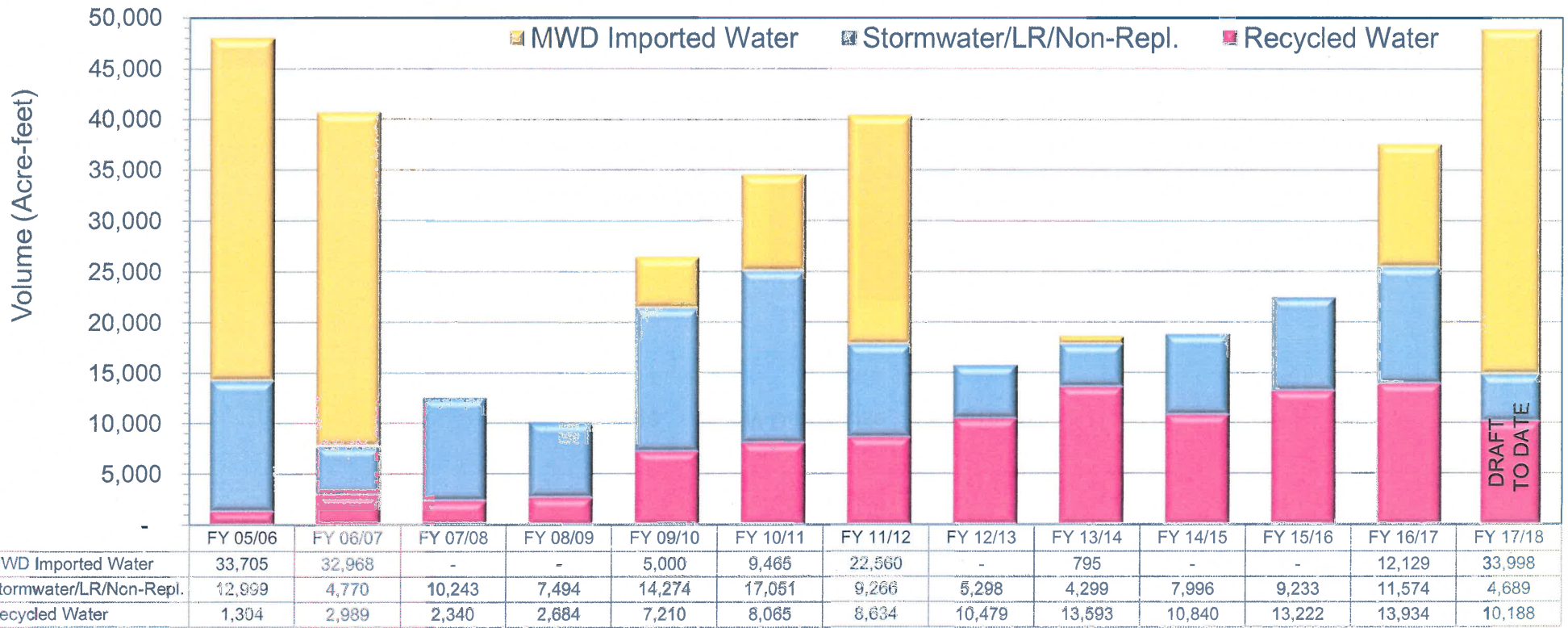
Inland Empire Regional Composting Facility celebrated 7th year of no loss time incidents



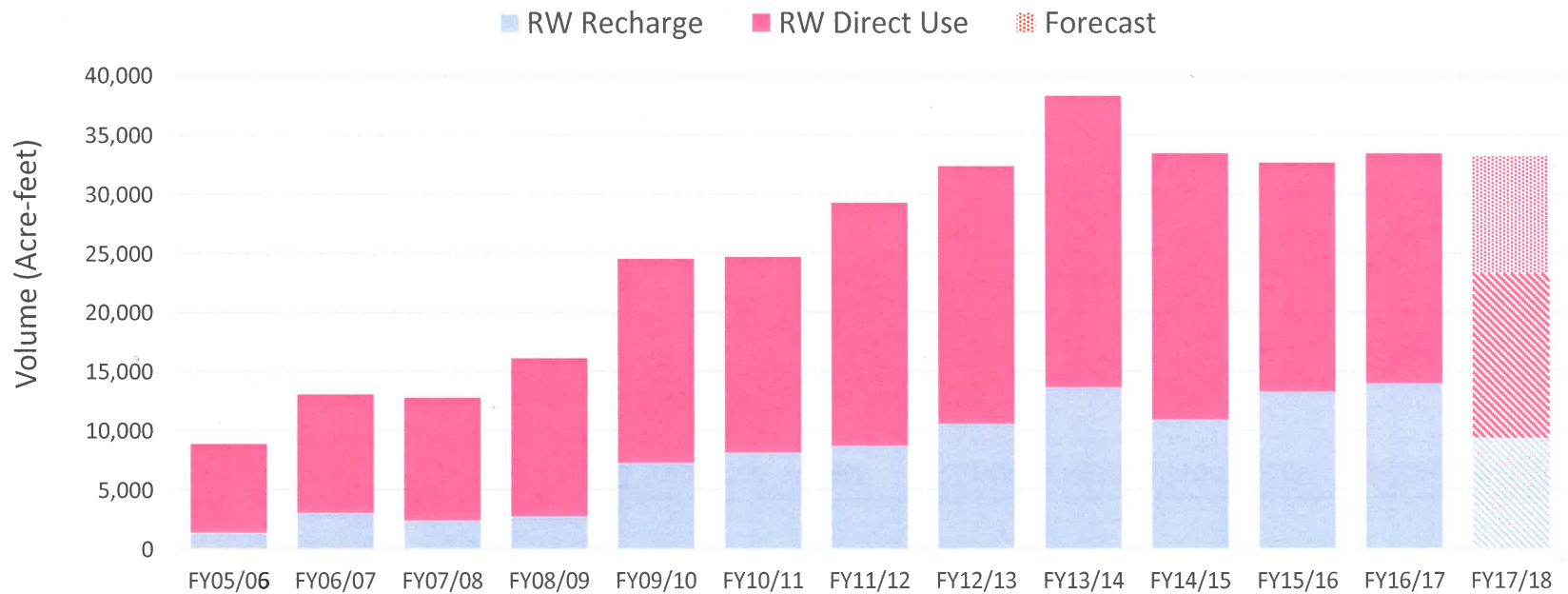
Recordable Injuries by Location



Groundwater Recharge

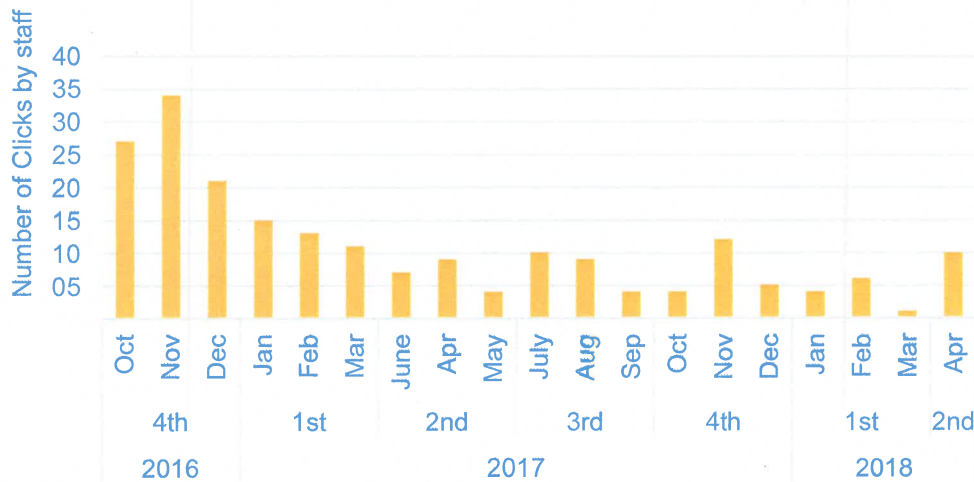


Recycled Water Delivery



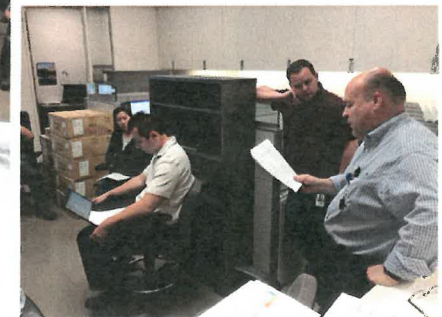
Integrated Systems Services (ISS) Network Security and Disaster Recovery

IEUA Phishing Report

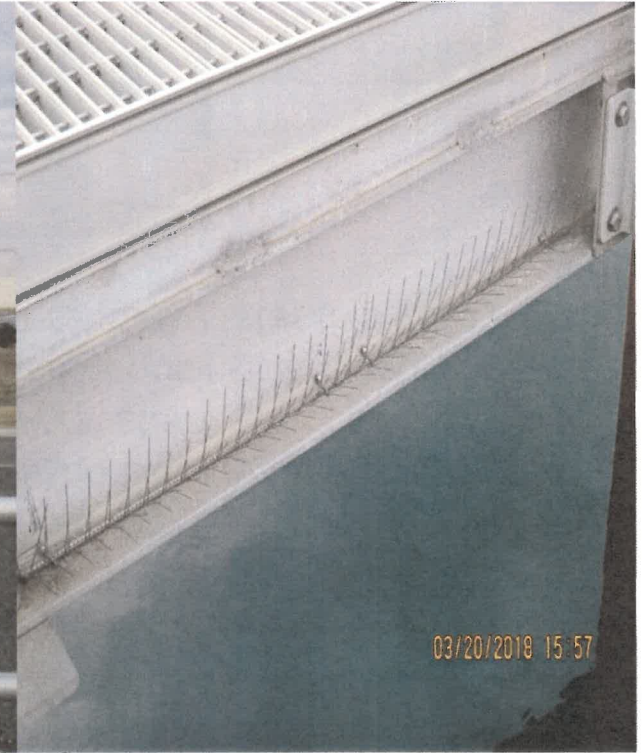


- Continued monthly phishing campaign and training for employees

- Performed semi-annual disaster recovery training for the Supervisory Control And Data Acquisition (SCADA) system
- Will conduct business network disaster recovery later this year



Nesting Bird Mitigation at RP-5



Outreach

- Touch-A-Truck Charity Event
 - Collections' Gap-Vax Truck Displayed
 - Charity Raised Over \$2,000



INFORMATION

ITEM

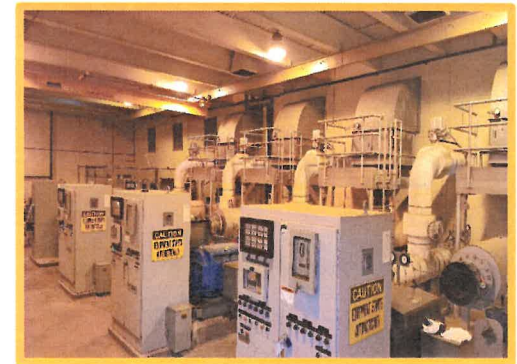
2D

Engineering and Construction Management Project Updates



EN17006 – Carbon Canyon Water Recycling Facility Asset Management and Improvements

- **Project Goal:** Provide improvements to the preliminary, primary, and secondary treatment processes
- **Current Phase:** Predesign
- **Design Engineer:** CDM Smith
- **Contract Amount:** \$3.6 M
 - Amendments: \$0/0.0%
- **Total Project Budget:** \$23.4 M
- **Project Completion:** September 2021
- **Percentage Complete:** 15%
- **Current Activities:**
 - Predesign and peer review



Aeration Blowers: End of Service Life, No Back-Up



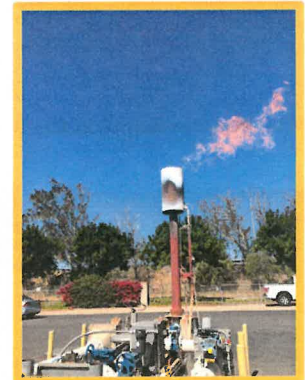
Gate Upstream of Headworks: Failed to Open

EN18006 – Regional Water Recycling Plant No. 1 Flare Improvements

- **Project Goal:** Compliance, safety, performance, and reliability
- **Current Phase:** Design
- **Design Engineer:** Lee & Ro, Inc.
- **Contract Amount:** \$378 K
 - Amendments: \$0/0.0%
- **Total Project Budget:** \$5.38 M
- **Project Completion:** November 2019
- **Percentage Complete:** 15%
- **Current Activities:**
 - Evaluation of flare layout alternatives
 - Review code compliance, maintenance access



Aereon Flares – City of Riverside



RP-1 Candlestick Flare

EN14042 – Regional Water Recycling Plant No. 1 1158 Recycled Water Pump Station Upgrades

- **Project Goal:** Increase pump capacity for enhanced recycled water delivery
- **Current Phase:** Design
- **Design Engineer:** Stantec
- **Contract Amount:** \$428 K
 - Amendments: \$106,518/19.9%
- **Total Project Budget:** \$7.9 M
- **Project Completion:** December 2019
- **Percentage Complete:** 40%
- **Current Activities:**
 - 85% design phase
 - Contractor prequalification



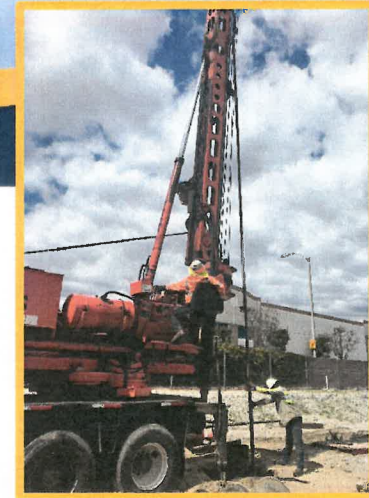
RP-1 Recycled Water Pumps



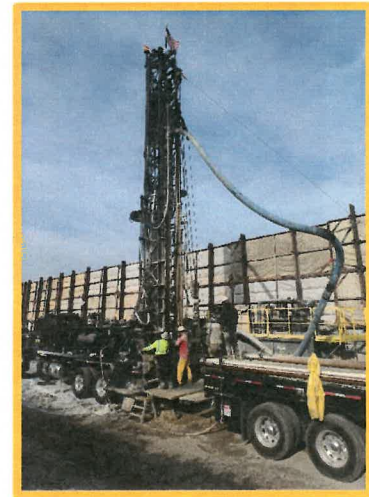
RP-1 Recycled Water Surge Tanks

EN17067 - Declez Monitoring Well Project

- **Project Goal:** Maintain regulatory requirements for ground water recharge
- **Current Phase:** Construction
- **Contractor:** Yellow Jacket Drilling
- **Contract Amount:** \$243 K
 - Agency Requested: \$0/0%
 - Changed Conditions: \$0/0%
- **Total Project Budget:** \$400 K
- **Project Completion:** April 2018
- **Percentage Complete:** 95%
- **Current Activities:**
 - Install well pump, level transducer, and vault cover



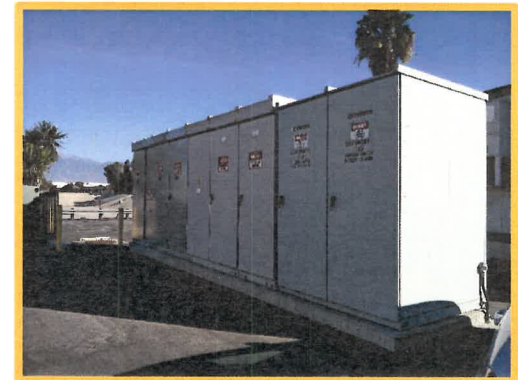
Initial Drilling to Install 50-foot Casing



Main Rig to Drill to 350-feet

EN13048 – Regional Water Recycling Plant No. 1 Power System Upgrades Phase II

- **Project Goal:** Expand the power system at RP-1
- **Current Phase:** Construction
- **Contractor:** Henkels & McCoy
- **Contract Amount:** \$358,813
 - Agency Requested: \$0/0%
 - Changed Conditions: \$0/0%
- **Total Project Budget:** \$1.6 M
- **Project Completion:** October 2018
- **Percentage Complete:** 10%
- **Current Activities:**
 - Pre-construction and shop drawing review



12-KV Switchboard will be Expanded



Outdated 480V Switchboard Board will be Replaced

EN17014 – Non Reclaimable Wastewater System Manhole Upgrades

- **Project Goal:** Replace nine deteriorated manhole frames and covers
- **Current Phase:** Project acceptance
- **Contractor:** Ferreira Construction
- **Contract Amount:** \$82 K
- **Change Orders:** \$0/0%
 - Agency Requested: \$0/0%
 - Changed Conditions: \$0/0%
- **Total Project Budget:** \$350 K
- **Project Completion:** February 2018
- **Percentage Complete:** 100%
- **Current Activities:**
 - Notice of Completion was filed
 - Labor compliance audit was requested



New Concrete Manhole Collar



New GMI Manhole Installation