

**CITY OF COOS BAY CITY COUNCIL**  
**Agenda Staff Report**

<b>MEETING DATE</b> February 3, 2015	<b>AGENDA ITEM NUMBER</b>
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TO: Mayor Shoji and City Councilors

FROM: Jim Hossley, Public Works Director

THROUGH: Rodger Craddock, City Manager

ISSUE: Update - North Spit Waste Water Treatment Plant Proposal from Dennis Beetham, CEO D.B. Western Texas, Inc. (DBWT)

**BACKGROUND:**

Mr. Dennis Beetham, CEO D.B. Western Texas, Incorporated, has contacted several City Councilors and City staff, as well as officials with several other organizations/agencies throughout the community and state regarding building a waste water treatment plant on the North Spit. Mr. Beetham has requested that the City consider abandoning rebuilding WWTP#2 at Empire Blvd and Fulton Avenue and send the waste destined for that plant to a treatment plant he would design, build and, potentially, operate on the North Spit. Mr. Beetham believes he can build a treatment plant for less than the cost at the Empire and Fulton location.

Mr. Beetham leases the property from the International Port of Coos Bay (Port) that he proposes to site the plant. Per Port officials, the lease agreement does not allow siting of a waste water treatment facility on the property. The Port does support a regional waste water treatment plant on the North Spit, but on another piece of property. At this time, planning for and developing a regional waste water treatment plant is not on the Port's work plan. Because of state law, State Wide Planning Goal #11 (OAR660-015-000(11)), and the current limits of the City of Coos Bays Urban Growth Boundary, a governmental entity other than the City of Coos Bay must own and operate a waste water treatment plant on the North Spit. This other entity could be the Port, Coos County, or a not yet formed regional entity. The City would be the entity's customer for treating our waste water at the plant.

**BUDGET IMPLICATIONS:**

Mr. Beetham has provided construction costs in his proposal for two scenarios. These costs range from \$24,900,000 to \$26,500,000. Staff does not have enough information to determine that the proposal would provide a cost savings to sewer rate payers over the current course of action. Also, we do not yet have the Guaranteed Maximum Price (GMP) for the construction cost from our contractor for the current course of action. Additionally, it is not clear if prevailing wage requirements were completely accounted for in Mr. Beetham's proposal. The proposal does not provide life-cycle costs for the North Spit project, which is necessary to truly evaluate how the proposal economically compares to the City's current plan. Annual operating costs to the City for the North Spit plant have not yet been fully investigated. Sludge handling costs are expected to be higher. Energy costs related to pumping influent to the North Spit and effluent

back to the City's bay outfall could be a significant addition to the operational costs.

### **ADVANTAGES:**

A single centralized waste water treatment plant on the North Spit that discharges to the ocean could offer some operational advantages if waste from both City plants were to be treated at one plant. However, at this time it is unclear if this centralized plant would provide an immediate and long term cost saving advantage to our rate payers.

### **DISADVANTAGES**

Besides the land, ownership, an unknown cost issues previously mentioned, there is another hurdle to implementation of Mr. Beetham's proposal. One is that the proposal is predicated on a direct contract award to DBWT without going through a competitive process. The cost to design this project would probably require (per state procurement law) that the owner of the North Spit plant select the most qualified design firm. Design cost cannot be a factor in selection. Assuming the owner would use design/bid procurement for construction, the owner must competitively bid the new design plans and then accept the lowest responsible bidder.

### **RELATED CITY GOAL:**

Maintain public trust and confidence by utilizing resources in the most efficient manner possible.

### **CONSIDERATIONS:**

The City has completed a ten plus (10+) year planning and design process, and invested close to \$4 million to complete this process for the waste water treatment plant proposed for the corner of Empire Blvd and Fulton Avenue. The 100% design (final) plans were completed in mid December 2014. We are currently awaiting development of our CMGC's GMP, building permits, DEQ approval, and final environmental permit approvals for the final plans. Once the City accepts the final GMP, and the permits are approved (June 2015), DEQ will be ready to loan the City the funds to construct the project in time for the City to meet its Mutual Agreement and Order (MAO) schedule with DEQ. The WWTP #2 project at Empire Blvd and Fulton Avenue is DEQ's top ranked project for funding in the state. Should the City change its course of action and pursue the North Spit proposal using DEQ financing, then we will have to start back at the beginning of the planning process. We would be required to create a Facility Plan, which would include an alternatives analysis repeating the evaluation of the various alternatives once again. We would also be required to go through a three-step design process again. Create a pre-design report (resulting in 30% level design plans), value engineering of the pre-design report, and final design. This process could take anywhere from 18 months to 3 years. I don't believe Mr. Beetham factored in the DEQ design review process when determining his cost estimates and time line. Should the City decide to change the project location we would be required to re-apply for the DEQ funding. Not owning the property could complicate the City's ability to obtain funding.

The current treatment plant is in need of immediate upgrade. The City is under an MAO with DEQ that gives the City until 2017 to have a new treatment plant online. The just completed plant design can accommodate upgrade for tertiary treatment if required in the future and can

be enlarged to accommodate future growth if needed. At this point, it is difficult to justify repeating the process we just completed.

**ACTION REQUESTED:**

None at this time

**ATTCHMENTS:**

Historical Timeline for WWTP#2  
Oregon's Statewide Planning Goal 11  
DBWT Proposal (Proposal narrative / without exhibits)

The Oregon Department of Environmental Quality (DEQ) has a required course of action for communities to follow when doing planning and design for wastewater treatment facilities. This course of action must be followed should the community want to qualify for grants and loans available from DEQ. The course of action involves three major efforts. They are Facility Plan, Pre-design Report and Final Design Plans. Each of these major efforts has particular actions, criteria and information the community must complete and or provide.

2004 - The City of Coos Bay contracted with consultant who started preparation of a Facility Plan for Wastewater Treatment Plant #2 (WWTP #2).

2008 – The Facility Plan is approved by DEQ. The City hired a consultant to prepare rate and cost of service study to ensure City's waste water fees/rates are adequate to pay for capital improvements need for WWTP #2 and other waste water infrastructure.

2009 – Pre-design report preparation starts. Early in the preparation of the Pre-design we learned that the selected alternative identified in the Facility Plan, and approved by DEQ, will not work on the property we have available.

2010 –Council authorized funding to perform a Feasibility Study to determine if relocation of WWTP # 2 operations to the North Spit was a viable alternative. Other options were also explored that included, pumping all the waste to WWTP 1, and expanding the current WWTP 2 site into property located east of South Empire Boulevard. After evaluating other alternatives, city staff and our consultant determined that moving the current WWTP #2 to larger nearby property would be the best option.

As these alternatives and the best option had not been fully vetted by the Facility Plan process and approved by DEQ, DEQ required that the City complete a Facility Plan Amendment (FPA) to include evaluation of the alternatives and best option.

2011 – The City contracted with a consultant to prepare the FPA. Within this FPA, the City investigated several alternatives related to influent facilities, treatment, and disinfection. Additionally a value analysis (VA) of the FPA was performed for the City by a third party consultant. The VA team included CH2M HILL staff, City Staff, Charleston Sanitation District representatives, and a DEQ representative. The VA confirmed the most cost effective solution for the City.

2012 - After the VA, the FPA was finalized. A contract was awarded to SHN/CH2M Hill to complete a preliminary design report for WWTP #2.

2013 – Preliminary design report is completed to 90% and Value Engineering analysis done with a third party firm facilitating. The City Council approved the CMGC delivery method for construction of the WWTP2. Mortenson Construction is selected to perform the CMGC services

2014 – Completed pre-design. The final design of WWTP2 was started and completed. State Revolving Fund (administered by DEQ) loan application submitted to DEQ. Environmental permit application submitted to US EPA.

2015 – Expect to receive guaranteed maximum price from the CMGC in March. Expect to obtain permit approvals and loan financing by midsummer with construction to follow immediately.

# Oregon's Statewide Planning Goals & Guidelines

## GOAL 11: PUBLIC FACILITIES AND SERVICES

### OAR 660-015-0000(11)

**To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.**

Urban and rural development shall be guided and supported by types and levels of urban and rural public facilities and services appropriate for, but limited to, the needs and requirements of the urban, urbanizable, and rural areas to be served. A provision for key facilities shall be included in each plan. Cities or counties shall develop and adopt a public facility plan for areas within an urban growth boundary containing a population greater than 2,500 persons. To meet current and long-range needs, a provision for solid waste disposal sites, including sites for inert waste, shall be included in each plan.

Counties shall develop and adopt community public facility plans regulating facilities and services for certain unincorporated communities outside urban growth boundaries as specified by Commission rules.

Local Governments shall not allow the establishment or extension of sewer systems outside urban growth boundaries or unincorporated community boundaries, or allow extensions of sewer lines from within urban growth boundaries or unincorporated community boundaries to serve land outside those boundaries, except where the new or extended

system is the only practicable alternative to mitigate a public health hazard and will not adversely affect farm or forest land.

Local governments may allow residential uses located on certain rural residential lots or parcels inside existing sewer district or sanitary authority boundaries to connect to an existing sewer line under the terms and conditions specified by Commission rules.

Local governments shall not rely upon the presence, establishment, or extension of a water or sewer system to allow residential development of land outside urban growth boundaries or unincorporated community boundaries at a density higher than authorized without service from such a system.

In accordance with ORS 197.180 and Goal 2, state agencies that provide funding for transportation, water supply, sewage and solid waste facilities shall identify in their coordination programs how they will coordinate that funding with other state agencies and with the public facility plans of cities and counties.

***A Timely, Orderly, and Efficient Arrangement*** – refers to a system or plan that coordinates the type, locations and delivery of public facilities and services in a manner that best supports the existing and proposed land uses.

**Rural Facilities and Services** – refers to facilities and services suitable and appropriate solely for the needs of rural lands.

**Urban Facilities and Services** – Refers to key facilities and to appropriate types and levels of at least the following: police protection; sanitary facilities; storm drainage facilities; planning, zoning and subdivision control; health services; recreation facilities and services; energy and communication services; and community governmental services.

**Public Facilities Plan** – A public facility plan is a support document or documents to a comprehensive plan. The facility plan describes the water, sewer and transportation facilities which are to support the land uses designated in the appropriate acknowledged comprehensive plan or plans within an urban growth boundary containing a population greater than 2,500.

**Community Public Facilities Plan** – A support document or documents to a comprehensive plan applicable to specific unincorporated communities outside UGBs. The community public facility plan describes the water and sewer services and facilities which are to support the land uses designated in the plan for the unincorporated community.

**Water system** – means a system for the provision of piped water for human consumption subject to regulation under ORS 448.119 to 448.285.

**Extension of a sewer or water system** – means the extension of a pipe, conduit, pipeline, main, or other physical

component from or to an existing sewer or water system, as defined by Commission rules.

## GUIDELINES

### A. PLANNING

1. Plans providing for public facilities and services should be coordinated with plans for designation of urban boundaries, urbanizable land, rural uses and for the transition of rural land to urban uses.

2. Public facilities and services for rural areas should be provided at levels appropriate for rural use only and should not support urban uses.

3. Public facilities and services in urban areas should be provided at levels necessary and suitable for urban uses.

4. Public facilities and services in urbanizable areas should be provided at levels necessary and suitable for existing uses. The provision for future public facilities and services in these areas should be based upon: (1) the time required to provide the service; (2) reliability of service; (3) financial cost; and (4) levels of service needed and desired.

5. A public facility or service should not be provided in an urbanizable area unless there is provision for the coordinated development of all the other urban facilities and services appropriate to that area.

6. All utility lines and facilities should be located on or adjacent to existing public or private rights-of-way to avoid dividing existing farm units.

7. Plans providing for public facilities and services should consider as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land

conservation and development action provided for by such plans should not exceed the carrying capacity of such resources.

## **B. IMPLEMENTATION**

1. Capital improvement programming and budgeting should be utilized to achieve desired types and levels of public facilities and services in urban, urbanizable and rural areas.

2. Public facilities and services should be appropriate to support sufficient amounts of land to maintain an adequate housing market in areas undergoing development or redevelopment.

3. The level of key facilities that can be provided should be considered as a principal factor in planning for various densities and types of urban and rural land uses.

4. Plans should designate sites of power generation facilities and the location of electric transmission lines in areas intended to support desired levels of urban and rural development.

5. Additional methods and devices for achieving desired types and levels of public facilities and services should include but not be limited to the following: (1) tax incentives and disincentives; (2) land use controls and ordinances; (3) multiple use and joint development practices; (4) fee and less-than-fee acquisition techniques; and (5) enforcement of local health and safety codes.

6. Plans should provide for a detailed management program to assign respective implementation roles and responsibilities to those governmental bodies operating in the planning area and having interests in carrying out the goal

**DBWT**

*D.B. Western Texas, Inc.*

*New Business Development, Design, Engineering, EPC Contractor  
ASME Fabrication, Finite Analysis, ASPEN Heat Exchanger, API Tanks  
Technology, Chemical Process Development, Chemical Production*

# **North Spit Waste Water Treatment Plant Proposal**

**For the City of Coos Bay**

**1/22/2015**

**Presented by**

**DBWT**

**Dennis Beetham, President and CEO**



# DBWT

## *D.B. Western Texas, Inc.*

*New Business Development, Design, Engineering, EPC Contractor  
ASME Fabrication, Finite Analysis, ASPEN Heat Exchanger, API Tanks  
Technology, Chemical Process Development, Chemical Production*

January 20, 2015

City of Coos Bay  
City Manager Roger Craddock  
500 Central Ave.  
Coos Bay, Or 97420

Subject: DBWT's Proposal A for a "DESIGN BUILD" 8.2 MGD waste treatment plant on the North Spit; across the bay from Empire on property currently owned by the Port Of Coos Bay. DBWT is also providing a Proposal B for a "DESIGN BUILD OPERATE" plant of the same 8.2 MGD at the same location.

### **INTRODUCTION**

Roger, proposal A and B are for the same design (8.2 MGD ICEAS Sanataire) as the proposed new Coos Bay Plant 2 with changes from the Current CH<sub>2</sub>M Hill Plans, very similar to Coquille, Gold Beach and several other new plants designed by Dyer Partnership and West Tech. The photos enclosed are of a 5 MGD plant with an elevated screening facility for the City of Jefferson's WWTP Headworks by West Tech. In speaking with the City of Jefferson's WWTP Operations supervisor he indicated how much they like their plant's ease of operation while meeting DEQ specification requirements. This proposal is presented to you in a summary form. Our team can provide these items in a formal document listing the Engineer and experienced General Contractor; more detailed scope of supply; project schedule; bonding; and other requirements. Within our proposal, we offer the following key elements:

#### **1. DIRECT BENEFITS**

- 1.1 Capital savings of a fixed-bid, DBO vs a higher cost CMCC Bid with additional 3<sup>rd</sup> party PM costs, allowing you to offer to the community the savings and security from possible "over budget" concerns. CMCC contracts have a reputation for additional charges and running over budgets.
- 1.2 Opportunity to utilize more local contractors, suppliers, and professions including professional services resources located right here in the Bay Area rather than distributing these precious City financial resources outside our community. DBWT will be able to help the City invest in our community as opposed to benefiting outside areas with City project funds.
- 1.3 Utilize an existing 30 in. Ocean Outfall (15,000 MGD) and start a process for reducing waste discharging into our Bay; improving our estuary environment for fish, oysters, and marine habitat. Our planned approach is preferred by environmental agencies and watch dog groups.
- 1.4 More North Spit property available to develop future waste treatment expansion projects and meet future EPA requirements; remove Waste Treatment Plant #2 from sensitive and valuable residential and commercial land; savings of capital and operating requirements and costs. Public concerns of odors, spills and upsets may be eliminated.

- 1.5 DBWT's 50 years as a construction general contractor, engineering and design, ASME code fabrication, and owner and operator of multimillion dollar plants around the world is uniquely positioned to blend our professional capabilities with local engineers and an experienced General Contractor who have engineered and built several of Sanitaire's ICEAS SBR plants in Oregon. Sanitaire has over 600 ICEAS-SBR plants in the US and fully guarantee the effluent quality, equipment, and technology they supply. If DBWT is selected and able to utilize local consulting engineering expertise and experience with Sanitaire SBR's system the community will benefit by employing local professionals and taking advantage of their experience, background, and expertise.
- 1.6 We recognize that there will be some minor redesign and modifications of the current plan design to relocate the plant from Empire to the North Spit. However, we believe the environmental benefits and guaranteed lower DBO costs present a compelling story that is challenging to ignore. The City will not lose much of the design work that has been completed to date. Most of the current design is valid and can be reused with the plant at a different location. We also recognize that significant savings potential exists by relocating the plant to the North Spit and eliminating internal and external plant elements that will not be required at our location (i.e. odor control, etc.).
- 1.7 DBWT has contacted Bob Dillard whom has retired from the City of North Bend Public Works Department, he is the only person in this area who is Certified Class 4 in Waste Treatment; we will contract with Bob to help develop a staff training program under his direct supervision during the project.
- 1.8 DBWT's 100,000 sq ft ASME Code fabrication shop next door to the proposed new plant with cranes, man lifts, equipment, and skilled craftsmen is a major factor in reducing the capital cost and potential future operations and maintenance costs. We realize this project will require (PW) Prevailing Wages; however, DBWT can subassemble and preassemble right up to "the fence" as a supplier of equipment fabricating at the site, thus reducing some of the costs associated with the Federal Labor law requirements. Our crew can also install at the site with our payroll converting them to PW positions for installation.
- 1.9 The public's support for removing waste outfalls from the bay will help the community and generate support for this project, not to mention that DBWT will save the City money.
- 1.10 DBWT, our employees, and members of our project team live in our community and we believe in doing what we can to help Coos Bay be successful. DBWT, and our team partners, donate generously to local causes and efforts. Our interests in this project are grounded in supporting the community and not in earning profits for our company. Put simply, our motives are pure and we want to help the City reduce the impact to its rate payers we know that this project is "just the beginning" of many challenging projects yet to come and be paid for.

## 2. DESIGN – BUILD (DB) PROPOSAL

- 2.1 We propose to provide a DB bid of \$26,500,000 for the engineering, equipment supply, and installation of the ICEAS SBR 8.2 MGD plant with modifications required to locate on the North Spit with an ocean outfall. This includes all engineering, equipment and installation, site work, permits, foundations, excavation, stabilization, foundations, concrete basins, mechanical, electrical, controls, testing, training and start-up. This assumes plant facilities are similar to CH<sub>2</sub>MHill layout for OMI operation. We will modify the plans and re-engineer some elements, as necessary, to

eliminate elements not needed on the North Spit as well as accounting for changes for local site conditions, head requirements, etc.

- 2.2 Modify or develop new permits for the plant; Primary raw influent via under bay piping; and effluent piping back under the bay to the original outfall system, if necessary.
- 2.3 Primary pumping station in Empire as defined by the CH<sub>2</sub>MHill design with design modifications for the new TDH thru the new 18 inch HDPE line under the Bay to the North Spit of about 3000 ft.
- 2.4 Head works, primary screening with 2 Parkson Helical 500 with solids compaction, dewatering, and washing, one bar screen.
- 2.5 Gravity system upgrades feeding the primary pump station at Empire.
- 2.6 30,000 gal. Stainless aerated storage of secondary sludge; and the load out system designed for trucks to haul secondary sludge multiple trailers at 32,500 lb each to Plant 1.
- 2.7 Industrial Building for Operations, Lab, DCS Controls, MCC, parts and supplies of 2500 sq. ft.
- 2.8 Standby generator system sized to meet requirements.
- 2.9 Chlorine/Sodium Bisulfate system.
- 2.10 18 inch HDPE pipe system back to Empire to connect to the current permitted outfall. We included this as Option A only to provide assurance to meet the Dec 2017 deadline. Option B will be developed with the City, Port, DEQ, NOAA, and LNG approval for the 30 inch Ocean outfall. This Permit cannot be applied for until after November 2015 or January 2015. Permits can be obtained within 9 months. Our communication with both NOAA and DEQ regarding permits for an ocean outfall was very positive and supportive. Surf Rider Association has been contacted and indicate support for our approach to the project.

### 3. DESIGN BUILD OPERATE (DBO)

- 3.1 DBWT proposes a bid of \$24,900,000 for the same project as described earlier in 2.1 with a layout designed around use of our North Spit facilities integrated into the design to reduce capital and O&M costs. We also propose that DBWT will provide plant operation and maintenance services for the new North Spit wastewater facility for a base fee of \$510,000/yr. (See Exhibits)
- 3.2 Modify or develop new permits for the plant; primary inflow under bay piping; and effluent piping back under the bay to the original outfall system.
- 3.3 Primary pumping station at Empire as defined by the CH<sub>2</sub>MHill design modifications to account for the new TDH thru the new 18 inch HDPE line under the Bay to the North Spit of about 3000 ft.
- 3.4 Head works, primary screening with one mechanical screen and one bar screen.
- 3.5 Gravity system upgrades feeding the primary pumps.
- 3.6 100,000 gal. Stainless aerated storage of secondary sludge; and the load out system designed for truck to haul multiple trailers at 32,500 lb each of secondary sludge to Plant 1.
- 3.7 Industrial building for operations, lab, DCS Controls, MCC, parts and supplies of 2500 sq. ft.
- 3.8 Standby generator system to meet requirements.
- 3.9 Chlorine/Sodium Bisulfate system.
- 3.10 18 inch HDPE pipe system back to Empire to connect to the current permitted outfall. We included this as Option A only to provide assurance to meet the Dec 2017 deadline. Option B will be developed with the City, Port, DEQ, NOAA, and LNG approval for the 30 inch Ocean outfall. This Permit cannot be applied for until after the first quarter 2015. Permits may be obtainable within 9 months. We have had communication with both NOAA and DEQ, regarding the permits for ocean

outfall, and they appeared to be positive. Surf Rider has been contacted and they indicated at the same permitted levels as the Bay, they would not object.

## 4. FUTURE WASTE TREATMENT OPPORTUNITIES

4.1 The North Spit is an optimum location to process all wastewater in the Coos Bay area for the following benefits:

- 4.1.1 Industrial land is available and away from residential areas.
- 4.1.2 Future waste heat from the planned LNG facility for converting sludge from Class B to Class A or to facilitate composting
- 4.1.3 Single digestion and dewatering to 16-18% Class B Sludge.
- 4.1.4 Single processing to a Class A sludge, which would reduce storm run-off of pathogens.
- 4.1.5 Possible use of sawdust, wood waste and fish waste in the area to compost to a Class A compost salable product as is currently successfully being practiced by the City of Newberg Oregon. (See Exhibit A)
- 4.1.6 Developing the potential to remove all waste from municipal wastewater processing from the Coos Bay Estuary.

4.2 A future new Coos Bay Plant 1 could also be located on the North Spit as follows:

- 4.2.1. Earlier consultant's strategies determined that pumping wastewater to the North Spit is not cost effective as pumping "over the hill" to Empire and the high TDH resulted in multiple pump stations of high BHP at a cost of 30 MM\$.
- 4.2.2 We believe there may be a route down 101 and under the bay near the RR crossing bridge. This route would not have high TDH and BHP, and may provide a viable plant relocation option.
- 4.2.3 With combined Plants 1 and 2 on the North Spit, the sludge may be managed as indicated in 3.1.
- 4.2.4 The sludge lagoons in Eastside, which have already begun to exceed steady state conditions, can be eliminated.
- 4.2.5 Possible partnership with the Port, LNG, Southport Lumber, Roseburg Forest Products and other industrial partners.
- 4.2.6 Potential value of City management looking for new ideas to improve our environment and reduce costs to rate payers.

## 5. ENVIRONMENTAL CONCERNS

5.1 The City of Coos Bay has the opportunity to apply restoration ecology to improve the functioning of the estuary ecosystem. A cursory review of what has been documented about the Coos Bay estuary gives cause for concern:

- 5.1.1 90% of the original saltmarsh habitat within the estuary has been lost to development (Arneson, "Seasonal Variation in Tidal Dynamics, Water Quality and Sediments in the Coos Bay Estuary", Oregon State University Master's Thesis, June, 1976).

- 5.1.2 The bay has received considerable inputs of aliphatic organochlorides, chlorinated acid compounds, and chlorinated phenols/phenoxyphenols, common byproducts of the disposal of chlorinated wastewater from sewerage treatment plants.
- 5.1.3 Juvenile Chinook Salmon in Coos Bay are found to contain PCB (polychlorinated biphenyl) concentrations of approx. 25 ppb within their body tissue (Arkoosh, "Contaminant exposure in out migrant juvenile salmon from Pacific Northwest estuaries in the United States", Environmental Monitoring & Assessment, Volume 124, Numbers 1-3, pgs. 167-194).
- 5.1.4 Juvenile Chinook Salmon in Coos Bay contain approx. 300 ppb of PAH (polycyclic aromatic hydrocarbon) metabolite concentrations in their bile (ibid).
- 5.1.5 Juvenile Chinook Salmon in Coos Bay contain DDT concentrations within their bodies of approx. 9 ppb (ibid).

## 6. ADDITIONAL ITEMS

- 6.1 DBWT is interested in operating this new plant and transporting the sludge to Plant 1. We would contract Bob Dillard to develop the training and periodic operational reviews and responsible oversight.
- 6.2 We understand that CH<sub>2</sub>MHill's O&M contract expires in 2016. DBWT is interested in providing a proposal for the O&M for the entire Coos Bay wastewater treatment operations. We believe we can significantly reduce the O&M costs and the associated impacts to rate payers.

## 7. SUMMARY

- 7.1 We have met with the local oyster producers to discuss the project. The oyster producers feel the City has done a good job with prior improvements in both Plant 1 and 2. They have seen those improvements result in measurable gains in bay health and the associated harvest yields have benefited their business. They have expressed hope that removing all outfalls will further improve bay health for oysters, which may be relational to fish and other marine habitat.
- 7.2 DBWT can meet the City's December 2017 MAO requirements.
- 7.3 DBWT can significantly reduce the capital costs related to this project.
- 7.4 DBWT can significantly reduce OM on the on the new plant on the North Spit.
- 7.5 The City can offer the community the benefits of relocation of this facility away from residences and businesses
- 7.6 Charleston may be more favorable and supportive to our approach.
- 7.7 We realize this direction will require that the City terminate its contract with PM.
- 7.8 We also realize DEQ would have to accept the North Spit plant using the existing in Bay outfall, and that our goal was to work with the Port to file a new permit for Municipal and Industrial waste. We believe as well as others that it is all doable.
- 7.9 DBWT together with West Tech can have the new engineering done in 6 months.
- 7.10 An idea would be to ask the City Council to vote on allowing DBWT's contractors to bid as acceptable alternative to the plans in Empire. We can have plans and specifications ready in 40 days.

The City will win the favor of many in the community including local industry, oyster producers, environmental agencies and groups, regulators, and rate payers.

Roger, we thank you and your staff for the opportunity to show you our thoughts and proposal. We wish to thank you again for this opportunity to provide a quotation for your consideration. Please do not hesitate to contact me if you have any questions or concerns regarding this proposal. We look forward to receiving your response.

Sincerely,



Dennis Beetham,  
President