



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

**WEDNESDAY, JUNE 8, 2016
10:00 A.M.**

*Or immediately following the
Public, Legislative Affairs, and Water Resources
Committee Meeting*

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 Biosolids Management Committee meeting minutes from the May 11, meeting.

B. PUMP EFFICIENCY IMPROVEMENTS PROPOSAL REJECTION

It is recommended that the Committee/Board reject the April 12, 2016, proposals for the construction of the Agency-Wide Pump Efficiency Improvements, Project No. EN16070.

C. RP-2 MICROTURBINE PROPOSAL REJECTION

It is recommended that the Committee/Board reject the November 17, 2015, proposal from Regatta Solutions to design and build a microturbine at Regional Plant No. 2.

D. CONTRACT AWARD TO POLYDYNE INC. FOR FLOSPERSE 30S

It is recommended that the Committee/Board:

1. Approve Contract No. 4600002106 to Polydyne Inc., establishing a two-year contract for the supply of Flosperser 30S with options for three additional one-year extensions, for a potential total contract term for five years; and
2. Authorize the General Manager to execute the contract with the three potential contract extensions.

E. PURCHASE OF DEWATERING POLYMER BLENDING UNITS

It is recommended that the Committee/Board:

1. Authorize the single source procurement of new polymer blending units and start up services for Regional Water Recycling Plant No. 1 (RP-1) from Velocity Dynamics, LLC for a not-to-exceed amount of \$172,000 (including tax and delivery); and
2. Authorize the General Manager to execute the purchase.

2. INFORMATION ITEM

A. ENGINEERING AND CONSTRUCTION MANAGEMENT MONTHLY UPDATE (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: 

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, June 2, 2016.

for 
April Woodruff

**ACTION
ITEM
1A**



MINUTES

**ENGINEERING, OPERATIONS, AND BIOSOLIDS MANAGEMENT
COMMITTEE MEETING
INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS, CHINO, CA**

**WEDNESDAY, MAY 11, 2016
10:00 A.M.**

COMMITTEE MEMBERS PRESENT

Michael Camacho, Chair
Terry Catlin

STAFF PRESENT

P. Joseph Grindstaff, General Manager
Chris Berch, Executive Manager of Engineering/AGM
Christina Valencia, Chief Financial Officer/AGM
Randy Lee, Executive Manager of Operations/AGM
Ernest Yeboah, Executive Manager of Operations/AGM
Pietro Cambiaso, Supervisor-Environmental Compliance & Energy
Nel Groenveld, Manager of Laboratories
Jason Gu, Grants Officer
Elizabeth Hurst, Environmental Resources Planner
Sylvie Lee, Manager of Planning and Environmental Resources
John Scherck, Acting Deputy Manager of Engineering
Shaun Stone, Manager of Engineering
Jamal Zughbi, Senior Engineer
April Woodruff, Board Secretary/Office Manager

OTHERS PRESENT

Tom Dodson, Tom Dodson & Associates

The meeting was called to order at 10:06 a.m. There were no public comments received or additions to the agenda.

ACTION ITEMS

The Committee:

- ◆ Approved the Engineering, Operations, and Biosolids Management Committee meeting minutes of April 13, 2016.
- ◆ Recommended that the Board:
 1. Approve the construction contract award for the Water Quality Laboratory, Project No. EN15008, to Kemp Bros. Construction, Inc., in the amount of \$17,460,000;
 2. Approve a total project budget amendment in the amount of \$3,745,000, which

will increase the total project budget from \$20,900,000 to \$24,645,000;

3. Authorize the Agency to request an increase to the current SRF Loan Agreement in the amount of \$7,545,000; and
4. Authorize the General Manager to execute the construction contract, budget amendment, and required loan documents;

as an Action Item on the May 18, 2016 Board meeting agenda.

◆ Recommended that the Board:

1. Approve the electricity amendment with Shell Energy North America (SENA) US, L.P. through December 31, 2016, to purchase 1.5 megawatts (MW) of electricity per hour at a variable rate;
2. Approve the natural gas amendment with SENA US, L.P. through May 31, 2017, to purchase 200 MMBtu per day of natural gas at a variable rate; and
3. Authorize the General Manager to finalize and execute the amended agreements, and negotiate further amendments for up to three additional years;

as a Consent Item on the May 18, 2016 Board meeting agenda.

◆ Recommended that the Board:

1. Approve the amendment to the Master Service Contract No. 4600000900 with EnerNOC, Inc. for provision of demand response services, including sub-metering data management; and
2. Authorize the General Manager to finalize and execute the contract amendment;

as a Consent Item on the May 18, 2016 Board meeting agenda.

◆ Recommended that the Board approve the proposed Fiscal Year (FY) 2016/17 through 2025/26 Ten-Year Capital Improvement Plan (TYCIP);

as an Action Item on the May 18, 2016 Board meeting agenda.

INFORMATION ITEMS

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

- ◆ Engineering and Construction Management Monthly Update

GENERAL MANAGER'S COMMENTS

General Manager Joseph Grindstaff announced that Mr. Randy Lee has been selected as the Executive Manager of Operations/AGM effective May 8, 2016.

COMMITTEE MEMBER COMMENTS

There were no Committee Member comments.

COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

There were no Committee Member requested future agenda items.

With no further business, Director Camacho adjourned the meeting at 10:35 a.m.

Respectfully submitted,

April Woodruff
Board Secretary/Office Manager

*A Municipal Water District

APPROVED: JUNE 8, 2016


**ACTION
ITEM
1B**





Date: June 15, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (6/08/16)
Finance, Legal, and Administration Committee (6/08/16)

From:  P. Joseph Grindstaff
General Manager

Submitted by: Chris Berch 
Executive Manager of Engineering/Assistant General Manager

Shaun J. Stone 
Manager of Engineering

Subject: Pump Efficiency Improvements Proposal Rejection

RECOMMENDATION

It is recommended that the Board of Directors reject the April 12, 2016, proposals for the construction of the Agency-Wide Pump Efficiency Improvements, Project No. EN16070.

BACKGROUND

As part of the Agency-Wide Energy Efficiency Study Project, IEUA staff has been working with The Energy Network (TEN) and the Water Infrastructure and System Efficiency (WISE) Program to identify opportunities to reduce total electricity usage and costs. Pumping facilities are one of the main elements that consume a substantial amount of power during operations. Agency staff worked with Southern California Edison (SCE) to conduct several pump performance tests at all sites. The tests found that a total of eleven (11) pumps; three (3) wastewater and eight (8) recycled water are in need of repairs or replacement.

On March 22, 2016, the Agency solicited cost proposals (RFP-RW-16-006) from five (5) pre-qualified contractors to provide overhaul services and/or replacement of the above-referenced pumps. On April 12, 2016, the Agency received two (2) cost proposals; one of which was deemed non-responsive for failure to complete the bid forms and the other was slightly higher than the Engineer's Estimate. Due to the limited number of responses and the elevated price, staff recommends the rejection of the proposals received.

The following is the anticipated schedule moving forward:

Project Milestone	Date
Rejection of Proposals	June 15, 2016
Construction Contract Award (based on re-advertising)	August 17, 2016
Construction Completion	April 2017

The rejection of the proposals for the Agency-Wide Pump Efficiency Improvements Project is consistent with the *Agency's Business Goal of Business Practices* by applying ethical, fiscally responsible, and environmentally sustainable principles to all aspects of business and organizational conduct.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

PJG:CB:SS:aa

**ACTION
ITEM
1C**

Date: June 15, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, & Biosolids Management Committee (06/08/16)
Finance, Legal & Administration Committee (06/08/16)

From: *for* P. Joseph Grindstaff *PG*
General Manager

Submitted by: Chris Berch *CB*
Executive Manager of Engineering/Assistant General Manager

Shaun J. Stone *SJS*
Manager of Engineering

Subject: RP-2 Microturbine Proposal Rejection

RECOMMENDATION

It is recommended that the Board of Directors reject the November 17, 2015, proposal from Regatta Solutions to design and build a microturbine at Regional Plant No. 2.

BACKGROUND

Since 1990, the Inland Empire Utilities Agency (IEUA) has produced renewable energy at Regional Plant No. 2 (RP-2) by fueling a cogeneration engine with digester gas. Due to forthcoming emissions limits imposed by South Coast Air Quality Management District (SCAQMD) Rule 1110.2, the engine will not be able to operate in compliance beyond December 2017. In anticipation of the engine shutdown, IEUA evaluated alternative technologies that could comply with environmental regulations while beneficially and cost effectively utilizing the digester gas produced on site.

The impact of RP-2's future decommissioning was heavily considered when evaluating the various alternatives. Initial analysis indicated that replacing the engine with a digester gas-fueled microturbine was the most cost effective option. Research on the microturbine and initial engineering estimates indicated that the technology could achieve a return on investment (ROI) within the remaining life of RP-2. On October 20, 2015, IEUA issued RFP-RW-15-083 for the Installation of a Microturbine Power Plant at RP-2. Regatta Solutions was the only vendor to respond to the RFP, with a proposed installation cost of \$3,112,450.

RP-2 Microturbine Proposal Rejection

June 15, 2016

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The November 2015 proposal from Regatta included equipment purchase and installation costs that were approximately 20 percent higher than the engineering estimate and O&M costs that were approximately 30 percent higher than the engineering estimate. The main source of the increases were additional design considerations to improve portability following RP-2 decommissioning and added assurances in the digester gas cleaning system. With these increased costs, the microturbine installation no longer appeared capable of achieving an ROI within the remaining life of the facility. Staff entered into negotiations with Regatta Solutions to determine if the costs could be reduced.

In April 2016, Regatta Solutions presented a new project assessment with revised costs and incentives. Staff conducted further economic analyses using the updated cost information and determined that the microturbine was still not the best option for digester gas utilization at RP-2.

Staff is requesting the Board of Directors to reject the proposal received in response to RFP-RW-15-083 for Consulting Engineering Services for the Installation of a Microturbine Power Plant at Regional Plant No. 2. The rejection of the proposal for the design-build of a microturbine at Regional Plant No. 2 is consistent with the *Agency's Business Goal of Business Practices* by applying ethical, fiscally responsible, and environmentally sustainable principles to all aspects of business and organizational conduct.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.


PJG:CB:SS:jp

**ACTION
ITEM
1D**

Date: June 15, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (6/08/16)
Finance, Legal, and Administration Committee (6/08/16)

From: *for* P. Joseph Grindstaff 
General Manager

Submitted by: Randy Lee *RL*
Executive Manager of Operations/Assistant General Manager

Matthew Melendrez *RL for RL MM*
Deputy Manager of Operations

Subject: Contract Award to Polydyne Inc. for Flosperse 30S

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve Contract No. 4600002106 to Polydyne Inc., establishing a two-year contract for the supply of Flosperse 30S with options for three additional one-year extensions, for a potential total contract term of five years; and
2. Authorize the General Manager to execute the contract with the three potential contract extensions.

BACKGROUND

Sewage treatment generally involves solids and liquid treatments processes. At the Agency's water recycling plants, liquid stream goes through biological, filtration, and disinfection treatments to achieve the required Title 22 standard before it is distributed for beneficial reuse. Solids stream goes through thickening, digestion, dewatering, and finally transported to the Inland Empire Regional Composting Facility (IERCF) for composting. During the sludge dewatering process, a very hard mineral called struvite can form and coat the inside of sludge lines and dewatering equipment, reducing equipment capacity and causing failures. This is a common problem encountered in the wastewater industry. Struvite formation is a complex chemical reaction dependent on pH, temperature, pressure, and constituents such as magnesium, ammonium, and phosphate which are abundant in sludge. This issue is found at Regional Water Recycling Plant

No. 1 (RP-1), but not at Regional Water Recycling Plant No. 2 (RP-2). Without treatment, RP-1 experiences substantial struvite build-up. Agency Operations and Maintenance staff have been challenged by struvite formation on sludge dewatering equipment for many years. In 2010, RP-1 started experimenting with the addition of an anti-struvite chemical, which has provided significant benefits in the form of reduced struvite deposits in the dewatering process equipment, fewer disruptions to dewatering operations, and the need for less frequent equipment cleaning.

The current anti-struvite chemical supply contract with Polydyne Inc. will expire on June 30, 2016. On March 28, 2016, a formal Request for Proposal was issued through the PlanetBids online solicitation system to 19 potential bidders. Suppliers were asked to sample RP-1 centrate to perform jar tests and then provide a recommended chemical dose with their proposed price. The bid closed on April 11, 2016 and four suppliers provided proposals:

Supplier	Cost per Year
Univar	\$30,378
Jayne Products	\$44,602
Polydyne Inc.	\$65,456
Thatcher Company	\$105,714

Staff from the Technical Services Department then performed in-house jar tests using the Supplier's recommended dose to determine the best performing product. The results were based on the testing of three constituents; magnesium, phosphorous and total solids. The table below summarizes the results of the testing. Higher numbers indicate better performance.

Supplier	Product	Retained Magnesium	Inhibited Total Solids	Retained Phosphorus
Polydyne Inc.	Flosperse 30S	63%	24%	100%
Thatcher Company	Compliance STR	31%	11%	84%
Univar USA	Carus Struvout	3%	4%	62%
Jayne Products	Struvite Dispersant JS 9310	4%	5%	25%

The results of the jar testing indicated that the product Flosperse 30S, provided by Polydyne Inc., was the superior performer with respect to all three constituents tested. The other three products produced unacceptable results during the jar testing. Polydyne Inc. has been the supplier of anti-struvite chemical for IEUA since 2010 and the performance of their chemical has been acceptable.

Therefore, staff recommends that the Board approve the issuance of a two-year contract to Polydyne Inc. with options for three additional one-year extensions, for a potential total contract

Contract Award to Polydyne Inc. for Flosperse 30S

June 15, 2016

Page 3 of 3

term of five years. Currently, IEUA is paying \$0.919 per pound to Polydyne Inc. for the same Flosperse 30S product. The proposed price of \$0.875 represents a 5% decrease.

Awarding the contract to Polydyne Inc. for Flosperse 30S is in line with the IEUA Business Goal of Wastewater Management to maintain capacity within systems and facilities to meet essential service demands.

PRIOR BOARD ACTION

On June 16, 2010, the Board of Directors awarded a five-year contract to Polydyne, Inc.

On May 20, 2015, the Board of Directors approved an amendment extending the contract for a one-year term.

IMPACT ON BUDGET

If approved, the anticipated chemical expenditures will be funded from the Fiscal Year 2016/17 Regional Wastewater Operations and Maintenance (RO) Flosperse budget.

Contract Award to Polydyne Inc. for Flosperse 30S June 2016

Matthew Melendrez
Deputy Manager of Operations
Randy Lee
Executive Manager of Operations/AGM

Struvite

- * Struvite is a phosphate mineral containing several constituents commonly found in wastewater.



Struvite Formation

* Struvite deposits restrict and plug flow in pipelines, valves, pumps, etc.



Pump Impeller



Struvite Control With Flosperse 30S

- * Flosperse 30S is used at RP-1 to control struvite deposits in dewatering processes
- * Flosperse greatly mitigates struvite deposits
- * There have been no struvite related failures since dosing Flosperse



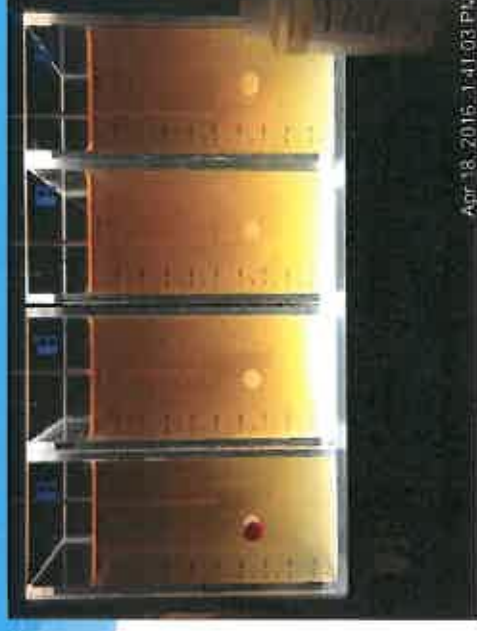
Chemical Trial RFP

* Staff issued an RFP for Anti-Struvite Chemical and received four proposals

Supplier	Cost per Year
Univar	\$30,378
Jayne Products	\$44,602
Polydyne Inc.	\$65,456
Thatcher Company	\$105,714

Jar Testing

* Technical Services staff performed jar testing to determine effectiveness of proposed chemicals



Supplier	Product	Retained Magnesium	Inhibited Solids	Total Solids	Retained Phosphorus
Polydyne Inc.	Flospense 30S	63%	24%	100%	100%
Thatcher Company	Compliance STR	31%	11%	84%	84%
Univar USA	Carus Struvout	3%	4%	62%	62%
Jayne Products	Struvite Dispersant JS 9310	4%	5%	25%	25%

* Higher number indicates more favorable result

Recommendation

- * Staff recommends Board approval of a new two-year contract with options for three additional years with Polydyne, Inc. for Flosperse 30S

- * \$0.875/pound including tax and delivery

- * Approximately 5% decrease from current price of \$0.919/pound



Supports the Agency's business goal of Wastewater Management to maintain capacity within systems and facilities to meet essential service demands.



**CONTRACT NUMBER: 4600002106
FOR
SUPPLY OF FLOSPERSE 30S**

This CONTRACT (Contract), is made and entered into this _____ day of _____, 2016, 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 as Agency) and Polydyne Inc. of Riceboro, Georgia (hereinafter referred to as Supplier) for supply and delivery of Floperse 30S anti-struvite chemical.

NOW, THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties agree as follows:

- A. **CONTRACT ADMINISTRATOR:** All general direction related to this Contract shall come from the designated Contract Administrator. Details of the Agency's assignment are as follows:

Contract Administrator: Roger Hughbanks
Location: 6075 Kimball Ave., Building A
Chino, CA 91710
Telephone: (909) 993-1679
Email: rhughbanks@ieua.org

- B. **SUPPLIER ASSIGNMENT:** Special inquiries related to this Contract and the effects of this Contract shall be referred to the below-listed Supplier Representative:

Supplier Representative: Brent Swanson
Address: 1 Chemical Plant Road
Riceboro, GA 31323
Telephone: (661) 803-2466
E-mail: PolyBidDpt@snfhc.com

- C. **ORDER OF PRECEDENCE:** The documents referenced below represent the Contract Documents. Where any conflicts exist between the general terms and conditions, addenda, attachment(s), or other contractual documents, the governing order of precedence shall be as follows:

1. Amendment(s) to Contract No. 4600002106
2. Contract No. 4600002106
3. Agency's Request for Proposal No. RFP-RH-16-030
4. Supplier's Proposal dated April 7, 2016

- D. **SCOPE OF WORK:** Supplier product, services, and responsibilities shall include and be in accordance with the following:

PRODUCT REQUIREMENTS: The anti-struvite chemical supplied in conjunction with this Contract will be used by the Inland Empire Utilities Agency (IEUA) within its' dewatering facility centrate discharge system located at the Agency's Regional Water Recycling Plants in Chino and Ontario, California.

The anti-struvite chemical delivered by the Supplier must not contain solidified masses and must be in 100 percent solution when mixed. Anti-struvite chemical not meeting this requirement can cause clogging of the Agency's anti-struvite chemical feed system and will be rejected back to the Supplier at the Supplier's expense.

The selected Supplier shall provide detailed instructions as to the proper procedures for feeding the anti-struvite chemical for use in the Agency's dewatering facility centrate discharge system process and shall also provide any necessary assistance, including conveyance of theory and control philosophy, for setting up the feeding systems. In addition, the Supplier shall provide any specialized equipment necessary to feed the anti-struvite chemical into the dewatering facility centrate discharge system process; such equipment will not include the mixing/feeding units.

Throughout the entire Contract term, the Supplier shall provide anti-struvite chemical identical to the product supplied during performance testing conducted by the Agency. The anti-struvite chemical will be routinely monitored for the following:

1. Density (lbs/gal)
2. Percent Total Solids
3. Percent Volatile Solids
4. Percent Active Solids

The supplied anti-struvite chemical shall be utilized to inhibit the formation of struvite within the dewatering facility centrate discharge system. The chemical shall be applied at the Supplier's recommended dosage into the dewatering facility centrate sump and into the individual centrifuge centrate discharge points. Agency staff will monitor parameters related to struvite formation as described below:

1. The raw centrate and chemically treated centrate (i.e., centrate dosed with anti-struvite chemical and/or NaOH) will be analyzed for magnesium, phosphorous, and total solids to determine whether the components of struvite are remaining in solution (i.e., not removed from the centrate through struvite formation).
2. pH, TSS, and COD may be measured periodically.
3. Centrate pumping performance, as compared to original pump curves
4. Discharge centrate header performance, by historical flow meter and pressure trends

A reduction of the centrate pump and/or the discharge piping is prohibited at any time during the application of the supplier's anti-struvite chemical. In addition, concentrations of magnesium and/or phosphorous in the treated centrate must stay in solution within the entire length of discharge piping and not precipitate in the form of struvite at any time during the application of the supplier's anti-struvite chemical.

Solution of anti-struvite chemical shall be delivered in 275 gallon tote bins. The Supplier shall supply and install any specialized fittings and equipment necessary to transfer the anti-struvite chemical from the bins to the mixing/feeding units.

Should the Supplier be unable to deliver the requested quantity of anti-struvite chemical consistent with the requirements specified herein, the Agency may purchase anti-struvite chemical on the open market. If the cost of the anti-struvite chemical purchased to replace the successful bidder's product results in increased operating costs, the successful bidder shall be responsible for the Agency's added costs.

The Agency will pay for the actual number of pounds delivered in the tote bins. Packing Slips shall convey the loaded gross weight, empty tare weight and net anti-struvite chemical weight delivered. Pounds invoiced will be the net pounds of anti-struvite chemical delivered (i.e., loaded gross weight minus the empty tare weight). The total weight of the anti-struvite chemical delivered shown on the packing slip shall be identical to the amount invoiced.

A certified laboratory analysis indicating the percent of total solids, percent of volatile solids and percent of active solids must be provided by the Supplier with each delivery. The laboratory analysis must accompany the delivery notice (packing slip). The laboratory analysis must indicate any product that is delivered containing less percent of dry solids than has been specified. Periodic quality control tests will be performed by the Agency on the delivered product to ensure that Contract specifications are maintained and reported quality is accurate. Continued discrepancies of delivered product will result in back charges to the Supplier for all resultant extra costs incurred by the Agency and may result in contract termination.

All anti-struvite chemical delivered in conjunction with this contract shall comply in all respects with federal, state, and local regulations in effect at the time of delivery.

ESTIMATED QUANTITIES: It is envisioned that the selected Supplier shall provide all anti-struvite chemical to be used by the Agency's Regional Water Recycling Plants No. 1 and No. 2 dewatering facility centrate discharge systems during the term of the Contract. The Agency's annual anti-struvite chemical usage will be based on historical data and Supplier's chemical information as detailed below:

1. Anti-Struvite chemical will be applied at the Supplier's recommended dosage.
2. RP-1's average daily centrate flow of 330,000 gallons per day (calendar year 2015).
3. Percent Active Solids of anti-struvite chemical as provided by the Supplier
4. Density of anti-struvite chemical as provided by the Supplier

However, the Agency shall not be obligated to purchase any specific minimum nor maximum quantities and reserves the right to purchase either more or less product based on the facility's Solids Loading Rate and the effectiveness/efficiency of the selected anti-struvite chemical product, at the agreed upon firm-fixed unit price established by the Contract.

SHIPPING INSTRUCTIONS: Shipments shall be made within three calendar days subsequent to the Supplier's receipt of either a verbal or written shipping order from the Agency. Orders will be placed on an as-needed basis to suit the Agency's requirements throughout the Contract period. Deliveries shall be made between the hours of 7:00 a.m. and 1:00 p.m., Monday through Friday only.

DELIVERY LOCATIONS: Anti-struvite chemical shall be delivered to the following locations, as designated at the time of order placement:

Inland Empire Utilities Agency
Regional Plant No. 1
2662 E. Walnut Avenue
Ontario, CA 91761

Inland Empire Utilities Agency
Regional Plant No. 2
16400 El Prado Road
Chino, CA 91708

The Agency reserves the right to add any additional delivery destinations, within its' designated service area, as may subsequently be required. Any added location(s) shall receive the same product, service, pricing, etc. as required by the Contract.

LOADING AND UNLOADING: Upon arrival, the delivery person will report to the Agency facility's clerk; upon notification, an Agency operator will observe and approve all loading and unloading of shipments. The Supplier shall allow a reasonable period of time (up to one hour) between notification

to the clerk and approval by Agency operators to unload shipment. Procedures for loading and unloading of all shipments shall comply with Cal-OSHA and AWWA Standards. Loading and unloading of all shipments will not commence without an Agency Operator present. The Supplier's delivery equipment must be fully compatible with Agency facilities and equipment. Deliveries shall be executed without any spillage of material. Any spilled material, however minor, shall immediately be contained and properly removed by the Supplier. Any damage or disfigurement to Agency property caused by a spill, or the loading process, shall be corrected by the Supplier immediately, at the Supplier's expense.

The Supplier shall be responsible for the pick-up of "empty" totes at the request of the Agency; the collection of totes will be at no additional expense to the Agency. "Empty" totes may contain a residual amount of anti-struvite chemical; the Agency shall not be held accountable for completely cleaning and emptying the anti-struvite chemical totes prior to Supplier pick-up. The Agency shall not be responsible for damage to totes sustained during delivery or pick-up process.

PRODUCT SAMPLE: The Agency may require, on an as needed basis, that a sample of the product delivered be collected by Agency personnel prior to unloading. The amount of sample required will be approximately half a pint. Supplier's tote must accommodate the collection of the sample without causing spilling or splashing of product.

TERMINATION: The Agency may reject delivery or terminate the Contract, if: the quality of the delivered anti-struvite chemical does not meet Contract specifications; the quality of the delivered product deteriorates; the delivered product is different from the product that was tested during the trial testing period; or the performance of the delivered product is significantly different from the performance of the product during the trial testing period. In the event delivered product is rejected for failure to meet Contract specifications, it shall be the sole responsibility of the Supplier to immediately remove said product and provide acceptable replacement product at the sole expense of the Supplier. In that event, the Supplier shall, at the Supplier's expense, support the Agency's operation through provision of temporary facilities. Temporary facilities shall include installed anti-struvite chemical storage tanks, pumps, piping, and miscellaneous appurtenances. Further, all costs for removal, replacement, and temporary facilities for such replacement product shall be the responsibility of the Supplier. The Agency may terminate the Contract should two or more deliveries be rejected in a one year period.

EMERGENCY TELEPHONE NUMBER: The Supplier shall provide a telephone number(s) where a representative of the Supplier may be contacted 24 hours a day, seven days a week in the event of an emergency.

SAFETY DATA SHEETS: The Supplier shall provide two copies of the selected product's Safety Data Sheet (SDS) to the Agency's Contract Administrator upon execution of any Contract entered into, and upon any update or revision to the SDS document. Also, the SDS shall be made available for the Agency to copy at the time of each delivery.

SAFETY TRAINING: The successful bidder shall provide training in the safe and proper handling procedures of their product and emergency kits, if so requested by the Agency. If requested, training shall be provided up to twice per calendar year. This training shall be provided at the Agency's Regional Plants, as required. The training shall be provided at no additional expense to the Agency.

- E. TERM OF CONTRACT AND OPTIONS:** The term of this Contract shall run from the date of its bilateral execution through June 30, 2018 or as mutually agreed to between the Supplier and Agency in any written extension to the Contract. Additionally, the Supplier shall agree to allow the Agency, at the Agency's sole discretion, to extend this Contract, in twelve month increments, for an additional period not-to-exceed 36 months; resulting in the potential for a total Contract term of five years. In the event the Agency desires to exercise any or all of the Contract extension options provided for in this Section, the Agency shall provide written notice to the Supplier, prior to the expiration of the original Contract term or any extension thereof.

F. **PRICE ADJUSTMENTS:** In the event the Agency exercises any of the Contract extensions provided for in Section E above, pricing for said extension shall be calculated as follows:

Commencing on July 1, 2018 and continuing on each July 1st thereafter, those prices provided for in Section G of this Contract shall be adjusted plus or minus by a sum equal to the percentage change in the Consumer Price Index (CPI) for All Urban Consumers, in the Los Angeles-Riverside-Orange County(s), California index area as provided for in this section. The basis for computing the adjustment to those prices provided for in Section G of this Contract shall be the percentage change for the twelve month period from March to March, starting with the period of March 2017 to March 2018, and continuing every twelve months thereafter.

In the event the CPI is changed so that the base period differs from 1967=100, then the index applied as provided for above shall be corrected in accordance with the conversion factor published by the United States Department of Labor, Bureau of Labor Statistics, or their successor. If the CPI is discontinued or revised, such other governmental index or computation with which it is replaced shall be used in order to obtain substantially the same result as would have been obtained if the CPI had not been discontinued or revised.

G. **PAYMENT, COMPENSATION and INVOICING:** The Agency shall pay Supplier's properly executed invoice(s) within thirty (30) calendar days following receipt of the invoice. Payment will be withheld for any product which does not meet or the requirements of this Contract until such product is replaced and accepted by the Agency.

As compensation for all satisfactory product provided under this Contract, the Agency shall pay the Supplier, on a fixed unit price basis, in accordance with the price schedule shown below.

PRODUCT PRICE/POUND (delivered)	\$ 0.810
SALES TAX @ 8.00	\$ 0.065
TOTAL NET PRICE/POUND (delivered)	\$ 0.875

Contractor's invoices shall be submitted as follows:

Inland Empire Utilities Agency
Attention: Accounts Payable Department
P.O. Box 9020
Chino Hills, CA 91709

QR invoices may be submitted electronically via:

APGroup@ieua.org

H. **FITNESS FOR DUTY:**

1. **Fitness:** Supplier and its Subcontract personnel on Agency property:
 - a. shall report for work in a manner fit to do their job;
 - b. shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance as prescribed by a physician so long as the performance or safety of the work is not affected thereby); and
 - c. shall not have been convicted of any serious criminal offense which, by its nature, may have a discernible adverse impact on the business or reputation of the Agency.
2. **Inspection:** Searches by Agency authorized personnel may be made of lockers, storage areas, vehicles, persons or personal effects on Agency-owned, or leased property at various times without prior announcement. Such facility inspections may be conducted using

detection dog teams to search work areas and other common areas in order to detect evidence of unlawful drug use or the presence of pyrotechnics, explosives, firearms, weapons, or facsimiles thereof, alcoholic beverages and illegal drugs ("Prohibited Items"). Prohibited items must not be brought onto, or kept on, Agency property.

3. **Compliance:** Supplier shall advise all supplier and subcontractor personnel and associated third parties of the requirements of the Contract ("Fitness for Duty Requirements") before they enter on Agency property and shall immediately remove from Agency property any employee determined to be in violation of these requirements. Supplier shall impose these requirements on its Subcontractors. The Agency may cancel the Contract if Supplier violates these Fitness for Duty Requirements.
- I. **REQUIRED INSURANCE:** During the term of this Contract, the Supplier shall maintain at the Supplier's sole expense, the following insurance.
1. **Minimum Scope of Insurance**
 - a. **General Liability:** \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage, with a \$2,000,000 general aggregate. Coverage shall be at least as broad as Insurance Services Office form number CG 00 01 10 01 covering Comprehensive General Liability.
 - b. **Automobile Liability:** \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage shall be at least as broad as Insurance Services Office form number CA 00 01 10 01 covering Automobile Liability, including "any auto".
 - c. **Workers' Compensation and Employers Liability:** Workers' compensation limits as required by the Labor Code of the State of California and employers Liability limits of \$1,000,000 per accident.
 2. **Deductibles and Self-Insured Retention:** Any deductibles or self-insured retention must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the Agency, its officers, officials, employees, and volunteers; or the Supplier shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
 3. **Other Insurance Provisions:** The policies are to contain, or be endorsed to contain, the following provisions:
 - a. **General Liability and Automobile Liability:**
 - (1) The Agency, its officers, officials, employees and volunteers are to be covered as insureds, endorsement GL 20 11 07 66, CG 20 10 11 85, and/or CA 20 01 (Ed. 01 78) as respects: liability arising out of activities performed by or on behalf of the Supplier, products and completed operations of the Supplier, premises owned, occupied or used by the Supplier, or automobiles owned, leased, hired or borrowed by the Supplier. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its officers, officials, employees or volunteers.
 - (2) The Supplier's insurance coverage shall be primary insurance as respects the Agency, its officer, officials, employees and volunteers. Any insurance or self-insurance maintained by the Agency, its officers, officials, employees, or volunteers shall be excess of the Supplier's insurance and shall not contribute with it.

- (3) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Agency, its officers, officials, employees or volunteers.
- (4) The Supplier's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- (5) The Supplier may satisfy the limit requirements in a single policy or multiple policies. Any such additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.

b. **Workers' Compensation and Employers Liability Coverage:**

The insurer shall agree to waive all rights of subrogation against the Agency, its officers, officials, employees and volunteers for losses arising from work performed by the Supplier for the Agency.

c. **All Coverages:**

Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after 30 days or ten days in the event of nonpayment, prior written notice has been given to the Agency.

- 4. **Acceptability of Insurers:** Insurance is to be placed with insurers with a Best's rating of no less than A:VII, and who are admitted insurers in the State of California.
- 5. **Verification of Coverage:** The Supplier shall furnish the Agency with certificates of insurance and with original endorsements effecting coverage required by the Agency for themselves and all Subcontractor(s) prior to commencing work or allowing any Subcontractor to commence work under any subcontract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All insurance certificates and endorsements are to be approved by the Agency before work commences. The Agency reserves the right to require complete, certified copies of all required insurance policies, at any time.
- 6. **Submittal of Certificates:** The Supplier shall submit all required insurance certificates and endorsements to the following:

Roger Hughbanks (or via e-mail to: rhughbanks@ieua.org)
 Inland Empire Utilities Agency
 P.O. Box 9020
 Chino Hills, California 91709

J. **LEGAL RELATIONS AND RESPONSIBILITIES:**

- 1. **Status Of Supplier:** The Supplier is retained as an independent Supplier only, for the sole purpose of providing product as described herein, and not an employee of the Agency.
- 2. **Observing Laws And Ordinances:** The Supplier or any Subcontractor shall keep itself fully informed of all existing and future state and federal laws and all county and city ordinances and regulations which in any manner affect the supply of any product, conduct of any services or tasks performed under this Contract, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Supplier or any Subcontractor shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees, and shall protect and indemnify, as required herein, the

Agency, its officers, employees and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Supplier or its employees.

3. **Subcontract Services:** Any subcontracts for the performance of any services under this Contract shall be subject to the written approval of the Project Manager.
4. **Indemnification:** Contractor shall indemnify the Agency, its directors, employees and assigns, and shall defend and hold them harmless from all liabilities, demands, actions, claims, losses and expenses, including reasonable attorneys' fees, which arise out of or are related to:
 - A. The negligence, recklessness or willful misconduct of the Contractor, its directors, employees, agents and assigns, in the performance of work under this contract.
 - B. Any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law or equity, or every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of the Consultant;
 - C. Any and all losses, expenses, damages (including damages to the work itself), attorneys' fees, and other costs, including all costs of defense, which any of them may incur with respects to the failure, neglect, or refusal of Consultant to faithfully perform the work and all of the Consultant's obligations under the agreement. Such costs, expenses, and damages shall include all costs, including attorneys' fees, incurred by the indemnified parties in any lawsuit to which they are a party.
5. **Conflict Of Interest:** No official of the Agency who is authorized in such capacity and on behalf of the Agency to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving this Contract, or any subcontract relating to services or tasks to be performed pursuant to this Contract, shall become directly or indirectly personally interested in this Contract.
6. **Equal Opportunity:** During the performance of this contract the Agency, the Supplier and any Subcontractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, marital status, national origin, or physical handicap.
7. **Disputes:**
 - a. All disputes arising out of or in relation to this Contract shall be determined in accordance with this section. The Supplier shall pursue the work to completion in accordance with the instruction of the Agency's Project Manager notwithstanding the existence of dispute. By entering into this Contract, both parties are obligated, and hereby agree, to submit all disputes arising under or relating to the Contract which remain unresolved after the exhaustion of the procedures provided herein, to independent arbitration. Except as otherwise provided herein, arbitration shall be conducted under California Code of Civil Procedure Sections 1280, et. seq., or their successor.
 - b. Any and all disputes during the pendency of the work shall be subject to resolution by the Agency Project Manager and the Supplier shall comply, pursuant to the Agency Project Manager instructions. If the Supplier is not satisfied with any such resolution by the Agency Project Manager, they may file a written protest with the Agency Project Manager within seven (7) calendar days after receiving written notice of the Agency's decision. Failure by Supplier to file a written protest within seven (7) calendar days shall constitute waiver of protest, and acceptance of the Agency Project Manager's resolution. The Agency's Project Manager shall submit the Supplier's written protests to the Chief Executive Officer/General Manager (CEO/GM), together with a copy of the Agency Project Manager's written decision,

for his or her consideration within seven (7) calendar days after receipt of said protest(s). The CEO/GM shall make his or her determination with respect to each protest filed with the Agency Project Manager within ten (10) calendar days after receipt of said protest(s). If Supplier is not satisfied with any such resolution by the CEO/GM, they may file a written request for arbitration with the Project Manager within seven (7) calendar days after receiving written notice of the CEO/GM's decision.

c. In the event of arbitration, the parties hereto agree that there shall be a single neutral Arbitrator who shall be selected in the following manner:

(1) The Demand for Arbitration shall include a list of five names of persons acceptable to the Supplier to be appointed as Arbitrator. The Agency shall determine if any of the names submitted by Supplier are acceptable and, if so, such person will be designated as Arbitrator.

(2) In the event that none of the names submitted by Supplier are acceptable to the Agency, or if for any reason the Arbitrator selected in Step (a) is unable to serve, the Agency shall submit to Supplier a list of five names of persons acceptable to the Agency for appointment as Arbitrator. The Supplier shall, in turn, have seven (7) calendar days in which to determine if one such person is acceptable.

(3) If after Steps (a) and (b), the parties are unable to mutually agree upon a neutral Arbitrator, the matter of selection of an Arbitrator shall be submitted to the San Bernardino County Superior Court pursuant to Code of Civil Procedure Section 1281.6, or its successor. The costs of arbitration, including but not limited to reasonable attorneys' fees, shall be recoverable by the party prevailing in the arbitration. If this arbitration is appealed to a court pursuant to the procedure under California Code of Civil Procedure Section 1294, et. seq., or their successor, the costs of arbitration shall also include court costs associated with such appeals, including but not limited to reasonable attorneys' fees which shall be recoverable by the prevailing party.

d. Joinder in Mediation/Arbitration: The Agency may join the Supplier in mediation or arbitration commenced by a Supplier on the Project pursuant to Public Contracts Code Sections 20104 et seq. Such joinder shall be initiated by written notice from the Agency's representative to the Supplier.

8. Workers' Legal Status: For Performance under this Contract, Supplier shall only utilize employees that are authorized to work in the United States pursuant to the Immigration Reform and Control Act of 1986.

K. **INFRINGEMENT**: Supplier represents and warrants that Work and Documentation shall be free of any claim of trade secret, trade mark, trade name, copyright, or patent infringement or other violation of any Proprietary Rights of any person.

Supplier shall defend, indemnify and hold harmless, Agency, its officers, directors, agents, employees, successors, assigns, servants, and volunteers free and harmless from any and all liability, damages, losses, claims, demands, actions, causes of action, and costs including reasonable attorneys' fees and expenses arising out of any claim that use of the Work or Documentation, to replace or modify the Work and Documentation infringes upon any trade secret, trade mark, trade name, copyright, patent, or other Proprietary Rights.

Supplier shall, at its expense and at Agency's option, refund any amount paid by Agency under the Contract, or exert its best efforts to procure for Agency the right to use the Work and Documentation, to replace or modify the Work and Documentation as approved by Agency so as to obviate any such

claim of infringement, or to put up a satisfactory bond to permit Agency's continued use of the Work and Documentation.

- L. **TAXES, FEES, AND CHARGES:** The Supplier, and any of its Subcontractors, shall pay all sales, consumer, use and other similar taxes, and pay all charges and fees required to be paid by the Supplier, or any of its Subcontractors, in accordance with state, county, and local laws and ordinances.
- M. **NOTICES:** Any notice may be served upon either party by delivering it in person, or by depositing it in a United States Mail deposit box with the postage thereon fully prepaid, and addressed to the party at the address set forth below:

Agency: Warren Green
Manager of Contracts/Procurement & Facilities Services
Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709

Supplier: Boyd Stanley
Business Director
Polydyne Inc.
P.O. Box 279
Riceboro, GA 31323

Any notice given hereunder shall be deemed effective in the case of personal delivery, upon receipt thereof, or, in the case of mailing, at the moment of deposit in the course of transmission with the United States Postal Service.

- N. **INTEGRATION:** The Contract Documents represent the entire agreement between the Agency and the Supplier as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by the Contract Documents. This Contract may not be modified, altered, or amended except by written mutual agreement by the Agency and the Supplier. (Government Code Section 4154)
- O. **GOVERNING LAW:** This Contract is to be governed by and constructed in accordance with the laws of the State of California.
- P. **SUCCESSORS AND ASSIGNS:** All of the terms, conditions and provisions of this Contract shall inure to the benefit of and be binding upon the Agency, the Supplier, and their respective successors and assigns. Notwithstanding the foregoing, no assignment of the duties or benefits of the Supplier under this Contract may be assigned, transferred or otherwise disposed of without the prior written consent of the Contract Administrator and/or Agency; and any such purported or attempted assignment, transfer, or disposal without the prior written consent of the Contract Administrator and/or Agency shall be null, void, and of no legal effect whatsoever.
- R. **FORCE MAJEURE:** Neither party shall hold the other responsible for the effects of acts occurring beyond their control; e.g., war, riots, strikes, acts of nature, etc.
- S. **TERMINATION:** The Agency reserves the right to suspend, cancel, or terminate this Contract at any time upon ten calendar days written notice to the Supplier. In the event of such termination, the Agency shall pay Supplier for all authorized and Supplier-invoiced product, approved by the Contract Administrator, up to the date of such termination. (Government Code Section 4154)
- T. **CHANGES:** The Agency may, at any time, make changes to this Contract's Scope of Work; including additions, reductions and other alterations to any or all of the work. However, such changes shall only be made via written amendment to this Contract. The Contract Price and Work Schedule shall be equitably adjusted, if required, to account for such changes and shall be set forth within the Contract Amendment.

U. **NOTICE TO PROCEED**: No services shall be performed or furnished under this Contract unless and until a fully executed Contract has been completed by all responsible parties and a Notice to Proceed has been issued by the Agency.

AS WITNESS HEREOF, the parties hereto have caused this Contract to be entered as of the day and year written above.

**INLAND EMPIRE UTILITIES AGENCY,
A Municipal Water District:**

POLYDYNE Inc.:

P. Joseph Grindstaff
General Manager

Date



Mark Schlag
Vice President

5/12/16


Date


**ACTION
ITEM
1E**


Date: June 15, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (6/8/16)
Finance, Legal, and Administration Committee (6/8/16)

From:  P. Joseph Grindstaff
General Manager

Submitted by: Randy Lee 
Executive Manager of Operations/Assistant General Manager

Matthew Melendrez 
Deputy Manager of Operations

Subject: Purchase of Dewatering Polymer Blending Units

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the single source procurement of new polymer blending units and start up services for Regional Water Recycling Plant No. 1 (RP-1) from Velocity Dynamics, LLC for a not-to-exceed amount of \$172,000 (including tax and delivery); and
2. Authorize the General Manager to execute the purchase.

BACKGROUND

The RP-1 Dewatering Facility Expansion project was commissioned in 2013. The goal of the project was to replace the aging belt presses, produce dryer biosolids, and provide dewatering capacity, flexibility, and redundancy for the ultimate build-out. The contractor for the project installed four Siemens M-Series polymer blending units as required by the project specifications. These polymer blending units are designed to work with the dewatering centrifuges to produce dewatered biosolids and clear centrate. During startup, several issues related to the neat and diluted polymer solution pipe sizing and pressure losses were identified and fixed to meet the original design intent. The Siemens units worked effectively after the pressure loss issues were addressed and the project was accepted by the Board on September 18, 2013.

Purchase of Dewatering Polymer Blending Units

June 15, 2016

Page 2

During continued operation, all four Siemens polymer blending units experienced mechanical failures of the three-way water flow regulating valve, prohibiting the ability to automatically control the polymer blending system.

After contacting the local representative for Siemens, IEUA staff became aware that Siemens had sold its assets, inventory, and associated trademarks of the M-Series polymer blending units to Underground Solutions, Inc. (UGSI). After contacting UGSI, it became apparent that UGSI was not prepared to support the Siemens units installed at RP-1 and instead proposed the replacement of all four units with other UGSI products. The failure of the three-way valves became an unsupported manufacturer defect that reduced process efficiencies and had limited to no maintainability.

Agency staff performed industry-wide research and determined that three manufacturers could meet the original design requirements and physical footprint of the polymer blending units, which included Velocity Dynamics, UGSI, and Prominent. After performing site visits to other facilities and obtaining information from each manufacturer, it was determined that the Velocity Dynamics' Velodyne unit was the best choice for this application for the following reasons:

- 1) The unit is designed with a unique neat polymer check valve which allows for easy maintenance.
- 2) The polymer mixing chamber can continue to function even if the mixer motor fails.
- 3) Velocity Dynamics is an established manufacturer of polymer blending systems with readily available support and spare parts.
- 4) Velocity Dynamics units have a proven performance history with other wastewater agencies.

One unit was purchased from Velocity Dynamics and installed for testing purposes. The testing was successful in meeting the requirements of the dewatering process. Therefore, the Agency would like to standardize upon this unit for future purchases.

On April 13, 2016, the Agency requested pricing from JBI Water (the local representative for Velocity Dynamics) and received a quote of \$51,185 per unit and manufacturer onsite support/assistance during startup for \$5,030. The replacement of the remaining three units and startup is expected not-to-exceed \$172,000 (including tax and delivery). Of the total cost, the Agency will pay for one unit and startup services using funds available in Fiscal Year (FY) 2015/16. The remaining two units will be funded using budget in FY 2016/17, upon receipt of all project deliverables.

Replacing the failed polymer blending units is in line with the IEUA Business Goal of Wastewater Management to maintain capacity within systems and facilities to meet essential service demands.

PRIOR BOARD ACTION

On September 18, 2013, the Board of Directors accepted the work performed by SSC Construction, Inc. under the construction contract for the RP-1 Dewatering Facility Expansion, Project No. EN06015.

IMPACT ON BUDGET

The cost of the RP-1 Polymer Blending Units, for the not-to-exceed amount of \$172,000 is within the Regional Wastewater Operations and Maintenance Fund, with \$60,686 budgeted under Project EP16002 for FY 2015/16 and \$111,314 budgeted under EP17002 for FY 2016/17.

Purchase of Dewatering Polymer Blending Units

June 2016

Matthew Melendrez
Deputy Manager of Operations

Randy Lee
Executive Manager of Operations/AGM

Background

- * Originally installed Siemens M-Series Polymer Blending Units (PBU)
- * Proprietary 3-way valves failed
- * Siemens no longer supports M-Series
 - * Sold all rights to Underground Solutions, Inc. (UGSI)
- * UGSI was unable to propose solution to repair PBUs



Alternatives

- * Temporary field modifications
- * Complete PBU replacement
 - * Market research indicated three manufacturers met PBU required capacity
- * Velodyne unit selected
 - * Best value to the Agency
 - * Successful field testing



Recommendation

Approve the purchase of three Velodyne polymer blending units and startup services from Velocity Dynamics, LLC for the not-to-exceed amount of \$172,000 over FY 2015/16 and FY 2016/17.

Supports the Agency's business goal of Wastewater Management to maintain capacity within systems and facilities to meet essential service demands.



Questions?

INFORMATION

ITEM

2A

Engineering and Construction Management Project Updates

June 2016



John Scherck
Acting Deputy Manager of Engineering

EN15055 – 1630 E. and W. Recycled Water Pump Station Surge Protection

- Contractor: J. R. Filanc
- Current Contract (Construction): \$729 K
- Total Project Budget: \$1.59 M
- Scope of Work: Replace existing air compressor, surge tank, and associated piping and electrical system
- Anticipated Completion: October 2016
- Percent Complete: 5%
- Current Activities:
 - Relocate existing sewer piping and electrical conduit
 - Installation of temporary sound wall
- Focus Points:
 - Surge tank fabrication and delivery
 - Complete demolition and subgrade preparation for surge tank foundation



Relocating Existing Utilities



Sound Wall Supports

EN16055 – Headquarters Building Backup Generator

- Engineering Consultant: IDS Group, Inc.
- Current Contract (Design): \$36 K
- Total Project Budget: \$200 K
- Scope of Work: Modify existing portable backup generator and install a stationary unit. Install automatic transfer switch and control to secure emergency power for HQ A/B and new Laboratory
- Current Activities: Bid & Award
 - Request for Bid document is in progress
 - Advertise to bid by end of May 2016
- Project Completion: March 2017
- Percent Complete: 100%
- Focus Point:
 - Acquire AQMD permit
 - Advertise to bid



Project Location Behind HQB



Existing Portable Genset

RP-5 Energy Storage

- Engineering Consultant: Black and Veatch
- Current Contract (Construction): (Power Purchase Agreement)
- Total Project Budget: \$0
- Scope of Work: Installation of 500kW battery storage and integration of load shaping software
- Current Activities:
 - Installing NGO meters for solar and REEP generation
 - Completing SCE interconnection agreement
- Anticipated Complete: June 2016
- Percent Complete: 85%
- Focus Point:
 - SCE Interconnection Coordination
 - Construction completion



Tesla Powerpack Units



PME and Solar NGOM Installation

EN13045 – Wineville Extension, Segment B

- RP-3 facilities have been in operation since December 2015
- Groundwater Recharge at RP-3: 3,000 Acre Feet Per Year
- Direct recycled water user connections in Ontario and Fontana were constructed
- Project is in close-out phase



Valve Station at RP-3