

# Raymond - South Bend Regional Wastewater Coordinating Committee

300 First Street • Raymond • WA 98577 •

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## RWCC REGULAR MEETING South Bend City Hall April 26, 2012

- **The meeting was called to order** at 5:35 PM by Chair Eric deMontigny.
- **In attendance were** Eric deMontigny, Kirk Church, John Dunsmoor, Cathi Read, Jay Swift, Tom Zerkel, Todd Stephens, Bob Jungar, Jerry Bowman, Dean Parsons, and Patricia Neve.
- **Introductions – None necessary**
- A motion to accept the March 29, 2012 meeting minutes was made by Jerry, seconded by Todd, and carried.
- **Conveyance Project Closeout**
  - Landis and Landis warranty log
    - This remains an agenda item as Will Scott continues to monitor settling, which he reported as unchanged since the last measurement.
    - Work on the sink holes is on hold until after the Spring rainy season.
- **I/I project update**
  - Construction closeout
    - PS-2 start-up was successful and it is operating fine. There are some minor punch list items to address. The goal is to have this part of the project wrapped up before the next RWCC meeting.
- **Regional WWTP Project Update**
  - Construction progress
    - Photos from Jay show the progress. They are past the 50% threshold on working days as well as earned value on project. The project is on schedule and budget with 48% consumed.
    - Work continues on the UV system and the headworks building. Both digesters passed the leak test. Aeration basin work continues. Leak testing will begin shortly. Testing will be scheduled prior to finishing the inside of the basin. Sacking and pock work will take place after

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- successful leak testing. The clarifiers are being cleaned for installation of equipment.
  - Inspections show construction quality remains high.
  - Although they are still within the contractual window Rognlin's schedule has slipped a bit due to the equipment building being more complicated than originally expected. Tom will obtain an updated schedule from Rognlin's.
- Payment status
  - Up to date
- Change orders and potential construction issues
  - It was discovered that the equipment building plans and specs did not include casework in the control room, including countertops, a desk, and other furnishings. The cost for said casework is \$4,287.20 plus tax. This could be change order #6 or the RWCC may elect to bundle this with something else. The change order procedure is cumbersome and is the same regardless of the dollar amount. Todd made a motion to move forward with the purchase of the casework. The motion was seconded by Jerry and passed by the RWCC.
  - As the cost of the piles came in under budget there are some funds left over to use for other things.
- **Biosolids removal / lagoon decommissioning investigation**
  - Results of investigation
    - Jay provided several handouts including test reports and details for alternatives to handle biosolids removal and lagoon decommissioning. Just as he began to speak Jay was interrupted by the appearance of a spectacular rainbow that seemed to have its ends and the legendary promise of gold in Raymond and South Bend. Gold would be most welcome in this conversation currently dominated by other, less desirable metals such as zinc and lead.
      - **Raymond:**
        - Based on 2009 samples from the west polishing pond it was determined that the nutrient and volatile solids concentrations are below the concentrations typically seen in biosolids. It was concluded that the material in the Raymond west polishing ponds is largely inert and is primarily clay liner material.
        - These samples show a concentration of lead and zinc in excess of WAC 173-308 code Table 3 limits but less than Table 1 limits. Other regulated metals were below Table 1 and Table 3 limits. Because of the low levels of

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nutrients and relatively high lead and zinc concentrations (and thus low desirability to land appliers), the material will likely either have to be landfilled or land applied at the WWTP. If land applied at the WWTP, the material would be subject to the usual restrictions, including cumulative loading restrictions for pollutants and agronomic rate limitations for nutrients. Prior to beginning site preparations for the new Regional WWTP, these biosolids could be removed from the west polishing ponds and be stored within the north portion of the former west polishing ponds on site. In this case the level of nitrogen determines amount of land needed for land application. That would require 14.8 acres be available for the polishing pond biosolids application at the exiting site. G&O will provide a detailed plan to cover this.

- Removal methods:
  - To reduce hauling costs the lagoon biosolids should be dewatered prior to hauling for disposal.
    - **Method A includes dredging and dewatering using a mechanical dewatering device.** This is usually a higher cost alternative and used if there is evidence that air-drying will not be effective.
    - **Method B is air-drying.** After the clear water is pumped out of the lagoon the material is allowed to dry in-situ during the warmer summer months. The material is regularly turned and mixed by mechanical equipment to accelerate drying. This method is less expensive than mechanical dewatering and was used successfully during a previous project in 2001.
    - Regardless of the method used, biosolids will have to be tested again before they are moved because of the additional wastewater received at the plant since the last testing was conducted. (This testing may include the TCLP test used to characterize hazardous wastes.) The removal methods discussed below assume that the biosolids would pass a TCLP test and

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thus be able to be disposed in a municipal landfill – Probably the Wasco County Solid Waste Landfill in The Dalles, OR. Failure to pass the TCLP test would require that biosolids be sent to a hazardous waste landfill – probably in Arlington, OR.

- **Alternative 1 –\$1,889,000 - Air dry and remove existing biosolids and fill lagoons with structural fill.** In this option, clear water will be pumped from the aerated lagoons and transferred to the existing chlorine contact tank and out the outfall or to the new Regional WWTP for treatment. After clear water is removed the remaining sludge will stay in place for several weeks in summer until sufficiently dried for removal and disposal at a landfill. The six aerated lagoons will be filled up with a locally available structural material. Local vendors include Hawk and Harbor Rock. Kirk can provide contact information for John Carnas as Harbor Rock. The dried polishing pond biosolids will be land-applied as a fertilizer. Hydroseeding will be provided where land is not already planted. This alternative will require a shoreline substantial development permit as well as final approval of the City's biosolids permit application by DOE. This is the most costly alternative but will result in a level site suitable for a multitude of future uses. Total cost for Alternative 1 = \$1,889,000.
- **Alternative 2: - \$998,000 - Air dry and remove existing biosolids and leave lagoons unfilled.** Similar to Alternative 1 except lagoons will not be filled and will be left as large depressions. Because this alternative will not result in as much vegetation-covered area as Alternative 1, it will require more of the polishing pond biosolids to be hauled instead of being land applied as a fertilizer. Permitting as with Alternative 1 apply here as well. This alternative is less costly, but would present a safety hazard and potential breeding area for unwanted insects such as mosquitoes. Total cost for Alternative 2 = \$998,000
- **Alternative 3: \$1,498,000 – Air dry and remove biosolids and fill lagoons with low-cost fill material.** Similar to Alternative 1 except that the six aerated

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lagoons will be filled with locally available, low-cost, non-structural material. Permitting as with Alternative 1 apply here as well. Total cost for Alternative 3 = \$1,498,000.

- A question arose as to whether contaminants are currently being passed. These tests were done some time ago. DOE and Ron Hebish agree it would be prudent to conduct additional testing now rather than to wait until start-up. Ron proposes that the lead and zinc came from a now-defunct radiator shop. A survey of present activities may reveal other sources. Metals testing can be performed by Ron for both plants for about \$200. Each city is responsible for its local deleterious waste materials
- **South Bend**
  - Testing of the March 2012 biosolids samples collected in the South Bend lagoons revealed them to be “very clean” – low levels of metal pollutants (several times less than regulatory limits) – non-detectable PCBs, and nutrients to be at a level five to ten times lower than typical sewage sludge. The samples contained significantly low volatile solids concentrations leading to the conclusion that the material in the South Bend stabilization ponds is largely inert and is primarily sand, dirt and shells. This is likely due to the plant’s history of accepting sand-laden oyster processing waste solids. All of the composite samples contained non-detectable levels of PCBs, levels of heavy metal pollutants that are well below the Table 1 and Table 3 concentration limits listed in WAC 173-308-160, and low levels of nutrients. These levels would allow these biosolids to be land applied as Class B biosolids at a permitted land application site, provided that application is limited to acceptable agronomic rates and the other applicable regulatory criteria are met. Because of the largely inert composition of the material, the RWCC made the decision to forward an edited version of the G&O report to DOE for their review in hopes of obtaining a determination that the South Bend material not be designated as biosolids (and to get DOE’s comments on the alternatives identified). A similar request by Raymond was denied; however, their samples contained metals, where South Bend’s do not. While it’s unlikely (and 99% likely that it will be rejected), it’s worth a shot.
  - Although it is our understanding that only domestic wastewater (toilet flushing and non-processing sinks) from their facilities, it

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would be prudent for the City of South Bend to check out the “oyster people” (Coast, East Point, and South Bend Packers) regarding sand and shells entering the system. What is the status of the Coast permit? Has load and flow been verified?

- Weyerhaeuser Lease Agreement: The City of South Bend has leased the 35 acre site from Weyerhaeuser since 1963 at an annual rent of \$3,000. The lease runs through 2017; however, the City will no longer be using the site for wastewater treatment by early 2013. Weyerhaeuser’s Land Manager Karen Temen said they will get back to the City or G&O with feedback within a few weeks. The City is considering purchasing the WWTP and adjoining property – a total of 170.91 acres. The offer by the City of \$100 per acre varies substantially from Weyerhaeuser’s asking price of \$1,000 per acre. The RWCC awaits further communication regarding where Weyerhaeuser stands and what they want. Kirk will speak with Ms. Temen. G&O will create an easy-to-understand, single-page outline of the proposal.
  - What will they require to restore the property to its prior state?
  - There is grant money available to spend here.
  - Purchase is acceptable to RD.
  - Although State permitting may be difficult and time consuming and would need support from all agencies, the City could propose turning this area into a wetlands habitat.
- It is estimated 89 acres would be required to apply South Bend’s biosolids to land, assuming grass or similar vegetation is allowed to grow on the site. Additional sampling of all of the treatment ponds will be required immediately prior to removal and land application to satisfy regulatory requirements and to further characterize the material for land application. This sampling and analysis will likely take place in the spring of 2013.
- Dewatering biosolids in order to maximize solids concentration is typically employed to reduce the volume of sludge, the number of truck trips, and the associated hauling costs. There are three primary methods that are typically used for removing and dewatering biosolids: mechanical dewatering, dewatering in geotextile bags, and air-drying. As of July 1, 2012, in order to be land applied, wastewater or the biosolids generated from it must be screened through a device with an aperture size of no

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more the 3/8 inch. Thus, it is likely the biosolids from South Bend will need to be screened prior to dewatering and land application.

- Removal and Disposal Alternatives. Per applicable state regulations, the biosolids must be moved from a decommissioned lagoon WWTP within 2 years of cessation of operations unless a longer time period has been approved by Ecology.
  - **Alternative 1: \$4,843,000 – Mechanically Dewater Existing Biosolids and Fill Existing Aerated Lagoons and Stabilization Ponds Using On-Site Material and Non-Structural Fill** – This is the worst-case scenario: Return land to Weyerhaeuser, remove biosolids, and fill in all existing lagoons to 8 to 9 feet which would equal the average elevation of the site prior to 1963. Remove clear water, mechanically dewater remaining sludge, and haul to a local land application site. Local suppliers would supplement the on-site non-structural material required to restore original elevation. A shoreline substantial development permit and a biosolids permit from Ecology is required for this alternative. This estimate is based on using Fire Mountain Farms as the land application site. Total cost for Alternative 1 = \$4,843,000.
  - **Alternative 2 – \$2,877,000 - Mechanically Dewater Existing Biosolids and Fill Existing Aerated Lagoons with Non-Structural Fill** – This alternative involves removing all the biosolids, filling in the existing aerated lagoons, and grading the rest of the site to a uniform elevation. See Alternative 1 for dewatering, land application, and permitting. Total cost for Alternative 2 = \$2,877,000.
  - **Alternative 3 - \$1,599,000 – Land Application on Adjacent Farmland and Fill Existing Aerated Lagoons with On-Site Material and non-Structural Fill** – This option is identical to Alternative 2, except the biosolids are diluted with existing water and pumped through hoses overland to adjacent farmland (Camenzind's) for land application. Kirk will speak with the Camenzind's about the City's proposal. Previous Camenzind concerns include the effect on their well-water source,

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the effect on livestock, possible lawsuits in the future, and monetary compensation. Proposals should include a hold-harmless stipulation. The RWCC suggested a meeting with the Camenzinds and Kyle Dorsey. G&O will prepare an easy-to-understand, single-page outline of the proposal that should be provided to Camenzind's when this possibility is discussed. The City and G&O will research alternative land application sites. Total cost of Alternative 3 = \$1,599,000.

- **Alternative 4 - \$2,192,000 – Site Management Option –**
- This option includes the ongoing management of the site by the site owner or a third party. The owner and site manager could be Weyerhaeuser, the City of South Bend, or a separate entity such as a private wetland developer or other naturalist preservation group. See Alternative 1 for dewatering. It is estimated that approximately one-half (depending on Ecology approval and permitting) of the biosolids would be dewatered and hauled to an approved land application site. The remaining biosolids would be stored on site and then land applied after testing and re-grading. The site would be planted with native vegetation, including grasses and wetland plants, to form a habitat for wildlife. The habitat would resemble the existing surrounding landscape as closely as possible. This alternative would require an extensive effort in regulatory consultation and permitting with the Army Corps of Engineers, Ecology, EPA, as well as US Fish and Wildlife Service. A special site-specific land application plan would need to be developed and approved by DOE. Support from all regulatory agencies is critical. Any opposition could torpedo the concept. Total cost of Alternative 4 = \$2,192,000.
- There was discussion that the letter report should be confidential, with the exception that it will be forwarded to Ecology following receipt of comments from Eric and Dean. (Following review by Ecology, it will also need to be provided to RD.) New one-to-two-page fact sheets will be provided to Camenzind and Weyerhaeuser, instead of providing them the entire letter report.

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- **Regional Project Accounting Spreadsheet Update**
  - G&O present updated spreadsheet
    - How much is left and what to spend it on?
      - Jay's spreadsheet shows the amount available for Phase IIB = \$4,973,063, assuming a portion of the WWTF contingency is reallocated to Phase II-B. This amount is without regard to the City percentage allocation.
      - Proposed Phase IIB Projects identified to date and their estimated cost:
        - South Bend Lagoon Decommissioning = \$1.6 - \$2.2 million
        - Raymond Lagoon Decommissioning - \$1.5 million
        - Central Avenue = \$750K
        - Odor Control and/or Fiber Optics = \$600K
      - A motion to authorize design work for Central Avenue was made by Jerry, seconded by Kirk, and carried.
      - Initiation of repayment of RD loans is about a year away. The RWCC suggests that a workshop be set up to discuss debt service, bonds, operating budgets, P/I reserves, etc. Workshop should include Debbie Harper, Dee, Hester, and, if available, Skip Rand, who recently retired. This should happen within the next month. Cathi will give Skip a call to gauge his willingness to participate.
  - Central Avenue sewer investigation status
    - Video inspections have been completed. Large amounts of I/I found.
    - Storm water arch is not in the greatest shape
      - Side sewers were rerouted to provide service to homes previously served at arch
      - Proposal to go down alleyway between Central and Pacific and deepen sewer line will cost about \$745K.
- Set next meeting – May 31 2012 –Raymond – 5:30 – Budget meeting will be held earlier in the day – Time to be determined.
- Adjourned at 8:05 PM