



RESOURCE RECOVERY FACILITY MASTER PLAN – CONSULTANT SERVICES

Request for Proposal

RFP No. 18120

Delta Diablo is seeking proposals from qualified firms interested in providing Consulting Services for the Resource Recovery Facility Master Plan as described in this Request for Proposal. The Consultant Team shall prepare a master plan document that will evaluate key long-term strategic planning issues. The project is located in Antioch, CA.

June 2019

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Request for Proposal (RFP)

1.0 INTRODUCTION

Delta Diablo (District) invites proposals for the Resource Recovery Facility Master Plan (RRFMP or Project) from engineering consulting firms capable of performing the planning study as described in the proposed Scope of Work.

Qualified firms that submit a proposal will be evaluated in accordance with the requirements defined within this RFP. Upon successful negotiation with the District, the selected Consultant will enter into a professional services agreement to provide planning services for the Project in accordance with the goals and general scope of work described in this RFP.

1.1 PROJECT SUMMARY

The intent of the RRFMP is to provide the District with a strategic planning document focused on near- and long-term infrastructure improvements to address asset condition, hydraulic capacity, treatment capacity, and regulatory requirements. The RRFMP will evaluate components of the District's conveyance system, Wastewater Treatment Plant (WWTP), Recycled Water Facility (RWF) and supporting infrastructure. The Consultant will have access to District records, drawings, process control data, and other relevant information to conduct this planning effort. The Project will be completed as a collaborative effort between the Consultant and District staff, with scope tasks conducted by the Consultant and informed by staff knowledge of District history, business practices, innovation goals, and facility specific information.

1.2 PROPOSAL SCHEDULE

The following key events and dates have been established for the selection of a Consultant:

TABLE 1 – Project RFP and Consultant Selection Timeline

Event	Date
RFP Issued	June 5, 2019
Non-mandatory Pre-Proposal Meeting and Site Walk	June 13, 2019 at 11:00 AM
Deadline to Submit Written Questions	June 21, 2019 at 2:00 PM
Anticipated Deadline for Responses to Questions	June 28, 2019 at 2:00 PM
Proposal Submission Deadline	July 10, 2019 at 3:00 PM
Notification to Proposers Selected for Interviews	July 18, 2019
Interviews	August 5 – 9, 2019
Contract Negotiation with Selected Consultant	August 12 – 23, 2019
Request District Board Approval	September 11, 2019

Note: All dates are subject to change. Proposers will be notified one week in advance of date changes.

1.2.1 PRE-PROPOSAL MEETING

A non-mandatory pre-proposal meeting and site walk will be held at the District's WWTP at the date and time in Table 1. The meeting will be held in the District's Board Room located in the Treatment Plant building. The meeting goals are to:

- Provide the District an opportunity to present the Project scope and goals;
- Provide Proposers an opportunity to ask questions related to the Project and this RFP; and
- Tour the District's Wastewater Resource Recovery Facility (WWRf) (includes the WWTP, RWF, and Delta Household Hazardous Waste Collection Facility)

To maintain a reasonable tour group size, each Proposer is limited to a maximum of three (3) attendees. Questions received during the meeting that are deemed by the District to

be substantive relative to the Project scope or RFP will be responded to in accordance with the question section below.

1.2.2 PROPOSER QUESTIONS AND DISTRICT RESPONSES

All questions regarding this RFP must be submitted in writing to the District on or before the date and time in Table 1. Questions received after the deadline in Table 1 may not receive a response.

Questions must be submitted via electronic mail (e-mail) to the District's Project Manager, Brian Thomas, at briant@deltadiablo.org. *All e-mailed questions shall contain the following title in the Subject line: "Delta Diablo Project No. 18120: RFP Proposer Questions"*. Because the District strives to provide consistent information to Proposers, questions via telephone or submitted to other District staff will not be accepted.

1.2.3 PROPOSAL SUBMITTAL

Proposals will be received at the location shown in Section 3.0 below on or before the date and time specified in Table 1. Proposals received after the specified date and time will not be opened and will be destroyed.

The complete Technical Proposal shall be submitted in a sealed envelope or box with the Proposer's name, Project Title, and Project Number clearly marked on the envelope or box. The Fee Proposal shall be placed in a separate, sealed envelope and clearly marked with the Proposer's name, Project Title, Project Number, and labeled "Sealed Fee Proposal." The Fee Proposal envelope may be included in the same envelope or box as the Technical Proposal.

1.2.4 INTERVIEW DATE

The top-ranked Proposers may be invited to meet with the District's selection team for an oral interview. If interviews are held, the District will schedule the interviews with Proposers during the period specified in Table 1. The District will strive to schedule interviews at times that are mutually acceptable to the District and each Proposer. However, the District requests Proposers keep multiple periods of time available during the interview period.

1.3 PROJECT BUDGET

The District's proposed Fiscal Year 2019/2020 – Fiscal Year 2023/2024 (FY19/20 – FY23/24) Capital Improvement Program (CIP) includes an appropriation of \$1.5 million for the Resource Recovery Facility Master Plan. If necessary, it is possible with Board approval to amend funding allocations based on the final negotiated project scope and budget. The District has not received grant or loan funding for any portion of the Project.

2.0 DISTRICT BACKGROUND

Delta Diablo is a California special district that provides wastewater resource recovery services for approximately 214,000 customers in the cities of Antioch and Pittsburg, and the unincorporated Bay Point community in east Contra Costa County. These services include wastewater collection, conveyance, and treatment; recycled water production and distribution; energy conservation and production; beneficial biosolids reuse; pretreatment and pollution prevention; street sweeping; and household hazardous waste collection. The District's major wastewater collection, conveyance, and treatment system, and recycled water infrastructure elements are summarized below.

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- Wastewater Collection: The District owns, operates, and maintains 43 miles of gravity sewers in the Bay Point community, while the cities of Antioch and Pittsburg own and operate their respective collection systems.
 - Wastewater Conveyance: The District owns, operates, and maintains 14 miles of gravity sewer interceptors (12- to 42-inch diameter), 18.5 miles of force mains (4- to 24-inch diameter), flow equalization/diversion facilities, and five wastewater pumping stations. The majority of this system was constructed in the late 1970s and early 1980s.
 - Wastewater Treatment: The District's WWTP has a permitted average dry weather flow (ADWF) of 19.5 million gallons per day (MGD) and a peak wet weather design flow capacity of 31.1 MGD. In 2018, ADWF at the WWTP was 12.6 MGD with a maximum daily flow of 17.8 MGD. The WWTP was placed in service in 1982.
 - Recycled Water: The District's RWF was constructed in 2001 and has a permitted capacity of 12.8 MGD with 2018 daily average and maximum daily flows of 6.2 MGD and 12.4 MGD, respectively.

As a "Utility of the Future," the District embraces innovative approaches and sustainable solutions to benefit the environment, lower operating costs, increase revenues, and serve as responsible stewards of the public's resources and trust. The development of this Project is an essential element of the District's overall financial sustainability; strategic, financial, technical, and operational decision-making processes; and continued focus on operational excellence. This effort will underscore the District's commitment to continuing to foster a collaborative, innovative, and continuous improvement-based culture through active engagement with staff at all levels in the organization.

2.1 PROJECT GOALS

The RRFMP is intended to provide the District with an integrated, strategic planning focused guidance document with in-depth analysis in key areas to guide significant infrastructure investment decisions in the near and long term. The District would like to produce a strategic, "action-oriented" document that highlights specific measures and triggers that support decision making over the next few years, while maintaining a 20-year planning horizon. Specific project goals include:

- Guide development of a prioritized, long-term capital improvement program (CIP) that meets infrastructure needs, addresses regulatory drivers, and maintains operational effectiveness and reliability
- Support development of the District's Asset Management Program through coordination efforts and condition assessment data integration
- Develop the strategic technical, and financial approach to meeting future nutrient removal regulatory requirements
- Support resource recovery and organizational improvement through identification of applicable innovative approaches, technologies, and best practices in use at peer wastewater agencies
- Assist the District in becoming energy self-sufficient through trucked waste program growth
- Guide development of future capital project design assumptions by updating wastewater flow and load projections and assessing the hydraulic and treatment system capacities of wastewater conveyance and treatment facilities
- Identify and mitigate potential treatment process vulnerabilities and opportunities to improve process monitoring, control, and optimization
- Guide strategic decision-making efforts regarding long-term RWF operation and near-term capital investments
- Support implementation of the District's Strategic Plan (dated September 2014) in the goal areas of Financial Sustainability, Leadership, Operational Excellence, Workplace Innovation, and Stakeholder Engagement
- Achieve a high level of staff engagement and collaboration

2.2 KEY FOCUS AREAS

The District has identified several key focus areas to be included in the RRFMP. These areas correspond to task items within the scope for work. Table 2 highlights high-priority, early completion items and the estimated (qualitative) level of effort the District anticipates for each area. Consultants are encouraged to identify areas where the estimated level of effort does not correspond with the Consultant’s understanding of the scope of work.

Table 2 – Key RRFMP Focus Areas

Key Focus Area	Early Completion?	Estimated Level of Effort
Facility Condition Assessment – WWTP	✓	High
East County Bioenergy Project – Biogas Utilization Alternatives	✓	Low
Nutrient Management		
Near-term Strategy Development	✓	Medium
Process Modeling, Alternatives Evaluation, Cost Estimates		High
Renewable Energy Production		Low
Biosolids Management	✓	Low
Operational Vulnerability Assessment/Process Monitoring, Control, and Optimization Improvements	✓	Medium
Recycled Water		Low
Energy Management		Low
Future Flow and Loading Projections	✓	Low
Land Use Planning		Low

Although a number of these key focus areas will be evaluated in detail as part of the RRFMP, it is expected that several areas will be recommended for subsequent study as part of future “sub-master plan” efforts (e.g., recycled water, electrical distribution system). In these areas, the RRFMP is intended to serve as an “umbrella” master plan that summarizes current status, planning considerations, and strategic, regulatory, technical, and operational issues.

2.2.1 FACILITY CONDITION ASSESSMENT

The District has nearly completed Phase 1 of the Facility Condition Assessment (FCA) Project, which is focused on the wastewater collection (gravity sewers in Bay Point) and conveyance system (gravity interceptors, force mains). Recommended high-priority gravity sewer improvements have been included in the scope of work for the Bay Point Phase IV Sewer Repairs Project with construction expected to begin in August 2019. Gravity interceptor condition assessment work has largely been completed with prioritized improvements included in the proposed FY19/20-FY23/24 CIP. The pump station force main inspection work is expected to be completed by September 2019.

Note that the District is currently constructing the \$9.9 million Pump Station Facilities Repair Project, which is expected to address critical infrastructure needs at five wastewater pumping stations to ensure continued operational effectiveness and reliability at these critical facilities. No condition assessment work will be conducted at these locations as part of the RRFMP.

The District has elected to include Phase 2 (Wastewater Treatment Plant) of the FCA Project as a key scope of work element in the RRFMP. The selected consultant will be responsible for developing a cost-effective plan to determine the condition of major structural, mechanical, electrical, and instrumentation infrastructure elements at the WWTP using a variety of techniques, including “desktop” analysis, visual inspections, and physical sampling and testing (destructive and non-destructive). The focus will be on identifying critical infrastructure renewal and rehabilitation needs for near-term implementation, in addition to developing a prioritized long-term CIP based on condition assessment findings (including FCA Phase 1 results).

The District is currently embarking on development of a formalized Asset Management Program, which will require integration of FCA Phase 1 and RRFMP condition assessment data and findings. It is expected that the Consultant will coordinate with the District to present condition assessment data in a manner that is consistent with the Asset Management Program. The District understands that it may not be necessary or practical to conduct a detailed assessment of a complete process area. However, if practical, the District would like to conduct a detailed analysis of a small process area as a demonstration for future focused assessments by staff.

Key Strategic Questions

1. How should the District prioritize CIP needs based on the extensive inspection and condition assessment data?
2. How will this information be used to support development of the District's emerging Asset Management Program?

Early Completion? YES, include initial findings in next CIP

Level of Effort: HIGH

2.2.2 EAST COUNTY BIOENERGY PROJECT – BIOGAS UTILIZATION ALTERNATIVES

The District is currently completing design of the East County Bioenergy Project (ECBP), which is an organics co-digestion project under a public-private partnership with Mt. Diablo Resource Recovery (MDRR) (local waste hauler) and Anaergia, Inc. (technology provider). This project would divert approximately 114 tons per day of organic waste from local landfills in support of state-mandated diversion goals under SB 1383, while allowing the District to become energy self-sufficient with excess electricity sold to the local power grid.

Required MDRR infrastructure improvements include installation of a new and innovative material preprocessing technology at the existing MDRR material recovery facility, which is located one mile from the District's WWTP, to extract valuable organic material directly from municipal solid waste (MSW). This material would be delivered in a slurry form to the District's WWTP following contaminant removal. Key preprocessing equipment includes an Organics Extrusion Press (OREX) to extract organics from MSW followed by a polishing unit to remove plastics and grit with Anaergia as the technology provider. Required District infrastructure improvements include organic slurry receiving tanks and feed system, digester mixers, digester thickening (Anaergia's Omnivore system), biogas conditioning, two new 1.6-megawatt (MW) co-generation engines, a waste gas flare, and sidestream ammonia stripping with chemical addition (Anaergia's AMR process). MDRR and District capital costs are estimated at \$14-17 million and \$34+ million, respectively.

If the ECBP is implemented, biogas production would increase from 220 standard cubic feet per minute (scfm) to 640 scfm. The District would produce sufficient electricity to meet 280% of plant electrical demand (compared to the current baseline of 60-65%) with excess electricity sold to PG&E via the Bioenergy Market Adjusting Tariff (BioMAT) program at an expected rate of \$0.127/kWh. Although the recent PG&E bankruptcy proceedings created some uncertainty regarding the long-term viability of the BioMAT program, the District has engaged with industry experts and advocates on this issue and is currently assuming electricity sales via BioMAT as the primary biogas utilization alternative. However, because estimated capital and operating costs, project risk allocation (financial, technical regulatory, and operational), and potentially limited tipping fee "capacity" at MDRR are exerting financial pressure, the District is interested in determining if renewable natural gas (RNG) production and associated environmental attributes at the state (Low Carbon Fuel Standard [LCFS]) and federal (Renewable Identification Number [RINs]) level would better support overall project financial viability.

The District understands that the current project may only receive “D5” RINs credits (lower value) in the absence of an established pathway for “D3” RINs credits (higher value). The District is also aware of potentially significant Federal OSHA regulations associated with gas storage for off-site use that may impact the feasibility of RNG production for direct pipeline injection and vehicle fuel use.

Note that the District is currently engaged with multiple outside consultants in support of ECBP implementation (i.e., design, owner’s advisor, financial review, legal). The District has submitted both an air permit application to the Bay Area Air Quality Management District and an interconnection agreement to PG&E and has completed associated California Environmental Quality Act (CEQA) documentation. The selected RRFMP consultant would focus largely on biogas utilization alternatives.

Key Strategic Questions

1. Is renewable natural gas production for vehicle fuel or direct pipeline injection a feasible and cost-effective alternative for the ECBP?
2. Is qualifying the ECBP for D3 RINs credits a feasible assumption in the near term?
3. What applicable grant programs (existing and emerging) are available at the state and federal level to support the overall financial viability of the ECBP?

Early Completion? YES

Level of Effort: LOW

2.2.3 NUTRIENT MANAGEMENT

In 2010, Sacramento Regional was ordered to reduce nutrient loading to receiving waters, resulting in \$2 billion in subsequent capital expenditures to meet this regulatory mandate. Based on anticipated imposition of similar requirements at the District, staff recommended creation of the Advanced Treatment (AT) Reserve Fund in 2011 to begin collecting funds for a >\$125 million plant expansion. Approximately \$35-40 million in AT reserves was to be collected to support planning and design activities with remaining available funds applied to partially offset future construction cost, debt service payments and ensure rate stability. The assumed in-service date was 2024. To date, the District has expended approximately \$2.5 million from the AT fund for planning and pilot studies (CANDO, zeolite-anammox), and the Dow property purchase (50%) to support future plant expansion. The AT fund balance at the end of fiscal year 2018/2019 (FY18/19) is expected to be \$18.4 million. In response to the emerging nutrient management implementation timeline described below, the District reduced the originally planned 20% AT fund sewer service charge (SSC) rate component increase from 20% to 6.5% in FY18/19 and 0% in FY19/20 (proposed). This rate component currently comprises 15% of the overall SSC. In March 2019, staff informed the Board of Directors that the RRFMP would focus on developing the recommended strategic, technical, and financial approach to long-term nutrient management with associated recommendations for future collection of the AT fund SSC rate component.

The District is part of the Bay Area Clean Water Agencies (BACWA) regional collaboration, which has worked effectively with the Regional Water Quality Control Board (RWQCB) over the last few years to continue studying nutrient impacts in San Francisco (SF) Bay without imposition of nutrient limits in National Pollutant Discharge Elimination System (NPDES) permits. The recently issued 5-year Regional Watershed Permit (RWP) (7/1/19 – 6/30/24) references potential nutrient “Planning Level Targets” (PLTs) (i.e., nutrient “load caps”) with a contingency allowance for growth in the service area (and potential consideration for allowances related to loss of recycled water customers and/or increased organics waste co-digestion [refer to Attachment 1]) in the next 5-year RWP. Based on this information, the District anticipates that nutrient removal requirements may not be included in future NPDES permits until 2029, assuming no adverse nutrient impacts in SF Bay; however, there are unpredictable conditions (i.e., harmful algal

blooms, toxicity events, low dissolved oxygen conditions) that could trigger broad regional regulatory actions by RWQCB with a near-term implementation schedule and significant capital costs. In addition, if actual growth in the service area exceeds the contingency allowance, the District may need to implement a nutrient removal project on an expedited timeline.

BACWA submitted an engineering consultant report (dated May 18, 2018) to RWQCB that included the “BACWA Nutrient Reduction Study – Delta Diablo Wastewater Treatment Plant” (Study). The Study summarized recommended optimization, sidestream treatment (nitrogen only), and mainstream treatment approaches to addressing nutrient removal at the WWTP with estimated capital costs of \$5.8-6.1 million, \$14.5 million, and \$130-167 million, respectively. It should be noted that the ECBP includes a sidestream treatment nutrient removal process that would be sized to remove nutrient loading from existing wastewater primary and secondary sludges at an estimated total capital cost of \$5.0 million.

The District is considering how to address the aging tower trickling filters (TTFs) (e.g., existing internal and external corrosion, media replacement needs), which are critical to the secondary treatment process, given the potentially extended timeline for implementing mainstream nutrient removal. In addition, the District recently experienced a significant upset of its secondary treatment process in March 2019, which likely resulted from a combination of diminished TTF performance during peak loading conditions and inadequate activated sludge process control parameters to meet associated organic loading demands. The District was able to maintain NPDES permit compliance by treating significant portions of secondary effluent through the RWF prior to discharge through the effluent outfall.

The RRFMP is expected to include a high-priority, early evaluation of the best approach to TTF infrastructure investment (i.e., continue investing in the TTFs or abandon in place) based on the anticipated future approach to long-term nutrient management, the TTF condition assessment findings, and an assessment of the secondary treatment process operation and capacity. It should be noted that the existing TTFs are a key element of the District's secondary treatment process, removing the bulk of influent BOD prior to the activated sludge process. As a placeholder, the District has included \$6 million in Years 4 and 5 of the proposed 5-year CIP for a TTF rehabilitation project.

Key Strategic Questions

1. What strategic, technical, and financial approach should the District employ in meeting future nutrient removal regulatory requirements?
2. How should the District manage near-term treatment process infrastructure investment (e.g., TTFs) in a manner that is consistent with the long-term strategy?

Early Completion? YES (near-term strategy development)

Level of Effort: HIGH

2.2.4 RENEWABLE ENERGY PRODUCTION

If the District does not proceed with implementation of the ECBP, the District maintains an interest in increasing renewable energy production via co-digestion of organics in order to achieve energy self-sufficiency and reduce reliance on power purchased from PG&E. The District is interested in understanding the availability of potential low-impact trucked organic wastes within reasonable proximity that would support the District's sustainability commitment and the associated capital improvements necessary to accept and process the organic wastes.

Key Strategic Questions

1. How does the District achieve energy self-sufficiency via a trucked waste program (as a contingency for the ECBP)?
2. What infrastructure improvements and permit modifications are required to support program implementation?

Early Completion? NO

Level of Effort: MEDIUM

2.2.5 BIOSOLIDS MANAGEMENT

The District produces approximately 13,000 wet tons (3,250 dry tons) annually at 25% cake dryness using solid dewatering centrifuges. In support of its Sustainability Policy, the District beneficially reuses 100% of its biosolids via land application on non-edible food crop sites in Solano and Sacramento Counties (~95%) and composting in Merced County (~5%). The District expects to issue a request for proposals for biosolids management services in early-to-mid 2020. If the District proceeds with the East County Bioenergy Project, biosolids production is expected to increase by 9,000 wet tons (2,250 dry tons). In 2017, the District acquired 28 acres immediately southwest of the WWTP from The Dow Chemical Co. The District has explored the concept of conveying its biosolids to the Mt. Diablo Resource Recovery (MDRR) facility for processing at the wood waste gasification system that is currently being considered by Garaventa Enterprises, Inc. (Garaventa). However, this would likely require construction of a biosolids drying facility on the 28-acre site as an intermediate step due to biosolids dryness requirements for gasification. Based on a high-level analysis, biosolids management costs would need to exceed approximately \$75 per wet ton for the District to consider construction of a dryer facility. The District expects that Garaventa would reserve capacity for all District biosolids if both the ECBP and gasification system efforts are completed.

In addition, the District is participating in the regional Bay Area Biosolids Coalition (BABC) effort, which is focused on maintaining and expanding biosolids management alternatives through peer agency collaboration, technology development, and targeted research and biosolids product market development. The District is included as a potential facility “host” site with a range of technology options.

The RRFMP is expected to document current practices, threats, and opportunities, while highlighting future issues, triggers for action, and project development options with high-level supporting economic analyses.

Key Strategic Question

1. What long-term, cost-effective alternatives exist if current practices (i.e. land application) are no longer available?

Early Completion? YES (options for next biosolids contract)

Level of Effort: LOW

2.2.6 VULNERABILITY ASSESSMENT / PROCESS CONTROL, MONITORING, OPTIMIZATION

In December 2018, the District experienced a disruption of its electrical power service feed from PG&E, as well as subsequent failure of a critical uninterruptible power supply (UPS) system that was intended to provide backup power to an effluent flow diversion gate (i.e., normally closes via UPS during power outage to send flow to the on-site flow diversion basin) and sodium bisulfite feed system (SBS) for dechlorination. This failure condition resulted in discharge of chlorinated effluent for six minutes to the Delta receiving waters, resulting in an exceedance of the District’s NPDES permit requirements. The District conducted a comprehensive root cause investigation with associated preventative and corrective actions, which highlighted inclusion of two critical systems (effluent diversion gate, SBS feed) on a single UPS system as a root cause.

As noted above in Section 2.2.3, the District recently experienced a significant upset of its secondary treatment process. The event highlighted regulatory compliance vulnerabilities that were mitigated through various process monitoring and control improvements in response.

The District would like to include a comprehensive review of potential regulatory compliance vulnerabilities as part of the RRFMP effort with recommended mitigation measures. The District is interested in further improving process monitoring, control, and optimization through installation of (innovative or established) sensors and/or monitoring equipment, development of an enhanced field sampling and testing program, provision of sufficient redundancy to address potential vulnerabilities, and a review of chemical feed type and usage in relation to District goals (e.g. odor control, increased settling performance). Although this effort is expected to be focused on NPDES permit compliance, potential vulnerabilities associated with air permit and EPA Part 503 compliance should also be investigated.

Key Strategic Questions

1. What infrastructure, equipment, and operational vulnerabilities to regulatory compliance exist and how should the District address these issues?
2. What innovative, applicable, and cost-effective process monitoring and control technologies should the District consider?

Early Completion? YES (Vulnerability Assessment)

Level of Effort: MEDIUM

2.2.7 RECYCLED WATER

Since 2001, the District has operated a Recycled Water Facility (RWF) that provides tertiary-treated water to customers in its service area for industrial and irrigation purposes. In 2018, the District recycled 6.2 MGD (49%) of its average influent flow of 12.6 MGD. Approximately 90% of recycled water flow is provided to Calpine for cooling water use at two large power plants with the remaining 10% used for landscape irrigation at various parks, Caltrans rights-of-way, and a golf course. Uncertainty exists regarding long-term Calpine facility operation due to its acquisition by Energy Capital Partners in 2018 and expiration of the District's recycled water supply agreement with Calpine in 2030. The District is obligated to provide Calpine with a capital cost estimate to continue supplying recycled water by April 2024. Calpine is obligated to notify the District of its intent to continue receiving recycled water beyond 2030 by April 2025. If Calpine facility operation ceases, this would significantly reduce the financial feasibility of providing recycled water to irrigation customers only. In addition, the District does not have certainty regarding long-term operation of existing irrigation customers as evidenced by the closing of the Delta View Golf Course in Pittsburg in 2018.

During negotiation of the new Regional Watershed Permit (July 1, 2019 – June 30, 2024), the District requested consideration of the potential loss of all recycled water customers in the future and an allowance for the associated increase in nutrient loading if the Regional Water Board issues nutrient "Planning Level Targets" or "Load Caps" in the future (refer to Attachment 4).

The District expects to complete a more detailed evaluation of recycled water issues as part of a future Recycled Water Facility Master Plan; however, the RRFMP should highlight key issues, summarize early recommendations for key focus areas, and provide initial recommendations for potential program alternatives.

Key Strategic Questions

1. What long-term recycled water distribution alternatives are viable if Calpine ceases power plant operation earlier than expected or does not extend the existing recycled water supply agreement beyond 2030?
2. How should the District manage near-term capital investment to maintain operational effectiveness and reliability given long-term facility operation uncertainty?

Early Completion? NO

Level of Effort: LOW

2.2.8 ENERGY MANAGEMENT

In addition to increasing renewable energy production via co-digestion of additional organic wastes, the District is interested in formalizing its energy management program with additional focus on energy conservation measures. The District has engaged in the development of two energy management programs in recent years—the Department of Energy’s Superior Energy Performance (SEP) program and the ISO 50001 certification program; however, it is currently unclear whether there is sufficient energy savings potential to support program administration and required capital investment needs. The District may be interested in implementing additional industry “best practices” without pursuing SEP and/or ISO 50001 program certification.

Key Strategic Questions

1. What is the right level of investment and approach to implementation of a formalized energy management program at the District?
2. How should the District implement a “sub-metering” program to better identify energy conservation measures and support economic payback analyses?

Early Completion? NO

Level of Effort: LOW

2.2.9 FUTURE FLOW AND LOAD PROJECTIONS

As part of the Headworks Improvement Project, the District reevaluated previous future flow and load projections developed in 2011, which had direct impacts on project design assumptions, hydraulic profile findings, and ultimately the recommended approach to addressing aging infrastructure at the existing headworks facility. The District is interested in building on this preliminary analysis and developing future flow and load projections that will guide design bases for future projects. As part of its annual rate-setting process, the District has assumed annual growth of 400 equivalent residential units (ERUs) for the last 5 years, which represents a significant reduction in the 600 ERU annual growth assumption in prior years.

Key Strategic Question

1. How should uncertainty regarding future growth in the service area be considered in the development of long-term master planning issues?

Early Completion? YES

Level of Effort: LOW

2.2.10 LAND USE PLANNING

The RRFMP will include an assessment of existing land uses, available land (including the 28-acre property purchased from Dow), and future land use needs, alternatives, and recommendations. The WWTP site is fairly constrained and will be further constrained in the northeast section of the plant if the ECBP is implemented. Effective use of available land is expected to be a key criterion for evaluation and selection of near- and long-term nutrient management alternatives as well as improvements to meet future growth within the District’s service area.

Key Strategic Question

1. How should the District allocate existing land area for both near- and long-term infrastructure and regulatory compliance needs?

Early Completion? NO

Level of Effort: LOW

2.2.11 CONVEYANCE SYSTEM AND OUTFALL HYDRAULICS

The District's wastewater conveyance system consists of large diameter gravity sewers, pump stations, and force mains. The District has a hydraulic model (InfoWorks ICM) of the conveyance system that will be provided to the Consultant to evaluate various system configurations related to the current operation of the Bridgehead and Antioch pump stations to determine if improvements can be made to address various concerns regarding capacity and corrosion issues.

Previous planning studies have identified a future need to construct a parallel WWTP outfall and an outfall pump station to be used during high flow and tide events. The District is currently working with the City of Antioch as they plan to construct a brackish water desalination facility that will discharge 2MGD of brine directly into the upstream end of the District's outfall. There are other factors (e.g. future flow projections, sea level rise) that also need to be analyzed to determine, if or when, future outfall improvements are required.

Key Strategic Question

1. Are there viable alternatives to improve operation the Bridgehead and Antioch pump stations?

Early Completion? NO

Level of Effort: LOW

2.3 SCOPE OF WORK

The following scope of work is conceptual and represents a general outline of the expected services to be provided by the Consultant. It is not intended to be a complete list of services. The District expects Consultants to use their knowledge and expertise to present a fully-developed scope of work that cost-effectively addresses the key focus area issues described above. Consultants are encouraged to describe innovative approaches to address the key focus area and suggest changes to the scope of work described below to complement those approaches.

Task 1 – Project Management

The Consultant shall establish and maintain a project management system that facilitates effective communication between the Consultant and District, tracks the status of document submittals and key decisions, provides timely updates regarding the scope, schedule, and budget status, and ensures effective quality assurance and quality control (QA/QC). The Consultant shall coordinate and conduct the necessary meetings and/or workshops during the project to facilitate the development of the tasks below. The project schedule shall clearly identify milestones, review periods, and any interdependencies between tasks. Review of District data can be included as a sub-task of project management or as part of each task listed below.

Task 2 – Facility Condition Assessment

The Consultant shall conduct a condition assessment of the major systems at the WWTP using a variety of techniques from detailed field investigations to "desktop" analysis. The Consultant shall assume a level of effort that is generally informed by the age of the existing infrastructure, timing of completed and planned capital improvements, and criticality to the operation of the WWTP. Please note that the District is currently designing a Headworks Rehabilitation Project,

constructing a Primary Clarifiers Improvement Project, and preparing to issue a Switchgear Replacement Project for bidding. The Facility Condition Assessment shall include at least the following activities:

- A plan describing the level of investigation for each WWTP process area. The plan shall include information regarding the methodology to be used, impacts to District operations, the expected data to be collected, and the format in which the data will be delivered to the District. The District and Consultant will work together to refine the plan so that the condition assessment information can be assimilated into the District's Asset Management Program.
- A condition assessment of the structural, mechanical, electrical, and instrumentation process area infrastructure. The work should include a detailed assessment of at least one process area.
- A long-term CIP to address identified issues and defects with recommended project scopes, budgets, and timing. The CIP shall incorporate the FCA Phase 1 results.

Task 3 – East County Bioenergy Project – Biogas Utilization Alternatives

The Consultant shall review current ECBP project documentation to determine if there is a feasible approach to incorporate renewable natural gas production into the ECBP. The Consultant shall determine at least the following:

- Is there an approval pathway and associated timeline to receive D3 RINs for biogas generated from municipal solid waste organics? If a pathway doesn't currently exist, is there an opportunity to get a pathway approved and what is the associated level of effort? If a pathway exists, what regulatory, contractual, or other efforts are required to obtain the RINs?
- Will the RINs value support a business case analysis for renewable natural gas production?
- Is it possible to obtain LCFS credits for dedicated electrical vehicle fueling concurrently with the BioMAT program?
- Grant funding opportunities with estimated funding amounts, timing, and basic application and reporting requirements.

Task 4 – Nutrient Management

The Consultant shall develop a strategic approach to address nutrient management regulatory drivers with respect to mainstream and sidestream treatment alternatives. The analysis shall include at least the following activities:

- Develop multiple scenarios to meet anticipated regulatory limits with mainstream and/or sidestream treatment improvements and analyze the scenarios using a WWTP process model. The scenarios shall address the District's concerns described in Attachment 4 as well as other factors including future flow and load projections, existing facility condition, site limitations, and other planned District projects. The consultant shall use a methodology to compare and rank the scenarios based on multiple factors including life-cycle cost.
- Identify near- and long-term TTF capital investment strategy.
- Prepare an implementation strategy with triggers, cost estimates, and project descriptions for viable alternatives.

Task 5 – Renewable Energy Production

The Consultant shall identify the required volume of organic waste that the District can accept to achieve energy self-sufficiency and conduct a market assessment to determine if organic waste

sources exist within a reasonable hauling distance to the WWTP. If the market exists, the Consultant shall identify the necessary capital improvements, with cost estimates, to accept and process the additional organic wastes, and identify any operational impacts associated with accepting the organic waste.

Task 6 – Biosolids Management

The Consultant shall document the District's current biosolids management practices and costs, identify alternative biosolids management options currently available, and conduct a high-level assessment of the alternatives to determine if different management practices should be incorporated into the District's next biosolids management contract. The assessment should also consider long-term regulatory and cost drivers with trigger points for the District to monitor.

Task 7 – Vulnerability Assessment / Process Control, Monitoring, Optimization

The Consultant shall conduct at least the following activities:

- Conduct a comprehensive review of the WWTP and RWF to identify potential regulatory compliance vulnerabilities.
- Identify opportunities to improve treatment process control systems, enhance online monitoring, and further develop the District's sampling and data collection programs.
- Document the type, dosing rate, and intended purpose for the chemicals that the District uses at the WWTP and in the conveyance system and determine if the District should consider other chemicals, dosing rates, or alternative dosing locations.

Task 8 – Recycled Water

The Consultant shall develop and evaluate recycled water distribution alternatives to determine if there are cost-effective operating scenarios for the RWF if Calpine does not continue operation after 2030 (or sooner). The Consultant shall conduct a high-level review of the RWF to determine how the District should manage near-term capital investments and highlight key focus areas to consider in a future RWF Master Plan.

Task 9 – Energy Management

The Consultant shall review the District's current energy management programs, assist with defining goals that meet the District's needs and recommend a strategy to meet those goals. The Consultant shall also evaluate and, if favorable, recommend an energy monitoring strategy to be included as a future District project.

Task 10 – Future Flow and Load Projections

The Consultant shall develop future flow and load projections using historical flow and load data and growth projections based on the District's service area growth projections. The projections should be presented in a manner so that the District regularly can track its progress along the curves to verify design assumptions for future projects.

Task 11 – Land Use Planning

The Consultant shall prepare at least one map showing locations for future expansion of the WWTP to accommodate nutrient management facilities as well as improvements to meet growth within the District's service area.

Task 12 – Conveyance System Hydraulics

The Consultant shall use the District's existing conveyance system hydraulic model to evaluate at least three (3) alternatives including:

- Extending the existing Bridgehead Pump Station force main to discharge directly into one of the Antioch Pump Station force mains.
- Evaluating the Bridgehead Pump Station force main capacity and downstream gravity system conveyance capacity to handle build-out flows.
- Determining the appropriate pump sizing in the Antioch Pump Station (currently two 100 hp and two 400 hp) to accommodate existing dry and wet weather flows and improve the overall reliability and efficiency of the pump station.

The Consultant shall conduct updated hydraulic analysis of the outfall that accounts for the City of Antioch's brine discharge, future flows, and sea level rise to determine when facility improvements are required.

Task 13 – Report Preparation

The Consultant may choose to document the results of each task in a technical memorandum (TM). However, the final RWFMP report shall be a cohesive document with a table of contents, executive summary, chapters, graphics, tables, and any other supporting information in appendices as needed. The draft and final reports shall be submitted in searchable PDF and hard copy.

3.0 PROPOSAL FORMAT AND SUBMISSION INSTRUCTIONS

The proposal shall consist of two parts as described below: Part One - Technical Proposal and Part Two - Fee Proposal.

Proposals are due by the date and time shown in Table 1 in Section 1.2 and shall be submitted in pdf on digital media (e.g., DVD, CD, USB flash drive) and in hardcopy either hand delivered or mailed to:

Delta Diablo
Attn: Brian Thomas P.E.
2500 Pittsburg-Antioch Highway
Antioch, CA 94509

Proposal submittals shall include one digital copy of the Technical Proposal, six (6) color printed and *spiral bound* copies of the Technical Proposal, and three (3) printed copies of the Fee Proposal. Any delays by the mail service that causes a package to be delivered after the deadline will not be accommodated. Proposal submittals shall be clearly labeled as described in Section 1.2.3.

3.1 PART 1 – TECHNICAL PROPOSAL

Part One shall describe the firm's organization and capabilities, its understanding of the services to be provided, approach to accomplishing the Scope of Work, the project team's experience, and the project team and firm's qualifications. The Technical Proposal shall be limited to fifteen (15) double-sided pages using a minimum of 11-point font size, excluding: cover letter, table of contents, resumes of individuals proposed for the project team, and any contractual related information (e.g., litigation, contract exceptions) required in this RFP. The proposal should address, at a minimum, the following:

1. **Cover Letter** - State the firm's general interest in the project, identify the firm's primary point of contact during the RFP process, and clarify the lead consultant if firms have formed a team to prepare the proposal.

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2. **Executive Summary** - Prefacing the proposal, provide a brief and concise summation of the proposal demonstrating the Consultant's understanding of the Project elements.
 3. **Business Organization** - Provide full name, address, telephone, e-mail addresses, of the firm. Include affiliations with holding companies and/or parent companies. Indicate whether the firm operates as a partnership, corporation, or individual. Provide the name, title, and telephone number of the person in the organization authorized to negotiate contract terms, render binding decisions on contract matters, and sign the final agreement.

Provide a description of the proposing firm(s). Explain the firm's current organizational structure, general background and qualifications, and describe any special knowledge or capabilities within the firm, material to this RFP scope of work.

If firms have joined together to submit a proposal, explain the relationship between the firms. Clearly identify how the firms, if awarded a contract, will enter into the contract (i.e., joint venture, prime and sub-consultant)

4. **Project Team** - Provide the name and title of the project manager that will be the District's main point of contact for this Project. Identify the principal staff and support staff who will be assigned to this Project and include an organization chart showing key team members listed by name and project responsibility. Provide a maximum two-page resume for each of the key personnel, including descriptions of key project experience, dates, costs of the projects, and duties performed by the individual on the projects. Indicate any projects in which the team members have worked together in the past and the nature of those projects.

Submit the name of all Sub-Consultant(s) to be utilized on the project and their specific staff to be assigned to this project with resumes for key personnel. Describe how each sub-consultant will be utilized. Provide a list of their similar past projects along with references.

5. **Approach to the Scope of Work** - Present a narrative overview of the proposer's understanding of the Project requirements based on the information provided in this RFP. Describe the capability to keep the project on schedule, within budget and ensure proper quality control and quality assurance. Discuss any unique ideas or concerns relating to the work. Discuss quality control and quality assurance protocols. The District is interested in any innovative ideas to manage, control, or appropriately share Project risks. The proposal shall contain sufficient detail to demonstrate that the firm understands the magnitude and scope of the project and has developed a plan to accomplish the work. Elaborate on the scope of work provided with this RFP and suggest other scope items for consideration. Include any comments or suggestions regarding the project schedule or any other aspects of the work that the proposer feels would be helpful to the District. The proposal shall include a graphic representation of the project schedule with key milestones, deliverables, workshops, and other relevant information to adequately demonstrate interdependencies, if any, between tasks.
6. **Prior Experience** - Describe the project team's experience in completing similar master planning efforts. Provide descriptions of the work performed, including: schedule of when work was performed; name and location of project; total cost of the project; type and extent of services performed; and involvement of team members proposed for this project. List owner/client references including locations, contact name(s), email address(es) and telephone number(s).
7. **Litigation** - Provide litigation history for any claims filed by your firm or against your firm related to the provision of program or project or engineering services within the past five (5) years.

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8. **Other Information** - This section shall contain all other pertinent information the firm wishes the District to consider.
 9. **Contract Exceptions** - The District's Standard Consulting Services Contract form will be used as the contracting mechanism for this work and is attached to this RFP. The Consultant shall list specific exceptions and recommended replacement language for the District to consider.
 10. **Resumes** – Project team, included key sub-consultant, resumes shall be included as an attachment.

3.2 PART 2 – FEE PROPOSAL

Part Two shall be the Fee Proposal based on the scope of work in the Consultant's proposal. It shall be sealed in an envelope with the following clearly written on it:

Fee Proposal for Consultant Services for the Resource Recovery Facility Master Plan, RFP 18120.

The elements of the fee proposal shall include the following:

1. An hourly rate and reimbursement schedule for each classification of firm personnel who will be working on the project and for each classification of anticipated reimbursements. If applicable, wage rates must be in compliance with California labor code.
2. Fees for all required work as outlined in this RFP and any additional services proposed by the Consultant. The fee proposal shall be composed of and broken down into two components:
 - a) Fees for Consultant services broken down by key tasks in the scope of work and sub-consultant fees; and
 - b) Reimbursable expenses including but not limited to reproduction costs, postage, and mileage.

4.0 MINIMUM QUALIFICATIONS

The District seeks a project team with expertise to perform the work described herein. The firm's expertise is defined as a minimum of ten (10) years of experience in preparing master plans for wastewater treatment facilities and associated systems. Proven and successful experience may include, but not be limited to, the following:

1. Previous master planning experience for complex wastewater treatment plants and/or other similar infrastructure as noted in this RFP;
2. Previous experience with treatment plant process evaluations and modeling to determine operational performance improvements and/or new infrastructure requirements;
3. Knowledge of regulatory requirements and emerging regulatory trends;
4. Successfully completed project experience based on the ability of the proposed team to meet the project's objectives, schedule, and budget;
5. Project manager with demonstrated experience leading project teams that have successfully completed master planning efforts.

All proposed personnel, including sub-consultants, shall be knowledgeable of, and comply with, all applicable local, state, and federal regulations, cooperate and consult with District staff during the project period.

5.0 SELECTION PROCESS

Proposals will be evaluated using two sets of criteria. Proposals meeting the mandatory criteria will be evaluated based on the following technical elements. Proposals not meeting the mandatory elements may not be considered. The District may elect to interview top ranked firms.

1. Mandatory Elements

The firm follows the instructions set forth in the RFP, submits a complete proposal, including references, and demonstrates that the firm meets or exceeds the minimum qualifications in Section 4.0.

2. Technical Elements

The District will consider following technical elements when evaluating the proposal:

- Number of comparable and similar projects completed by project team members
- Project approach to the RFP scope of work
- Innovative ideas that add value to the Project
- Positive, relevant references
- Specialized firm experience
- Project manager experience

The District reserves the right to consider additional technical elements that may be identified during the proposal evaluation process.

6.0 REFERENCE INFORMATION

The District included the following background materials as attachments in Appendix B for use by the Consultant to prepare their proposal:

Attachment 1 - East County Bioenergy Project Fact Sheet

Attachment 2 - District Sustainability Policy

Attachment 3 - Proposed FY19/20-FY23/24 CIP Project Summary Table

Attachment 4 - District Letter to RWQCB, Factors Impacting Nutrient Loads

Attachment 5 - WWTP Process Flow Schematic

Consultants can review basic WWTP process control data on the California Integrated Water Quality System Project (CIWQS) website. Additional information will be provided to the selected consultant to prepare the RRFMP.

7.0 CONTACT INFORMATION

All technical questions shall be submitted to: Brian Thomas, Engineering Service Director at briant@deltadiablo.org.

Oral statements regarding this RFP by any persons should be considered unverified information unless confirmed in writing.

8.0 DISTRICT INFORMATION



Delta Diablo
2500 Pittsburg-Antioch Highway
Antioch, CA 94509
Tel 925-756-1900
Fax 925-756-1960
www.deltadiablo.org

APPENDIX A

Appendix A - District Standard Consulting Services Contract



DELTA DIABLO
2500 Pittsburg-Antioch Highway, Antioch, CA 94509
CONSULTING SERVICES CONTRACT

PROJECT NAME AND NUMBER:

THIS CONTRACT SHALL BE BINDING ON THE DISTRICT ONLY IF IT IS SIGNED BY AN AUTHORIZED DESIGNEE

This Contract ("Contract") is made by and between Delta Diablo ("District") and ("Consultant"). The parties agree as follows:

CONSULTANT DATA

Full Business Name:

Address:

City, State, ZIP:

Business Telephone:

Business Fax: **Email:**

Federal Tax Identification Number ("TIN") or Social Security Number ("SSN"):

Consultant Contact/Title:

District Contact/Title:

Consultant certifies under penalty of perjury that Consultant is a

- Sole Proprietor Corporation Limited Liability Company Partnership
- Nonprofit Corporation Government Agency Other [describe:]

CONTRACT TERMS

Effective Date:

Completion Date:

Payment Limit: \$

Liquidated Damages: \$ per day

Payment information will be reported to the Internal Revenue Service under the name and TIN or SSN, whichever is applicable, provided above by Consultant.

1. Scope of Service. District hereby contracts with Consultant, and Consultant accepts such, to perform the professional services as described in Appendix B (Scope of Services), upon the terms and in consideration of the payments stated herein.
2. Report Disclosure Section. Pursuant to Government Code Section 7550, Consultant shall include in all documents or written reports completed and submitted to District in accordance with this Agreement, a separate section listing the numbers and dollar amounts of all contracts and subcontracts relating to the preparation of each such document or written report. This section only applies if the Payment Limit of this Agreement exceeds \$5,000. If multiple documents or written reports are the subject or product of this Agreement, the disclosure section may also contain a statement indicating that the total Agreement amount represents compensation for multiple documents or written reports.
3. Insurance. Consultant may not commence work under this Agreement until it has furnished evidence of the insurance prescribed in Appendix A and may not continue to perform any work under this Agreement if the insurance required herein is no longer in effect.
4. Payment. District shall pay Consultant for professional services performed at the rates shown in Appendix C, which include all overhead and incidental expenses, for which no additional compensation will be allowed. Notwithstanding the foregoing, District shall reimburse those incidental



expenses specifically itemized in Appendix C, provided that Consultant submits copies of receipts and, if applicable, a detailed mileage log to the District. In no event may the total amount paid to Consultant exceed the Payment Limit specified on page 1, **Payment Limit**, without District's prior written approval.

- a. **Billing Statements:** Consultant shall submit billing statements in the manner and form prescribed by the District detailing the work performed and listing, for each item of services, the employee categories, hours and rates. Except as otherwise provided in the Scope of Services, Consultant shall submit the billing statements no later than 30 days from the end of the month in which the services described in the billing statement were actually rendered. Except as provided in subsections (b) - (d) below, District will endeavor to pay Consultant within 30 days after receipt of each statement.
 - b. **Documentation:** Consultant shall furnish progress reports with each billing statement at no additional charge. Consultant shall include sufficient detail in each progress report, and shall furnish to the District whatever additional information is necessary, to enable the District to determine whether Consultant is performing all tasks described in the Scope of Services pursuant to the schedule set forth in the Scope of Services. .
 - c. **Penalty for Late Submission:** If District is unable to obtain reimbursement from the state or federal government as a result of Consultant's failure to submit to District a timely billing statement as set forth above, District will not be obligated to pay Consultant for the services included in the late billing statement.
 - d. **Right to Withhold:** District may withhold payment to Consultant following written notice to Consultant that: (i) Consultant has failed to fully perform its obligations under this Agreement (including, without limitation, any failure to submit required deliverable items according to the schedule set forth in the Scope of Services); (ii) Consultant has neglected, failed, or refused to furnish information or cooperate with any inspection, review, or audit of its work or records; or (iii) Consultant has failed to sufficiently itemize or document its billing statement.
 - e. **Audit Exceptions:** Consultant accepts responsibility for receiving, replying to, and/or complying with any audit exceptions by appropriate county, state or federal audit agencies resulting from its performance of this Agreement. Within 30 days of demand, Consultant shall pay District the full amount of District's obligation to the state and/or federal government resulting from any audit exceptions that are attributable to Consultant's failure to properly perform any of its obligations under this Agreement.
5. **Extra Work.** Any work or services in addition to the work or services described in the Scope of Services that District deems necessary to properly complete the work or services described in Scope of Services shall be performed by Consultant at the direction of District according to the rates or charges listed in Appendix C. In the event that no rate or charge is listed for a particular type of extra work, Consultant will be paid for the extra work at a rate to be mutually agreed on prior to the commencement of the extra work. In no event will Consultant be entitled to compensation for extra work unless, prior to commencement of the extra work, District has executed a written amendment describing the extra work and payment terms in accordance with Section 25. **Amendments.**
 6. **Time for Completion.** Consultant shall complete all services covered by this Agreement no later than the end of the term as set forth above. Notwithstanding the foregoing, to the extent the Scope of Services provides for the phasing of services, Consultant shall complete all services for each phase of the project by the deadlines stated in the Scope of Services.
 7. **Termination by District.** At its option, District may terminate this Agreement at any time by written notice to Consultant, whether or not Consultant is then in default. Upon such termination, Consultant shall, without delay, deliver to District all materials and records prepared or obtained in the performance of this Agreement, and District shall pay Consultant, without duplication, all amounts due for the services rendered up to the date of termination.
 8. **Abandonment by Consultant.** If Consultant ceases performing services under this Agreement or otherwise abandons the project prior to completing all of the services described in this Agreement, Consultant shall, without delay, deliver to District all materials and records prepared or obtained in the performance of this Agreement. District shall pay Consultant the amount it determines to be the reasonable value of the services performed up to the time of cessation or abandonment, less a deduction for any damages or additional expenses which District incurs as a result of such cessation

or abandonment.

9. Ownership of Documents. All materials and records of a finished nature, such as final plans, specifications, reports, and maps, prepared or obtained in the performance of this Agreement, shall be delivered to and become the property of District. Consultant shall retain, and make available to District in accordance with Section 10. Record Retention and Auditing, all materials of a preliminary nature, such as survey notes, sketches, preliminary plans, computations and other data, prepared or obtained in the performance of this Agreement.
10. Record Retention and Auditing. Except for materials and records delivered to District, Consultant shall retain all materials and records prepared or obtained in the performance of this Agreement, including financial records, for a period of at least five years after Consultant's receipt of the final payment under this Agreement. Upon request by District, Consultant shall promptly make such materials and records available to District, or to authorized representatives of the state and federal governments, at a convenient location within Contra Costa County designated by the District, at no additional charge and without restriction or limitation on their use.
11. Independent Contractor Status. The parties intend that Consultant, in performing the services specified herein, is acting as an independent contractor and that Consultant will control the work and the manner in which it is performed. This Agreement is not intended and may not be construed to create the relationship between the parties of agent, servant, employee, partnership, joint venture or association. Additionally, Consultant is not entitled to participate in any pension plan, workers' compensation plan, health plan, insurance, bonus or similar benefits District provides to its employees. In the event that District exercises its right to terminate the Agreement, Consultant expressly agrees that it will have no recourse or right of appeal under any rules, regulations, ordinances or laws applicable to employees.
12. Breach. If Consultant fails to perform any of the services described in this Agreement in the manner and time frame set forth in the Scope of Services or otherwise breaches this Agreement, District may pursue all remedies provided by law or equity. Disputes relating to the performance of this Agreement are not subject to non-judicial arbitration.
13. Compliance with Laws. In performing this Agreement, Consultant shall comply with all applicable laws, statutes, ordinances, rules and regulations, whether federal, state, or local in origin, including, but not limited to, licensing and purchasing practices, and wages, hours and conditions of employment, including nondiscrimination and prevailing wage rates and their payment in accordance with California Labor Code Section 1775. If any federal or state regulations or laws touching upon the subject of this Agreement are adopted or revised during the term hereof, this Agreement will be deemed amended and Consultant will comply with such federal or state requirements.
14. Assignment. Consultant may not assign or transfer this Agreement, in whole or in part, whether voluntarily, by operation of law or otherwise; provided, however, Consultant may, subject to any required state or federal approval, enter into subcontracts for the portion of the services for which Consultant does not have the facilities to perform so long as Consultant obtains the District's written consent to such subcontracting prior to execution of this Agreement. The District may withhold consent to any proposed subcontract in his or her sole and absolute discretion. Any purported assignment, transfer or subcontract that does not comply with the terms hereof is void.
15. Endorsement on Plans. Consultant shall endorse all plans, specifications, estimates, reports and other items described in Scope of Services prior to delivering them to District, and, where appropriate, indicate his or her registration number.
16. Works Made for Hire. All reports, original drawings, graphics, plans, studies, and other data and documents, in whatever form or format, assembled or prepared by Consultant or Consultant's subcontractors, consultants, and other agents in connection with this Agreement are "works made for hire" (as defined in the Copyright Act, 17 U.S.C.A., Sections 101 *et seq.*, as amended) for District, and Consultant unconditionally and irrevocably transfers and assigns to District all right, title, and interest, including all copyrights and other intellectual property rights, in or to the works made for hire. Unless required by law, Consultant shall not publish, transfer, discuss, or disclose any of the above-



described works made for hire or any information gathered, discovered, or generated in any way through this Agreement, without District's prior express written consent. If any of the works made for hire is subject to copyright protection, District reserves the right to copyright such works and Consultant agrees not to copyright such works. If any works made for hire are copyrighted, District reserves a royalty-free, irrevocable license to reproduce, publish, and use the works made for hire, in whole or in part, without restriction or limitation, and to authorize others to do so.

17. Indemnification. Consistent with California Civil Code section 2782.8, Consultant shall, to the fullest extent permitted by law, indemnify, protect, defend and hold harmless District, and its employees, officials, and agents, from any and all demands, losses, claims, costs, liabilities, and expenses for any damage, injury, or death, including any and all administrative fines, penalties or costs imposed as a result of an administrative proceeding, that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its officers, employees, agents, contractors, subconsultants, or any persons under its direction or control. If requested by District, Consultant shall defend any such suits at its sole cost and expense. If District elects to provide its own defense, Consultant shall reimburse District for any expenditures, including reasonable attorneys' fees and costs. Consultant's obligations under this section exist regardless of concurrent negligence or willful misconduct on the part of District or any other person; provided, however, that Consultant will not be required to indemnify, including the cost to defend, District for the proportion of liability a court determines does not arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its officers, employees, agents, contractors, subconsultants, or any persons under its direction or control. This indemnification clause will survive the termination or expiration of this Agreement.
18. Endorsements. Consultant may not, in its capacity as a Consultant with District, (a) publicly endorse or oppose the use of any particular brand name or commercial product without the prior approval of District's governing body, (b) publicly attribute qualities or lack of qualities to a particular brand name or commercial product in the absence of a well-established and widely accepted scientific basis for such claims or without the prior approval of District's governing body or (c) participate or appear in any commercially-produced advertisements designed to promote a particular brand name or commercial product, even if Consultant is not publicly endorsing a product, as long as Consultant's presence in the advertisement can reasonably be interpreted as an endorsement of the product by or on behalf of District. Notwithstanding the foregoing, Consultant may express its views on products to other consultants, to District's governing body or its officers, or to others who may be authorized by District's governing body or by law to receive such views.
19. Project Personnel. In performing the services authorized under this Agreement, Consultant shall use the personnel listed in Appendix D. Consultant may only make changes in project personnel and authorized subconsultants with the District's prior written consent, and Consultant shall notify the District in writing at least thirty (30) days in advance of any proposed change. Any person proposed as a replacement shall possess training, experience, and credentials comparable to those of the person being replaced.
20. Inspection. Authorized representatives of District, the State of California and the United States Government may monitor, inspect, review and audit Consultant's performance, place of business and records pertaining to this Agreement.
21. Conflicts of Interest. Consultant covenants that it presently has no interest and that it will not acquire any interest, direct or indirect, that represents a financial conflict of interest under state law or that would otherwise conflict in any manner or degree with the performance of its services hereunder. Consultant further covenants that in the performance of this Agreement, Consultant will employ no person having any such interest. If requested to do so by District, Consultant shall complete a "Statement of Economic Interest" form and deliver it to the District and shall require any other person doing work under this Agreement to complete a "Statement of Economic Interest" form and deliver it to the District. Consultant covenants that Consultant, its employees and officials, are not now employed by District and have not been so employed by District within 12 months immediately preceding this Agreement; or, if so employed, did not then and do not now occupy a position that would create a conflict of interest under Government Code Section 1090. In addition to any indemnity provided by Consultant in this Agreement, Consultant shall indemnify, defend and hold District

harmless from any and all claims, investigations, liabilities or damages resulting from or related to any and all alleged conflicts interest.

22. Nonrenewal. Consultant understands and agrees that there is no representation, implication, or understanding that the services provided by Consultant under this Agreement will be purchased by District Under a new contract following expiration or termination of this Agreement, and Consultant waives all rights or claims to notice or hearing respecting any failure to continue purchasing all or any such services from Consultant.
23. Professional Competence; Licensure. Consultant represents and warrants that it is (i) professionally competent and able to provide the professional services described in this Agreement by reason of Consultant's personal knowledge and skill, and (ii) currently licensed, and will remain licensed in good standing at all times during the term of this Agreement, as one of the following: (a) an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the California Business and Professions Code; (b) a landscape architect pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the California Business and Professions Code; (c) a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the California Business and Professions Code; or (d) a professional land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the California Business and Professions Code.
24. Notices. All notices under this Agreement must be in writing, and, except as otherwise provided in the Scope of Services, sent by personal delivery (including overnight courier service) or by certified United States Mail, postage prepaid, to the parties at the addresses designated above, unless changed by written notice to the other party. Consultant shall address all notices to District to the District. The effective date of the notice is the date of deposit in the mail or of other delivery, except that the effective date of notice to District is the date of receipt by the District.
25. Amendments. This Agreement may be amended only by written agreement signed by both of the parties.
26. Disputes. Disagreements between District and Consultant concerning the meaning, requirements or performance of this Agreement are subject to final written determination of the District or in accordance with the applicable procedures (if any) required by state or federal government.
27. Choice of Law and Personal Jurisdiction. This Agreement is made in Contra Costa County and is governed by, and will be construed in accordance with, the laws of the State of California. The parties, to the fullest extent permitted by law, knowingly, intentionally, and voluntarily, with and upon the advice of competent counsel, submit to personal jurisdiction in the State of California over any suit, action or proceeding arising from or relating to the terms of this Agreement.
28. No Implied Waiver. No waiver of any provision of this Agreement by District is valid unless it is in writing and signed by District. Waiver by District at any time of any breach of this Agreement may not be deemed a waiver of or consent to a subsequent breach of the same or any other provision of this Agreement. If Consultant's action requires the consent or approval of District, that consent or approval on one occasion may not be deemed a consent to or approval of that action on any later occasion or a consent to or approval of any other action. Subject to Section 26. Disputes above, inspections, approvals or statements by any officer, agent or employee of District indicating Consultant's performance or any part thereof complies with the requirements of this Agreement, or acceptance of the whole or any part of Consultant's performance, or payments therefor, or any combination of these acts, does not relieve Consultant of its obligation to fulfill this Agreement as prescribed or prevent District from bringing an action for damages or enforcement arising from any failure to comply with any of the terms and conditions of this Agreement.
29. Successors and Assigns. Subject to Section 14. Assignment, this Agreement binds Consultant's successors, assigns, heirs, executors and personal representatives.
30. No Third-Party Beneficiaries. This Agreement is intended solely for the benefit of the parties hereto, and no third party has any right or interest in any provision of this Agreement or as a result of any



action or inaction of any party in connection therewith.

31. **Construction.** The section headings and captions of this Agreement are, and the arrangement of this instrument is, for the sole convenience of the parties to this Agreement. The section headings, captions and arrangement of this instrument do not in any way affect, limit, amplify or modify the terms and provisions of this Agreement. This Agreement may not be construed as if it had been prepared by one of the parties, but rather as if both parties have prepared it. The parties to this Agreement and their counsel have read and reviewed this Agreement and agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting party does not apply to the interpretation of this Agreement.
32. **Severability.** If any term or provision of this Agreement is, to any extent, held invalid or unenforceable, the remainder of this Agreement will not be affected thereby.
33. **Entire Agreement.** This Agreement, together with all of the attachments listed in below under Attachments, contains all of the terms and conditions agreed upon by the parties regarding the subject matter of this Agreement, and supersedes all previous communications, representations, understandings and agreements, whether verbal, written, express or implied, between the parties.
34. **Authorization.** Consultant, or the representative(s) signing this Agreement on behalf of Consultant, represents and warrants that Consultant has full power and authority to enter into this Agreement and to perform the obligations set forth herein, and that the representatives signing this Agreement have the authority to execute this Agreement on behalf of Consultant and to bind Consultant to its contractual obligations hereunder.

Attachments: Appendix A - Insurance Requirements for Consultant
Appendix B - Scope of Work
Appendix C – Rate Schedule

I HAVE READ THIS CONTRACT, INCLUDING ALL ATTACHMENTS AND EXHIBITS, IF APPLICABLE. I CERTIFY THAT I HAVE THE AUTHORITY TO SIGN AND ENTER INTO THIS CONTRACT AND AGREE TO BE BOUND BY ITS TERMS.

CONSULTANT

Signature #1

Consultant Printed Name and Title

Date

Signature #2

Consultant Printed Name and Title

Date

DISTRICT

Vince De Lange
General Manager

Date

Unless corporate resolution delegates an individual to sign contracts, a contract with a corporation shall be signed by the President, Vice President or Chairman of the Board (signature 1) **and** the corporation Secretary, Assistant Secretary, Chief Financial Officer/Treasurer or Assistant Treasurer (signature 2).



CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
)
County of _____)

On _____, before me, _____, Notary
Date Name

Public, personally appeared _____ (insert name(s) and title(s) of the officer(s) signing on behalf of the Consultant), who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS MY HAND AND OFFICIAL SEAL

Signature, Notary Public



APPENDIX A

INSURANCE REQUIREMENTS FOR CONSULTANT

Consultant may not commence work under this Agreement until it has furnished evidence of the insurance required herein to the District, and the District has approved it, and may not continue to perform any work under this Agreement if the insurance required herein is no longer in effect. Consultant shall, at no cost to the District, obtain and maintain, for the duration of the contract, the following policies of insurance:

- A. **General Liability Insurance** with a minimum coverage limit of \$1,000,000 for claims made in the aggregate annually for all personal injury and property damage, to include liability assumed under this Agreement, the use of any licensed motor vehicle by Consultant or subconsultants, and naming the District, its governing body, officers and employees as additional insureds.
- B. **Automobile Liability Insurance** with coverage at least as broad as ISO Form numbers CA 0001 06 92, Code 1 (any auto), for vehicles used in the performance of this Agreement with minimum coverage of not less than \$1,000,000 per accident combined single limit (CSL). Such policy shall contain or be endorsed with the provision that coverage shall not be canceled or materially reduced in coverage without thirty (30) days prior written notice ten (10) days for non-payment of premium to District by certified mail.
- C. **Professional Liability Insurance** with a minimum coverage limit of \$ 1,000,000 for claims made in the aggregate annually and a maximum self-insured retention or self-insured retained limit of liability of \$25,000, for all damages or losses because of errors, omissions or malpractice arising out of the provision of professional services by Consultant and Consultant's subconsultants under this Agreement.
- D. **Worker's Compensation Insurance** pursuant to state law, including, without limitation, California Labor Code section 3700. If Consultant has no employees, Consultant may sign and file the following certification in lieu of insurance:

"I am aware of the provisions of California Labor Code Section 3700 which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with the provisions of that code before commencing with and during the performance of the work of this contract."

Certificate of Insurance: Prior to the effective date of this Agreement, Consultant shall furnish to the District certificates of insurance evidencing the coverage required herein and requiring 30 days 'written notice to the District of policy lapse, cancellation or material change in coverage. If Consultant renews the insurance policy(ies) or acquires a new insurance policy(ies) or amends the coverage through an endorsement to the policy(ies) at any time during the term of this Agreement, then Consultant shall provide current certificate(s) to the District.

Warranty: Consultant represents and warrants that, as of the effective date of this Agreement, Consultant is not aware of any situation that has occurred that could reduce the limits of liability set forth above for claims made under this Agreement.



APPENDIX B

Appendix B – Reference Information

East County Bioenergy Project

dated February 2019
Contra Costa County, CA

This project is an innovative public-private partnership between **Delta Diablo** (wastewater agency) and **Mt. Diablo Resource Recovery** (MDRR, solid waste hauler) that aims to meet organics landfill diversion state mandates (AB 1826, SB 1383) by producing renewable energy, achieving energy self-sufficiency, and reducing greenhouse gas emissions.




Transforming Waste into Valuable Resources through Investment in Existing Infrastructure






MDRR intends to invest **~\$15 million** to install a new and innovative material preprocessing technology at its existing material recovery facility to extract valuable organics (e.g., food waste) from municipal solid waste for delivery to Delta Diablo's Wastewater Treatment Plant. MDRR would pay a "tipping fee" to Delta Diablo for further handling and processing of this material.

Delta Diablo intends to invest **~\$34 million** in infrastructure improvements to receive and process this material, including a waste receiving station, digester mixers/thickener, a biogas cleaning system, biogas co-generation engines, and an ammonia recovery system. Delta Diablo would recover the initial capital investment and provide value to its ratepayers via tipping fees from MDRR and electricity sales to the local power grid under a long-term contract.

Key Project Benefits

-  **Cost Savings** Delta Diablo receives long-term revenue to reduce future rate increases. MDRR reduces costs relative to other diversion options.
-  **Waste Diversion from Landfills** Nearly 30,000 tons/year of organics diverted to support sustainable waste management practices.
-  **Renewable Electricity Production** Delta Diablo would produce 280% of plant demand (~2.6 MW) w/sales of excess to grid

-  **GHG Emissions Reduction** Reduces GHG emissions by ~9,000 metric tons per year (equivalent to ~1,900 passenger cars).
-  **Job Creation** Creates local jobs to support project construction and long-term facility operations.
-  **Fertilizer Production** Residual solids would be processed and used to restore soil health by providing valuable nutrients and carbon.

Current Status

- Delta Diablo and MDRR completed 30% designs under separate contracts w/Anaergia (technology provider).
- Intend to execute design-build contracts w/Anaergia in 6-9 mos.
- Environmental review is complete; pursuing required permits.

Project Needs

- Federal/state funding to support overall project financial viability.
- Continued legislative support for renewable energy production.
- Advocacy to eliminate institutional barriers to implementing innovative projects.



Delta Diablo is a California special district that provides wastewater services for nearly 210,000 customers in the cities of Antioch and Pittsburg, and the unincorporated community of Bay Point. As a "Utility of the Future," Delta Diablo embraces innovative approaches and sustainable solutions to benefit the environment, lower operating costs, increase revenue, and serve as responsible stewards of the public's resources and trust.

Delta Diablo

ADMINISTRATIVE POLICY HANDBOOK

POLICY TITLE: Sustainability
POLICY NUMBER: 1060
PROCEDURE: N/A
DATE ADOPTED: March 14, 2018

for V.C. [Signature]
D. Pete Longmire, Board Secretary

It is the policy of Delta Diablo (District) to provide reliable, cost-effective water resource recovery services through sustainable operations, maintenance, planning, design, and construction activities that avoid, minimize, or mitigate adverse effects on the economy, environment, and the public, and nurture a productive and motivated workforce.

1060.1 Purpose

The purpose of the Sustainability Policy is to set forth the District's intent and commitment to incorporate sustainability into its business practices and decision-making processes.

1060.2 Definitions

1060.2.1 Sustainability: The ability to meet the needs of the present without compromising the ability of future generations to meet their needs.

1060.2.2 Triple Bottom Line: An evaluation framework made up of three main categories—social, environmental, and financial.

1060.3 Policy

The District's Sustainability Policy is based on the following guiding principles:

1060.3.1 Environmental Excellence: The District shall consistently meet or exceed all regulatory standards and comply with environmental regulations and legislation.

1060.3.2 Environmental Responsibility: The District shall contribute to the long-term preservation and enhancement of the environment.

1060.3.3 Environmental Progress: The District shall continuously improve its environmental performance.

1060.4 Goal

It is the goal of the District to increase the sustainability of its operations by incorporating the triple bottom line approach into its decision-making process. The General Manager and/or his/her designee will guide the District's efforts to:

- 1060.4.1** Promote an environmental stewardship ethic in its staff and amongst the water resource recovery industry.
- 1060.4.2** Incorporate economic, environmental, and social considerations into key business decisions to benefit our customers.
- 1060.4.3** Support continuous improvement of environmental performance in the areas of resource conservation, waste reduction, resource recovery, pollution prevention, and renewable resources.
- 1060.4.4** Promote the efficient use of materials and resources throughout District operations including, but not limited to, water, energy, raw materials, and chemicals.
- 1060.4.5** Be a positive force through advocacy in support of the state's efforts to protect and preserve the quality of our environment, communities, and workplace.
- 1060.4.6** Build partnerships, inside and outside of the District, to sustain and enhance our environment.
- 1060.4.7** Support and incorporate other related policies and programs, such as the Environmentally Preferable Purchasing Policy and the Energy Management System Pledge.
- 1060.4.8** Accord the highest respect and value to every individual and community by developing and conducting business in a manner that promotes equity and affords fair treatment, accessibility, and protection for all people, regardless of race, age, culture, income, or geographic location.

1060.5 Awareness

The District will make this policy available to staff, external partners, community members, and the general public.

1060.6 Reporting

Staff will prepare and submit periodic reports to the Board on ongoing efforts related to the Sustainability Policy. This information will also be provided to staff.

Page	Project Name	Project No.	Priority	Lead Dept.	*Approved Budget through FY18/19	Anticipated Budgets					Fund Distribution							
						FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	Estimated Total Project Cost	WW CA	WW CAR	WW Exp	AT	RW CA	RW CAR	RW Exp
Wastewater Capital Asset (Fund 120)																		
CA-3	Permanent Brine Transfer Facility	18109	1	ES	808,741	\$191,259					\$1,000,000	100%						
CA-5	Recycled Water Facility and Treatment Plant Intertie	TBA	1	ES				\$500,000	\$1,200,000	\$1,700,000	50%				50%			
CA-6	Asset Management Program	19109	3	ES	300,000		\$100,000	\$100,000	\$100,000	\$600,000	100%							
CA-7	Conveyance and Treatment Systems Reliability Improvements	18107	3	RRS		\$50,000	\$50,000	\$50,000	\$350,000	\$500,000	100%							
CA-9	East County Bioenergy Project	16117	3	ES	5,634,606		\$12,500,000	\$13,545,529	\$2,319,865	\$34,000,000	79%	14%		7%				
CA-10	Energy and Water Efficiency Improvements	18908	3	ES		\$50,000	\$50,000	\$50,000	\$450,000	\$600,000	50%	50%						
CA-12	Small District Capital Asset Project	19100	3	ES		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	100%						
Wastewater Capital Asset Fund Total					6,743,347	\$391,259	\$12,800,000	\$13,845,529	\$3,819,865	\$1,300,000	\$38,900,000							
Wastewater Capital Asset Replacement (Fund 130)																		
CAR-3	Chlorine Contact Influent Gates Replacement	TBA	1	RRS				\$400,000	\$1,100,000	\$1,500,000	100%							
CAR-4	Conveyance System Improvements - Sewer Main Blowoffs	TBA	1	ES					\$200,000	\$200,000	100%							
CAR-7	District Office Building Roof Replacement	18112	1	ES	2,400,000					\$2,400,000	100%							
CAR-8	District Office Building Rehabilitation	18113	1	ES	817,163	\$700,000	\$5,000,000	\$2,482,837		\$9,000,000	100%							
CAR-9	Headworks Improvements	17117	1	ES	1,524,286	\$2,475,714	\$5,000,000	\$3,000,000		\$12,000,000	100%							
CAR-10	On-Site Fueling Station Replacement	19112	1	ES	200,000	\$300,000				\$500,000	100%							
CAR-11	Primary Clarifier Area Improvements	17140	1	ES	3,238,070	\$961,930				\$4,200,000	100%							
CAR-12	Primary Clarifier Nos. 1 - 4 Coating	TBA	1	ES				\$400,000	\$500,000	\$500,000	\$1,400,000	100%						
CAR-13	Pump Station Facilities Repair	80008	1	ES	4,726,234	\$5,773,766	\$3,500,000			\$14,000,000	100%							
CAR-14	SCADA Communication Network/PLC Processor Upgrade	18114	1	RRS	646,855	\$100,000	\$100,000	\$153,145		\$1,000,000	90%				10%			
CAR-15	SCADA Master Plan	TBA	1	ES					\$500,000	\$500,000	90%				10%			
CAR-16	Sodium Bisulfite Tank Replacement	13105	1	ES	290,443	\$409,557				\$700,000	100%							
CAR-17	Treatment Plant Electrical Switchgear Replacement	17120	1	ES	2,006,272	\$1,243,728	\$1,250,000			\$4,500,000	100%							
CAR-18	Treatment Plant Roadway Maintenance Project	18115	1	ES	248,972	\$40,000			\$1,461,028	\$1,750,000	100%							
CAR-19	Triangle Pump Station Replacement	19111	1	ES	200,000	\$300,000				\$500,000	100%							
CAR-22	Emergency Retention Basin Improvements	19110	2	ES		\$50,000	\$50,000	\$50,000	\$750,000	\$900,000	100%							
CAR-24	RAS Pump Rehabilitation	TBA	2	RRS					\$300,000	\$300,000	100%							
CAR-25	Sewer Permit Software Replacement	18107	2	ES		\$50,000				\$50,000	100%							
TBD	Resource Recovery Facility Master Plan	18120	1	ES	200,000	\$600,000	\$700,000			\$1,500,000	35%	50%		10%			5%	
New	New Combined Project #2			ES			\$200,000	\$600,000		\$800,000	100%							
New	New Combined Project #3			ES			\$600,000	\$1,500,000	\$900,000	\$3,000,000	100%							
New	Biosolids Management Master Plan			ES					\$400,000	\$400,000	100%							
New	Electrical System Master Plan			ES					\$300,000	\$300,000	100%							
New	Tower Mixing Chamber & Overflow Structure Rehabilitation			ES				\$550,000	\$870,000	\$1,420,000	100%							
New	PFM 2401 Dresser Coupler Removal			ES			\$250,000			\$250,000	100%							
New	Aboveground Fuel Storage Tank Rehabilitation			ES		\$100,000				\$100,000	100%							
New	Aeration Basin Area Rehabilitation			RRS		\$90,000	\$100,000	\$100,000		\$290,000	100%							
New	Pump Station Grinder Replacements			RRS		\$100,000	\$100,000	\$100,000	\$100,000	\$400,000	100%							
New	BHPS Sewage Diversion Pump Rebuilds			RRS			\$60,000	\$60,000		\$120,000	100%							
New	ERB Pump Rebuilds			RRS			\$77,000	\$77,000	\$77,000	\$231,000	100%							
New	PPS Raw Sewage Pump Rebuilds			RRS		\$215,000				\$215,000	100%							
New	Vehicle Replacements			RRS		\$645,000	\$400,000			\$1,045,000	100%							
	Unanticipated Wastewater Treatment and Conveyance Infrastructure Repairs			RRS		\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000	100%							
	Lab Equipment Replacement			LAB		\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	100%							
	IT Equipment Replacement			IT		\$70,000	\$325,000	\$85,000	\$400,000	\$980,000	100%							
Wastewater Capital Asset Replacement Fund Total					16,498,295	\$14,449,695	\$17,937,000	\$9,782,982	\$7,683,028	\$1,225,000	\$67,576,000							
Wastewater Expansion (Fund 140)																		
E-3	Bridgehead Phase IV Expansion - Force Main Completion	10178	3	ES					\$700,000	\$3,300,000	\$4,000,000			100%				
Wastewater Expansion Fund Total					0				\$700,000	\$3,300,000	\$4,000,000							
Advanced Treatment (Fund 125)																		
AT-3	Nutrient Technology Research and Innovation	17123	1	ES	100,000				\$250,000	\$250,000	\$600,000			100%				
New	Tower Trickling Filters Improvements		3	1					\$2,000,000	\$4,000,000	\$6,000,000		50%	50%				
Advanced Treatment Fund Total					100,000				\$2,250,000	\$4,250,000	\$6,600,000							

Recycled Water Capital Asset (Fund 220)															
Existing	Existing Combined Project #2	TBD	3	ES					\$250,000	\$850,000	\$1,100,000				100%
RWA-13	Recycled Water Master Plan Update	TBD	3	ES					\$300,000		\$300,000				50%
RWA-14	Small Recycled Water Facility Capital Asset Project	19103	3	ES		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000				100%
RWA-15	Treatment Plant Flow Equalization Improvements - Emergency Storage Basin	TBA	3	ES					\$125,000		\$125,000				100%
Recycled Water Capital Asset Fund Total					0	\$50,000	\$50,000	\$50,000	\$725,000	\$900,000	\$1,775,000				
Recycled Water Capital Asset Replacement (Fund 230)															
Existing	Existing Combined Project #1			ES					\$225,000	\$375,000	\$600,000				100%
Existing	Recycled Water Distribution System Improvements	19114	3	ES						\$500,000	\$500,000				100%
New	DEC Storage Tank Rehabilitation			ES					\$250,000	\$750,000	\$1,000,000				100%
New	New Combined Project #1			RRS		\$75,000			\$500,000	\$582,000	\$1,157,000				100%
New	Unanticipated Recycled Water Infrastructure Repairs	19104	3	RRS		\$100,000	\$50,000	\$50,000	\$25,000	\$25,000	\$250,000				100%
Recycled Water Capital Asset Replacement Fund Total					0	\$175,000	\$50,000	\$50,000	\$1,000,000	\$2,232,000	\$3,507,000				
Recycled Water Expansion (Fund 240)															
RWE-3	Recycled Water Distribution System Expansion	18110	3	ES						\$150,000	\$150,000				100%
Recycled Water Expansion Fund Total					0					\$150,000	\$150,000				
Bay Point Collection (Fund 520)															
BP-3	Bay Point Rehabilitation Phase IV	18119	1	ES	798,473	\$4,051,527	\$1,250,000				\$6,100,000				100%
New	Bay Point Overlay Manhole Adjustments			ES		\$250,000					\$250,000				100%
New	River Watch Settlement Compliance			ES		\$670,000	\$720,000				\$1,390,000	45%			55%
TBD	Facility Condition Assessment	18121	1	ES	617,048	\$682,952					\$1,300,000	35%			65%
	Unanticipated Bay Point Repairs			ES		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	25%			75%
Bay Point Collections Fund Total					1,415,521	\$5,754,479	\$2,070,000	\$100,000	\$100,000	\$100,000	\$9,540,000				
Household Hazardous Waste (Fund 310)															
HHW-3	Household Hazardous Waste Improvements	18105	3	ES		\$25,000	\$25,000	\$25,000	\$25,000	\$300,000	\$400,000				100%
Household Hazardous Waste Fund Total					0	\$25,000	\$25,000	\$25,000	\$25,000	\$300,000	\$400,000				
					24,757,163	\$20,845,433	\$32,932,000	\$23,853,511	\$16,302,893	\$13,757,000	\$132,448,000				

Revised 6/4/2019

* Does not include carry forward budget for completed projects within FY18/19.



April 2, 2019

A CALIFORNIA
SPECIAL DISTRICT

VIA ELECTRONIC MAIL

Mr. James Parrish, Environmental Scientist
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

SUBJECT: TENTATIVE ORDER FOR WASTE DISCHARGE REQUIREMENTS FOR
NUTRIENTS FROM MUNICIPAL WASTEWATER DISCHARGES TO THE
SAN FRANCISCO BAY (NPDES PERMIT NO. CA0038873)

Dear Mr. Parrish:

Delta Diablo (District) appreciates the opportunity to comment on the Tentative Order for Waste Discharge Requirements for Nutrients from Municipal Wastewater Discharges to the San Francisco Bay (NPDES Permit No. CA0038873).

Delta Diablo is a California special district that provides water resource recovery services to the City of Antioch, the City of Pittsburg, and the unincorporated community of Bay Point. These services include secondary treatment of wastewater, recycled water production and distribution, pollution prevention, energy recovery, beneficial reuse of biosolids, street sweeping, and household hazardous waste collection. Serving over 213,000 residents and encompassing 54 square miles, the District is an award-winning agency with a mission to protect public health and the environment.

The District's comments pertain to current performance loads and the load targets that are shown in Table F-5. The Regional Water Board notes on page F-16 that "Before implementing any load targets as effluent limitations, the Regional Water Board may adjust them if necessary (e.g., to account for decreased recycled water demand, increased biosolids management, increased daytime worker population, or new or expanded waste-to-energy programs)." The District wishes to bring two potential factors to the Regional Water Board's attention at this time as each factor would increase nutrient loads.

The District is currently designing the East County Bioenergy Project (ECBP), which is an organics co-digestion project under a public-private partnership with a local waste hauler, Mt. Diablo Resource Recovery (MDRR), and a technology provider, Anaergia, Inc. This project would divert approximately 114 tons per day of organics from local landfills in support of state-mandated diversion goals under SB 1383, while allowing the District to become energy self-sufficient by producing excess biogas that could be used for electricity export, renewable natural gas pipeline injection, and/or renewable vehicle fuel. The organic material would be extracted from municipal solid waste through a pre-processing line at MDRR that produces a slurry for co-digestion at the District's wastewater treatment plant. The ECBP received \$4 million in grant funding through CalRecycle's Organics Grant Program during the fiscal year 2017/18 grant

Mr. James Parrish, Environmental Scientist

April 2, 2019

TENTATIVE ORDER FOR WASTE DISCHARGE REQUIREMENTS FOR NUTRIENTS
FROM MUNICIPAL WASTEWATER DISCHARGES TO THE SAN FRANCISCO BAY
(NPDES PERMIT NO. CA0038873)

Page 2

cycle. The final decision to implement the project will be based on overall financial viability and the ability to secure agreements with the project partners.

Since 2001, the District has operated a Recycled Water Facility (RWF) that provides tertiary-treated water to customers in its service area for industrial and irrigation purposes. In 2018, the District recycled 6.2 MGD (49%) of its average influent flow of 12.6 MGD. Approximately 90% of recycled water flow is provided to Calpine for cooling water use at two large power plants with the remaining recycled water used for landscape irrigation at various parks and a golf course. Uncertainty exists regarding long-term Calpine facility operation due to the expiration of the District's recycled water supply agreement with Calpine in 2030. If Calpine facilities cease operation, this would significantly reduce the financial feasibility of providing recycled water to irrigation customers only. In addition, the District does not have certainty regarding long-term operation of existing irrigation customers as evidenced by the closing of the Delta View Golf Course in Pittsburg in 2018.

If the organics co-digestion project should occur, the District expects its average dry season inorganic nitrogen load would increase by approximately 343 kg/day. Losing recycled water customers would increase the inorganic nitrogen load by approximately 156 kg/day.

While we understand that Regional Water Board staff does not wish to adjust the current performance or targets at this time based on potential changes that have some degree of uncertainty, the District respectfully requests that the Regional Water Board acknowledge, in response to comments, that both the District's current performance and load target will be reconsidered prior to implementation of any load caps in the future, should the expected increase in loads occur due to implementation of the ECBP or loss of recycled water customers.

The District appreciates the opportunity to comment on the Tentative Order and thanks you for your continued dedication to a collaborative regional approach on nutrients management. As a member of the Bay Area Clean Water Agencies (BACWA), the District also supports BACWA's comments on the Tentative Order by reference. Please feel free to contact Amanda Roa via email at amandar@deltadiablo.org for further information or clarification.

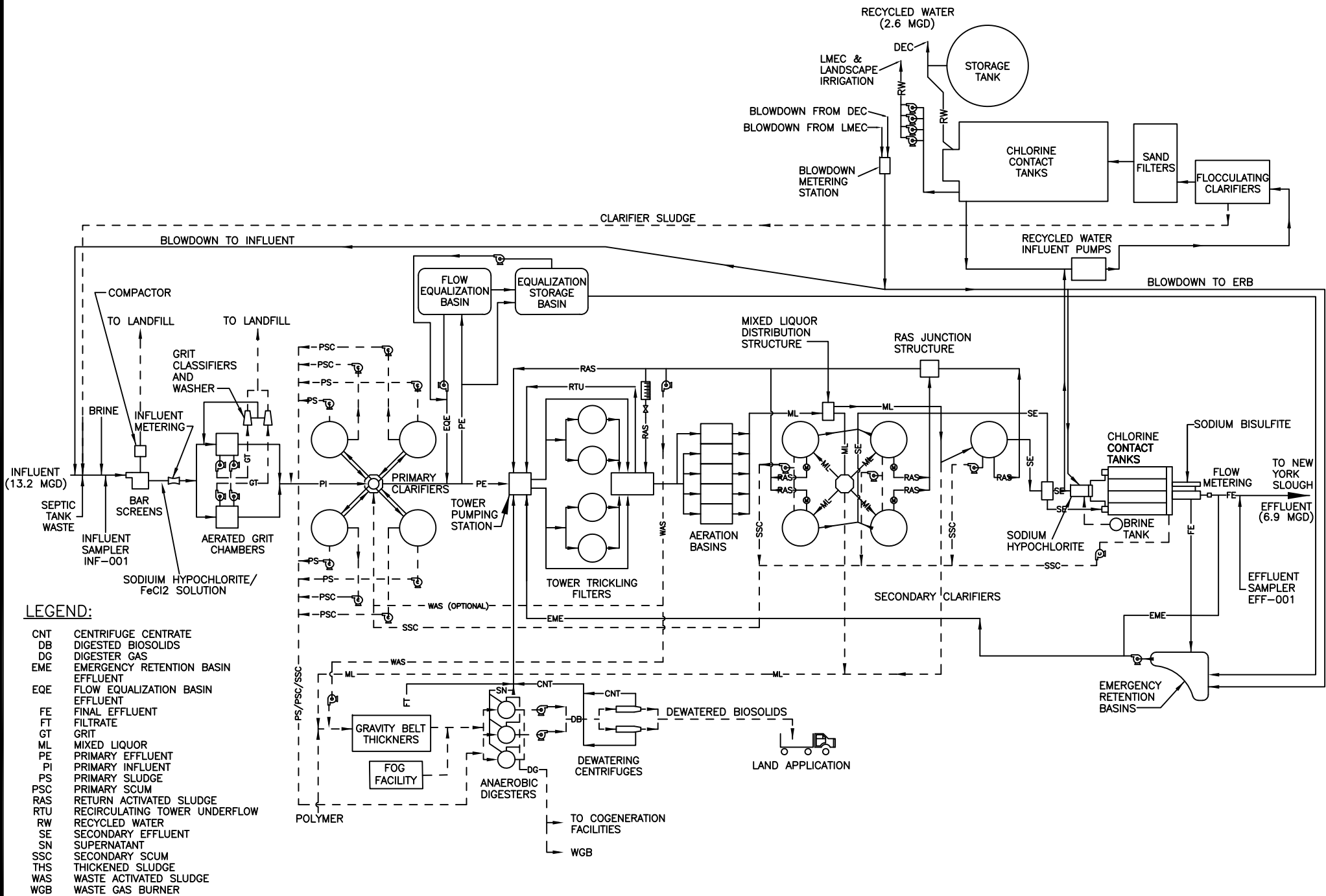
Sincerely,



Vince De Lange
General Manager

AWR:drb

cc: Dean Eckerson, Delta Diablo
Amanda Roa, Delta Diablo
Brian Thomas, Delta Diablo
District File



LEGEND:

- CNT CENTRIFUGE CENTRATE
- DB DIGESTED BIOSOLIDS
- DG DIGESTER GAS
- EME EMERGENCY RETENTION BASIN
- EFFLUENT
- EQE FLOW EQUALIZATION BASIN
- FE FINAL EFFLUENT
- FT FILTRATE
- GT GRIT
- ML MIXED LIQUOR
- PE PRIMARY EFFLUENT
- PI PRIMARY INFLUENT
- PS PRIMARY SLUDGE
- PSC PRIMARY SCUM
- RAS RETURN ACTIVATED SLUDGE
- RTU RECIRCULATING TOWER UNDERFLOW
- RW RECYCLED WATER
- SE SECONDARY EFFLUENT
- SN SUPERNATANT
- SSC SECONDARY SCUM
- THS THICKENED SLUDGE
- WAS WASTE ACTIVATED SLUDGE
- WGB WASTE GAS BURNER

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TRANSFORMING WASTEWATER TO RESOURCES

DRAWING NUMBER	SCHEMATIC OF WASTEWATER FLOW
SHEET 1 OF 1	