

MINUTES

**Committee of the Whole  
PLANNING COMMISSION MEETING**  
City and Borough of Juneau  
**Mike Satre, Chairman**

October 28, 2014

**I. ROLL CALL**

Dennis Watson, Vice Chairman, called the Committee of the Whole Planning Commission (PC), of the City and Borough of Juneau (CBJ) held in the Assembly Chambers of the Municipal Building, to order at 6:00 p.m.

**Commissioners present:** Dennis Watson, Vice Chairman; Karen Lawfer, Bill Peters, Nicole Grewe, Ben Haight, Gordon Jackson, Paul Voelckers

**Commissioners absent:** Mike Satre, Chairman; Dan Miller

**Staff present:** Travis Goddard, Planning Manager; Beth McKibben, Senior Planner; Rob Steedle, Deputy City Manager; Rory Watt, Director of Engineering; Samantha Stoughtenger, Wastewater Utility Superintendent; Michelle Elfers, Project Manager

**II. REGULAR AGENDA**

Presentation of the Biosolids Treatment and Disposal Evaluation, Phase II, by the CBJ Engineering and Public Works Department.

Ms. Stoughtenger told the Commission that they would be talking specifically about the solid product that results from the treatment of sewer that comes into the wastewater treatment plants. She explained that there are three plants in Juneau; the Mendenhall plant which is located in the Valley, which processes roughly 80% of the wastewater, and J.D. (Juneau Douglas) which is located in Thane, which processes almost 20% of the wastewater, and a very small treatment plant located in Auke Bay, from which the sludge is hauled and treated at the Mendenhall plant. The treated effluent goes into the Gastineau Channel, Auke Bay or the Mendenhall River, stated Ms. Stoughtenger.

The biosolids have been dealt with in a number of different ways, stated Ms. Stoughtenger. They had been treated up until 2010 in an incinerator located at J.D., she stated. At that time it was decided not to complete the repairs on the incinerator and a short term solution was decided upon which is being carried out today, which is a combination of landfill and a shipping option. Currently the biosolids are shipped from Juneau via barge to Seattle, then shipped via rail from Seattle to Oregon, and then the container is returned, explained Ms. Stoughtenger.

The cost for this option is about \$2 million a year to dispose of approximately 7 million wet tons, she explained. It is not a secure contract resulting in an unstable and tenuous situation, she explained, with only one barge company currently going in and out of Juneau. This is an area of rising concern on a daily basis, said Ms. Stoughtenger.

Ms. Elfers told the Commission that in 2013 the Department hired a consultant to provide an overview of technologies that would be a good fit for Juneau, during which treatment and disposal options were identified. Through this process they decided they wanted to end up with a Class A Biosolid which would be safer for public use, and would have the least disposal restrictions; for example it could be used as a topsoil for residential gardens. They also wanted to be able to reduce the volume of biosolids, said Ms. Elfers. Disposing of biosolids costs money, and the more biosolids there would be to dispose of, the more expensive it would be.

After disregarding various considerations, incineration and heat drying remain viable options with the status quo for comparison, said Ms. Elfers. Composting was not retained as an option because of the land required for the compost, said Ms. Elfers. Heat drying with the furnace was proposed by CH2M Hill in Phase II as it met with the goals and governing principles in the project.

The CH2M Hill complete report may be viewed on the CBJ web page here:  
<http://www.juneau.org/pubworksftp/wastewater/documents/2014-09CBJBTDE.pdf>.

Ms. Stoughtenger said they are seeking a stable, long-term, viable, biosolid disposal option. They do want a Class A Biosolid pellet, and they want to reduce the volume as much as possible.

The cost of current shipping for the biosolids has increased from roughly \$140 a wet ton to \$215 a wet ton, said Ms. Stoughtenger. That cost will just continue to rise, she said. There is no protection in the contract from the continuing rise of fuel costs, she said.

The highest -ranked alternative said Ms. Stoughtenger, is a thermal dryer with a heat recovery furnace estimated to cost \$28.7 million. Up front capital costs would be recovered over time, she said. At this time said Ms. Stoughtenger, the selected location is J.D. The Valley was not selected as the location because of the air quality factor, she said.

To maintain the status quo as it exists would cost \$35 million over a 20 year life span, said Ms. Stoughtenger. The dryer with the furnace over the same period of time is estimated at \$37 million to \$38 million, she said. The benefit of the dryer with the furnace is that it would

continue to pay for itself with energy recovery, with a usable end product, said Ms. Stoughtenger.

Ms. Stoughtenger said they are going to the Finance Committee in November and that they will be actively pursuing a public outreach campaign.

Ms. Elfers said they hope to come back before the Commission on November 25, (2014) at which time they will be asking for a recommendation from the Commission for the Assembly on one of the alternatives.

#### *Commission Comments and Questions*

Mr. Voelckers asked for clarification as to why the existing incinerator was dismantled in 2010 instead of being repaired for the \$2 million that it was estimated at the time to take for the repair.

Ms. Stoughtenger said that due to significant changes in air quality regulations it could not be upgraded or it could not be upgraded cost-effectively; that at best a temporary patch job could be done.

Mr. Voelckers asked if the old incinerator was still extant.

Ms. Stoughtenger said that part of it still remained but that there is no way today that \$2 million could be put into it to make it functional.

Ms. Elfers said that CH2M Hill contacted the vendor of the original incinerator equipment and they did look at refurbishing the original equipment as opposed to purchasing new equipment, and they found that it is actually cheaper at this point to purchase new equipment. Ms. Elfers stated that in 2011 there were massive changes within the Environmental Protection Agency (EPA) air quality regulations so that equipment now is vastly different than what it was when the original incinerator was purchased.

Mr. Haight asked if they could expand upon the escalation of costs for fuel and for transporting bio products South.

Ms. Elfers responded that they used an inflation rate of 2% across-the-board. She added that 2% does not cover the inflation of fuel costs at all. She added that the numbers will get a lot bigger than what they are indicating.

Mr. Haight said that is what he would expect, particularly for transportation, and for any fuel burning solutions.

The heat dryer without the furnace is estimated with number two heating oil, said Ms. Elfers, so that might also experience greater inflation, she added.

That may change the outcome of the lifecycle analysis, said Mr. Haight.

Mr. Haight asked about the life expectancy of the existing incinerator building as it currently stands.

They have not analyzed the building at this point, however it seems in good repair, said Ms. Elfers.

Mr. Haight asked which location for the plant proved to be most economically.

Ms. Elfers said that in the CH2M Hill report cost estimates are provided for each separate location.

Mr. Haight asked about the element of risk identified for each separate location.

There a lot of new technologies which they are wary of undertaking, said Ms. Elfers. Therefore they have chosen technologies which are proven. They have also been very careful in identifying technologies which are safe for the public health and safety and for employees in the plants.

Mr. Haight asked Ms. Elfers which solution she thought was the most stable.

Ms. Elfers identified alternative three, which is the chosen thermal drying with heat recovery furnace. The furnace uses wood pellets which they do not have any qualms about obtaining every year, she said.

Mr. Haight asked if there is the possibility to use wood pellets in lieu of fuel oil for the heat dryer with the energy recovery furnace.

Ms. Elfers said that it is possible. She said what is proposed is using the biosolids with wood pellets and that would be approximately 350 tons of wood pellets a year.

Ms. Lawfer asked why the capital costs for the plant were estimated to be higher for the Thane location than for the Valley location.

Eighty percent of the sludge comes from the Valley and therefore it would need to be transported from the Valley to the Thane location which it has to be anyway, said Ms. Elfers. Therefore a lot of that cost is transport, she said. Once it gets to Thane, she said, there would have to be a storage facility constructed for it, she said.

Have increases in utility rates been brought into the timeline for increasing rates, asked Ms. Lawfer.

In the current approved utility rates, said Ms. Stoughtenger, there is a \$20 million earmark for this project.

What would be considered the lifetime of this facility, asked Ms. Lawfer.

It is a 20 year planning time frame, responded Ms. Stoughtenger.

Mr. Peters said it still wasn't clear to him why they would be considering the J.D. facility as opposed to the Mendenhall facility.

Ms. Stoughtenger responded that the Mendenhall site plan is very constrained. That location is located in the middle of a neighborhood where there are already a lot of odor complaints, she said. The biosolids are already currently trucked to the AML (Alaska Marine Lines) yard, she said. The J.D. option has more available land, she added. These are considerations in addition to the air quality to be considered in the Mendenhall Valley, she added.

Mr. Watson said he assumed there would still be the existing problems of saltwater invading the sewer lines. He said he assumed there would still be the same impact on the new equipment as there is on the old equipment. With the selected option of number three, Mr. Watson asked if Juneau would ever be able to service other communities. If option three were selected he wondered if it would change the dynamics of the existing workforce; if the existing workforce would be able to transition to the new technology. He added that the neighborhood across the water has also been sensitive to odor throughout the past few years.

Mr. Voelckers asked if any other industrial sites have been considered.

Ms. Elfers said that early in the process some other sites had been considered such as some in Lemon Creek, but that they had not been carried forward, because they would then be trucking from additional locations.

III. **OTHER BUSINESS** - None

IV. **REPORT OF REGULAR AND SPECIAL COMMITTEES** - None

V. **ADJOURNMENT**

The meeting was adjourned at 6:47 p.m.