

Gustavus Disposal & Recycling Center (DRC) Quarterly Staff Report
Paul Berry, DRC Manager/ Operator
Monday, November 8th, 2021

My last quarterly report was at the August 9th General Meeting. My next quarterly report is scheduled for the February 14th General Meeting.

General Operations and Management

Labor

The 2021 DRC temporary labor pool (Pool) currently consists of Ian Barrier, Mike Atkins and Paul Dzubay. Because the Pool is classified as temporary labor, it has to be re-advertised on an annual basis. The notice that the 2022 Pool is open to applications will be advertised this month. In December I will go through applications, plan the interviews and make any recommendations. The current Pool members who want to be in the 2022 Pool will have to reapply and go through a streamlined interview process.

I feel fortunate to have good staff again after the Pool fell apart this past June. Ian is planning on being the person in charge of the facility when I leave for Hawaii in mid-January. Ian is a great employee and seems to fit in very well with the challenges and demands of working at the DRC.

Because this is my first report to the new Council I want to make mention of the new, regular, DRC Operator position that I have been pushing for since 2019. Currently I am the only regular position at the DRC and the only one who receives formal training and benefits such as paid leave, sick leave and retirement.

As I envision it, the new DRC Operator would be a full-time year-round or eight months at 40 hours and four months at 32 hours regular position. This schedule would be based on the availability of funding from the City to support these hours. I want to point out that the work is certainly there. Because the DRC is a recycling oriented operation as opposed to a landfill oriented operation there is a lot of processing of the various waste materials involved. Also, the DRC has a lot of equipment, much of it more than 10 years old, so there is a fair amount of equipment maintenance involved.

When I retire, the duties of my position could be melded into the DRC Operator's duties and the City could go back to either having just one regular position at the DRC or hire a new Assistant Operator. Either way the Pool should always exist to supply additional and back-up operators and as an opportunity for those interested in working at the DRC to get their foot in the door.

The Mound

Periodically I like to cover the topic of the mound which is what I call our collective pile of waste within the fenced area. The first waste pit within the fenced area was excavated in April of 1994 and the final pit was filled in 2015. Since 2015 all non-recyclable waste has been placed above grade. We are all curious as to how long we can keep placing waste in the mound. Currently I am working with Vista GeoEnvironmental, a landfill engineering firm, to produce a definitive answer to that question. I'll hopefully have some answer to that question in my next report.

Because the mound has been built in a flat manner rather than a sloped manner (I didn't know very much about mound building in the early days), water tends to puddle in various places atop the mound when it rains. And when the operators drive back and forth with a loader across these flat, seasonally water soaked areas, you get muddy ruts. These ruts make work on the mound difficult this time of year. I am trying to develop a slight slope for the top of the mound so it will better shed water but with our fine, silty soils I have available, holding a slight slope will be difficult. Without access to soils like commercial D1 which can set up and hold its slope even when wet, we are stuck with mud for much of the

year. Because of the mud we have had to put the metal tracks back on the older Bobcat. These tracks allow us to go through anything but they chew up the ground as well. If a waste mound is a permanent feature of Gustavus's solid waste scene (likely), the City should invest in a track loader for the DRC.

Alaska Department of Environmental Conservation (ADEC) Inspection Report

On August 25th, Zach Gianotti, the ADEC Solid Waste Program Environmental Specialist for our area arrived for a planned inspection. Zach's region is all of SE Alaska and this was the first opportunity I have had to meet him. ADEC tries to perform an inspection every other year or so, and our last one was in 2018. I have attached the inspection report to this report. I gave him a very thorough tour and we scored 97% which is typical for the DRC, there is always some area that needs improvement, such as how our lead-acid batteries and e-waste are stored and I have been working on those improvements.

Large baler repairs

The DRC's large baler gets used pretty hard in our operation and it shows. During August Chris Smith helped us out with some emergency welding. The DRC does not have any welding equipment so we are at the mercy of locals who are willing to help us out. The City is fortunate that Chris is happy to help the DRC and has helped us with numerous repairs with our equipment over the years.

Part of my drive to get a new building for the DRC is so that we can install a bigger, more robust baler. Our operation is very dependent on balers to compress our recyclables for shipment and compress our non-recyclables for placement in the mound.

Some interesting upcoming projects at the DRC

Landfill safety and composting training at the DRC

I mentioned this training in my last report. As some of you know I have a second job with the Zender Environmental Health and Research Group (Zender) out of Anchorage. We primarily work with villages to improve their landfill and recycling programs but we have worked with larger communities as well. As I like to say, my job at the DRC is where I gain my experience and it is my job with Zender that allows me to share that experience with a larger audience. But working with Zender has also allowed me to bring back to the DRC knowledge and ideas that I have picked up during my Zender work. This is where I learned about refrigerator processing for instance.

In May of next year Zender is planning to do a training here in Gustavus at the DRC. The two and one half day course will be about landfill safety, re-use (like the Community Chest) and food waste composting. Using the DRC for some of the training makes sense because it is a good example facility. In 2001 I did a similar such training with Zender. For that training there was a dozen or so people from various small villages located all over Alaska, and there was a representative from ADEC's Solid Waste Program.

For the training next spring I am hoping to get interested folks from Hoonah, Yakutat, Kake and Prince of Whales Island as well as other villages in Alaska. This training should have no impact on the operation of the DRC other than giving the Pool a chance to meet other landfill staff from other parts of the state.

The training is funded with a USDA solid waste grant that the Zender group was awarded.

A pilot study for turning low-grade plastic and wood waste from the DRC into usable construction material

This is also a rehash from my previous report for the benefit of our new Council members. On July 1st I met with Chet Hovey and Dave Lore of Advanced Environmental Engineering/AE2 (www.ae2eng.com) to discuss a pilot project they would like to conduct at the DRC in

2023. The purpose of the project is to take non-recyclable waste, like the material in our construction/ demolition “pit” and turn it into building products. The process would involve setting up a shredder and other processing equipment, housed in two 20-foot storage vans. We would take select materials from our waste mound, shred and combine them in such a way as to make plastic dimensional lumber or paving stones. This is a pilot study to see if the process is viable and if it could be used at other small, rural landfills. There would be no cost to the City for the pilot project. AE2 is asking for a letter of support from the City in support of this study. AE2 has produced a Feasibility Study and a Business Plan for their proposal that I would be happy to forward to anyone who would like to know more about the project.

Community Chest

While I provide oversight for the operation of the Chest, pretty much all the work is performed by a dedicated group of volunteers. Currently these volunteers are led by Vicki Bender and Annie Mackovjak.

Since my August report the front desk sales staff has been: Connie Darnell, Vicki Bender, Annie Mackovjak, Mary Healey, Becky King and Vikki Garret.

Sorting, stocking and purging has been done by: Amanda Dunaway, Vicki, Penny Cook, Melisa Gomb, Denise Pratschner, Marie ?, Vikki, BJ Robinson, Annie, Judy Hardy and Joyce Gallagher. My apologies to any individuals I may have missed.

The Chest needs more volunteers to work at the front desk and help with sales. Anyone who would like to help can contact Vicki, Annie or Myself.

I would also like to put out a thank you to Katy Dighton for dealing with the tent that used to be in the yard at the Chest. The tent blew over the fence during the October 1st windstorm and Katy happened to see that night and took it upon herself to deal with it. The fabric was damaged from the event but can be replaced and none of the steel framing tubes were bent so we'll have our tent set up next spring.

Capital Project Summaries

New Composting Facility/ Quonset replacement

Project description:

As described in previous reports, the objective of this project is to replace the failing Quonset structure with a more robust composting facility capable of processing greater amounts of material in a more temperature controlled manner than our current facility can. This project also seeks to pave more of the composting yard with concrete and install concrete push walls behind the piles of wood chips, sawdust, overs and curing compost.

Project status:

This project is several years behind (not that I haven't tried). Currently, I am developing a simple, low cost layout plan for a five or six bay facility constructed of large concrete Eco-blocks to replace the Quonset structure.

When my plans are complete I will put out a RFP document for engineering services to figure out the most cost-effective design for the facility. I am hoping to get this RFP out this year or early next year so that the facility can be constructed in the spring before the peak season waste flows.

In-flow Storage Area Project

Project description:

More information about the purpose of this storage area can be found in earlier reports or in the DRC's General Operations Plan.

Project Status:

This project will be complete once the HHW facility (described below) has been placed into position and connected to electrical power. The HHW unit will sit on part of the area that was improved during the in-flow storage area project.

Household Hazardous Waste (HHW) Facility

Project description:

This project has involved the specification and purchase of a 20' long x 8' wide & 8' high welded steel container designed for storing equipment fuel, used lead-acid and dry-cell batteries and other miscellaneous hazardous materials. The unit includes spill containment, fire suppression, ventilation, lighting, shelving, and signage.

Project Status:

As I write this, the unit is in Juneau and is due to come to Gustavus and be set in place during November. The project will be complete once the unit is set in place and is connected to power (120 VAC).

New main building

Project description:

This new building will be designed to initially work beside and then eventually replace the current landfill building. The current landfill building has two critical shortcomings:

- 1 It is too small to be able to properly accommodate the amount of waste throughput on a daily or weekly basis. It is too small to house the proper equipment needed to process effectively the community's waste stream.
- 2 It was not constructed to allow the full use of powered equipment, such as a small loader or forklift, within the building. Evidence for this is a lack of concrete push walls or metal clad barrier posts beside drive through openings.

Project Status:

As a City project, the design process for the new building started with the adoption of the Capital Improvement Plan COG_CIP 2021-2025 document last spring, and the adoption of the new buildings scoping document in February of last year.

The next step in this project is the drafting and release of a Request For Proposal (RFP) for the design, engineering and estimated construction costs for the project. The goal is to send the RFP to at least three engineering/ architectural firms that have worked on other projects that involve transfer stations or other solid waste related buildings.

If all goes well the Council would be awarding the RFP for design and engineering during their General Meeting in January.

The end, thank you.

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