

Gustavus Disposal & Recycling Center (DRC) Quarterly Staff Report
Paul Berry, DRC Manager/ Operator
Monday, May 9th, 2016

My last quarterly report was for the February 8th General Meeting. I did not give a report at that time as I was on leave but I did submit the DRC's FY15 Annual Report to the Council. Because it has been 6 months since I have last reported to the Council some subjects in this report will cover a longer span of time than usual.

My next scheduled quarterly report is during the August 8th, 2016 General Meeting.

Operations and management

Labor

In December the City advertised for people interested in being a part of the DRC's 2016 Temporary Labor Pool (Pool). There were six applicants and all six were interviewed and deemed qualified for the Pool. The 2016 Pool members are: Artemis BonaDea, Nat Drumheller, Jeff Irwin, Logan Kendle, Larry Landry and Eric Syrene.

One of the goals of the Pool is to maintain two workers for all days that the DRC is open to the public from early April through early October. Additionally the Pool provides labor for special projects, covering my absences in the winter and when I am away on training or other travel.

Jeff Irwin has agreed to return for another season as the primary Assistant Operator and I am grateful for that. This will be Jeff's fourth year.

The compost scene

Unfortunately the wet spring has made it either difficult or impossible to work in the composting yard. Normally this is the "dry" time of year when I start sifting the winter's accumulation of compost but over time the composting yard has become a bowl and rainwater accumulates in the yard rather than draining out of it. In the capital projects section of this report I am presenting an idea on how to fix this situation.

Compost sales went very fast this spring and in two days about 12 yards of material was sold. While I am glad that it is so popular I am sorry for those who miss out on the compost sale. 12 yards doesn't go that far...

Ground water sampling

Our ADEC operating permit provides for sampling the ground water at our facility on a three year cycle and has been more fully described in previous reports. The four wells sampled in October and April did not indicate any "bad" metals (lead, cadmium, mercury) and there were no spikes for the other metals. Here are the details briefly (ppb = parts per billion):

October 2015 during high-high tide for the month: Monitor Well (MW) 6 – down-gradient, located in the meadow directly south of the DRC and MW4 – up-gradient, located directly across from Charles DeBoer's old place. Metals detected were MW6: Barium 15 ppb, Copper 2.1ppb, Nickel 2.8ppb, Zinc 2.1 ppb; MW4 Arsenic 8.9 ppb, Barium 29 ppb, Manganese 84 ppb, Nickel 1.1ppb, Zinc 8.2 ppb

April 2016 during low-low tide for the month: MW1 – down-gradient, located adjacent to the SR Boat Harbor parking lot and MW3 – up-gradient, located adjacent the intersection of SR Boat Harbor Road and State Dock Road. No spikes or other anomalies. Metals detected were MW1: Barium 17 ppb, Copper, 1.6 ppb Manganese 27 ppb, Nickel 2.2 ppb; MW3 Arsenic 1 ppb, Barium 33 ppb Manganese 2.3 ppb, Nickel 2.2 ppb, Zinc 15 ppb. Additional parameters measured are temperature, pH, chemical oxygen demand and conductivity. I have submitted the October results to ADEC and am preparing the April results for submission at this time. One problem that is now occurring is that MW1 has very little water in it during low-low tide conditions. I assume this is because of isostatic rebound.

Copies of the electronic reports are available by e-mail: dumpmaster@gustavus-ak.gov.

The sad state of the recycled commodities market

The markets for recycled commodities such as aluminum, plastic and paper, continue to be very poor with our returns being almost 2/3rds lower than the last significant high in 2008-9. One small bright spot in all of this has been the reduction in the fuel surcharge that is charged for our material when it is shipped on the barge lines.

Help your local Recycling Center – buy products made from recycled materials.

Community Chest

The front desk volunteers since my last report have been Mary Williams and Annie Mackovjak on Wednesdays (Annie covered for Mary who left in mid January). Saturdays have been staffed by Judy Brakel, Liz Vanderzanden and Betsy Lesh with a fill in provided by Maureen Moore. Sorting, purging and stocking has been done by Artemis BonaDea, Julie Howell, Becky King, Betsy, Annie, Kim Ney, Laurie Ross, Brenda Tencate and Joan Williams. I apologize if I have missed any names. We are all indebted to these fine women for keeping the Chest going.

There have been several shipments of books to The Amazing Book Store in Juneau and in April there was a shipment of over 40 boxes of clothes to the Hoonah Thrift Store via the ferry. This spring or summer I hope to organize some maintenance and repair time to deal with minor issues with the building and yard.

Regional issues: Southeast Alaska Solid Waste Authority (SEASWA) & Juneau

I have missed many of the SEASWA meetings since I last wrote but I do follow the agenda and minutes from the meetings that they have. I have no issues to report on.

The proposed Inter-local Recycling Agreement with the City & Borough of Juneau:

The latest development with this project was a pilot shipment in late September/ early October. We shipped 14 bales of cardboard, plastic and mixed paper to Juneau. The bales were to be broken open and re-baled with Juneau's material in their new baler but there was a communication mix up on their end and they ended shipping our material baled as it was to the Seattle recycler. This complicated the reporting process and the upshot was that Juneau absorbed the cost of shipping our pilot project material south. The good side of the possible agreement is that this will shave a couple hundred dollars from our freight costs. The bad side is that Juneau does not recycle mixed plastics or books so I will still need to ship these very low value materials to Seattle periodically and to do that I need the higher value materials like HDPE, cardboard and PETE that help cover the costs of the low value materials. Still, developing an agreement with Juneau for recycling is a good goal and may also allow for working with Juneau in other area such as Household Hazardous Waste and e-waste.

Solid Waste Management Plan (SWMP)

Background: I am concerned with how Gustavus will deal with trash & recycling in the future. Our disposal capacity is finite and our facility is undersized for the amount of waste it receives and attempts to recycle. In June 2014 the Council initiated the process of having me develop a new SWMP for the City. This was with resolution 2014-20:

<http://cms.gustavus-ak.gov/government/resolutions/2014/Resolution%202014-20%20DRC%20Solid%20Waste%20Management%20Plan.pdf>

Attachment A the scoping document:

<http://cms.gustavus-ak.gov/government/committees/disposal-recycling-center/Planning/2015-bell-associates/AoWMPiG-App%20A%20-%20Proj%20Scope%20.pdf>

During the two year process I collected data and worked with Bell & Associates to develop a “phase 1 report” which came out in August of 2015:

<http://cms.gustavus-ak.gov/government/committees/disposal-recycling-center/Planning/2015-bell-associates/Analysis-of-Waste-Management-Practices-In-Gustavus-2015-Final-Report.pdf>

The process of putting together a new SWMP has unfolded much slower than I originally proposed and much work remains in achieving the goals of the original SWMP.

Therefore I would propose to the Council a two year extension of the SWMP process. I will produce a report in the near future as to what was accomplished in the first two years and how much \$ was spent in that process. If the Council is still in support of the SWMP process, which I certainly hope they are, then I ask that the Council consider an extension resolution for the June 13th General Meeting.

Capital Projects

Not wanting to duplicate everything I wrote in my last report I am structuring this section as an update for the highest priority projects – especially now that it is budget time.

Skid-Steer Loader Replacement

The Council approved the scoping document for the purchase of a new loader to replace the existing Bobcat 763 skid-steer loader (mfg 1995, 5,110 hours) at the January 11th, General Meeting. Due to on going issues with mud I am considering the specification of an all wheel steer loader vs the skid steer loader. Currently when it gets muddy we put on tracks – but then it gets real bad because the tracks disturb the ground even more. Extensive track use is not a good solution.

I have also specified a machine with a Rated Operating Capacity (ROC) of 3,300 pounds. The 763 has a ROC of 1,500 pounds which is unable to move pallets of lead acid batteries and has difficulty with some scrap metal bales.

I have also specified the purchase of a new machine, which would include a warranty period rather than the purchase of a used machine with no warranty period. A new machine is well worth the investment because Gustavus is remote and there are often times when no mechanics are available for equipment maintenance. Buying a used loader may not be cost effective in the long run. The custom at the DRC has been to buy and wear out machines rather than turn them over on a set schedule. The usage patterns (hours and duties performed) at the DRC are known and a good, new machine will last our facility a long time. A very important point for the Council to consider is that I am proposing that the City buy a new loader from Bobcat of Juneau rather than putting the purchase out to bid as is normally required with equipment purchases over \$10,000. City code allows for this through the use of a bypass resolution to go with any one-source purchase per CoG 4.17.40(b). Two points for a bypass resolution are: 1) The 30% municipal discount that Bobcat of Juneau provides makes the machine competitively priced; 2) The DRC has operated and maintained a Bobcat for almost 18 years and the DRC has a good working relationship with Bobcat of Juneau with the maintenance of the existing 763 skid-steer loader. I can go with the competitive bidding process but it will add significant time to the replacing our current skid-steer loader and may not yield any significant savings. This is a Council decision, however, that is needed before I can move forward.

Pre-processing storage area, driveway and site improvements

This project would involve developing the area between the landfill fence and Boat Harbor Road to replace the storage which is now occurring inside the fenced area on top of previously deposited waste (and where future waste will be deposited). Storage and waste landfilling need to be separated to increase efficiency and the waste waste mound needs to

be graded and contoured to reduce standing water and muddy work conditions. I am submitting a scoping document and two diagrams for this project located within this folder on the City's web site:

<http://cms.gustavus-ak.gov/government/committees/disposal-recycling-center/reports/reports-to-the-city-council/2016/pre-processing-storage-area-driveway-and-site-improvements-scoping-documents>

At this point in time the costs are estimated as:

SUB-PROJECT Driveway improvements	\$10,000
SUB-PROJECT Pre-processing storage area	\$26,400
SUB-PROJECT Storage bins & pallet jack	\$18,000
SUB-PROJECT Tree Planting & Misc. Earthwork	\$ 3,300

I have attached a black and white site drawing with my initial ideas for the new driveway (in the above folder). The diagram is a starting point. What I want to avoid is traffic buildup with people parking everywhere and backing up in tight places without good visibility. I also want to avoid large un-usable islands created by multiple entrances. However, small islands with well groomed trees such as some of the cottonwoods near the entrance of the DRC could make for an attractive entrance to our facility. I would ask that the Council give some time to the Pre-processing storage area, driveway and site improvements project and consider approving or editing and approving the scoping document that I am presenting.

Compost yard improvements

As I have mentioned earlier in this report, the DRC's composting yard is becoming unusable in wet weather – a situation which is pretty common here. The composting yard needs a hard surface for mixing food waste, storing wood chips, storing compost that is either curing or finished and for the running our screening operation. The overall size of the composting area is 60' x 110' and this area is sufficient for the amount of material we compost and the static pile method we use. Only a portion of this area, roughly between a half and three quarters, would need a hard surface. I would ask that the Council consider funding a project to rebuild the composting area: remove the mud and put in rock (cheaper) or concrete (more \$). As I have mentioned in prior reports the Quonset is also going to need replacement in the near future. The fabric is considered to have a 10 year life span and it was installed in 2006.

Landfill mound building

As reported previously our waste is no longer being buried below grade but is instead being added to an artificial mound that is slowly growing skyward. I feel that it is very important to do this process of waste mound building correctly and as such I have made the primary focus of the SWMP process on obtaining a topographical survey of the DRC property. The survey would focus primarily on the waste mound but would also include building floor elevations, the driveway, ditches etc. Knowing our current elevations allows us to determine how much waste is currently landfilled and helps determine how much capacity remains. I have (slowly) been working on a RFP for this project. I would ask that the Council seriously consider funding this important project.

Prior to the RFP I would also like to propose a small ~\$2,000 purchase order for approximately 12 hours work for the Roger North/ Vista Consultants, (the landfill engineer I worked with on the SWMP last year), to work with me on the RFP: document drafting, review of vendors/ proposals etc.

The end, thank you.

Report compiled by PNB on 05/06/16

5/4/16

STATE DOCK ROAD

BOAT HARBOR RD

Bait Storage

Parking

NO

Parking

Parking

Gate

Alfalfa

Pre-processing storage

Long term storage

