



City of Denton
MINUTES
COMMITTEE ON THE ENVIRONMENT

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

Monday, December 3, 2018

1:30pm

City Council Work Session Room

After determining that a quorum of the Committee on the Environment of the Denton City Council was present, the Committee on the Environment thereafter convened into an Open Meeting on Monday, December 3, 2018 at 1:30 p.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas

Council Members: Chair Council Member Keely Briggs, Council Member Paul Meltzer, Council Member John Ryan

Also Attending: Mario Canizares, ACM; Kenneth Banks, General Manager Utilities; Antonio Puente, CFO; Ethan Cox, Director Solid Waste; Brian Boerner, Deputy Director; Katherine Barnett White, Sustainable & Customer Initiatives Manager; JT Douglas, Conservation Coordinator; Sarah Luxton, Sustainability Coordinator; Vanessa Ellison, Recycling Coordinator; Kim Mankin, Administrative Manager

REGULAR MEETING

- A. COE18-039** - Consider approval of the Committee on the Environment of the Denton City Council Meeting minutes of November 3, 2018.

Motion by Committee Member Meltzer second by Committee Member Ryan
Vote 3-0 approved

- B. COE18-040** - Receive a report, hold a discussion, and give staff direction regarding the Solid Waste department's Building Materials Recovery and rubble processing operations.

Ethan Cox gave the presentation reminding the Committee that last summer a consulting group named Blue Ridge Services was hired to provide an overview of what is and is not working. Solid Waste has number of operations and programs that has been put forth for the community. Some of the recommendations were to step away from the operation but almost all cases were opportunities to improve. After this was presented to Council they appreciated the consultant's information and then wanted staff to dive deeper for more analysis. There will be several of these discussions over the next few months.

What is a Business Case Analysis.

Definition - A business case analysis evaluates the benefits, costs, and risks associated with a program, proposed investment, or plan of action.

Elements of the case analysis include:

- Program Purpose & Objectives
- Evaluation of Results
- Financial Analysis
- Risk Assessment
- Conclusion/Recommendations

Rubble/BMR Analysis Definitions:

Rubble - Waste fragments of stone, brick, concrete, or asphalt

Building Materials - Waste brick, concrete, glass, drywall, metals, insulation, lumber, etc. Metals is the easiest to be diverted.

Diversion - Process of diverting materials from the landfill. Stored and stockpiled material is not counted as diverted material. Material is moved offsite.

Briggs asked about food waste diversion, does that mean it can be diverted before it enters and not make it to the landfill. Is it only counted if it makes it to Solid Waste Department and then doesn't make it to the landfill. Cox answered brush for instance 100 percent is diverted. Recycling is in the diversion numbers although it doesn't enter the landfill facility. Materials that is not accepted is 100 percent diverted.

Rubble/Build Materials Recovery Purpose & Objectives:

Department Objective is to divert 40 percent of all waste accepted

Purpose:

Rubble Processing – Sort & process rubble to sell as aggregate products (crushed concrete, soil, etc.).

Building Materials Recovery (BMR) – Sort, recover and divert construction wastes from landfill disposal through reuse or recycling.

Participants include:

Customers – Private Contractors, Commercial Operators, City Departments

Operations – Landfill, BMR, Former Mining Operation

Briggs stated on the BMR, we have a lot of growth happening which should equate to a lot of access coming in. Cox answered that would be correct but also gave the example of a fence being blown down in a storm, that would be another item for this area of solid waste. Briggs remembered an area where treated lumber was accepted. Cox answered that material was used for the liquids associated with Opala as a bulking agent so those liquids could be disposed of. After reviewing the numbers that material was counted as diverted, but 100 percent went into the landfill. Treated lumber can't be used in our normal composing operation.

Metzler asked about the concept of zero percent waste, now achievable it is. Cox stated when you look at other communities you have to look at their operational definitions. Many other communities do not have access to the data that Denton does. Many people believe items that are put in the recycling cart are actually recycled. In many cases only 70 percent was recycled because 30 percent was contaminated. Much of this would depend on if there is a market to move the materials. Cox believes that 40 percent is much more achievable than zero waste.

Metzler then asked if there are opportunities to make a market for some of these products. Cox answered staff does divert materials from the landfill. As in aggregate materials, there are quality standards that have to be adhered too which is one of the challenges with rubble processing.

Ryan asked if we didn't have the stock pile of rubble, would it be considered diversion if we was using it for roads. Cox stated that is where the definitions come into play. What is reuse versus diversion. It is a good idea to reuse, but it isn't diverted material.

Briggs asked about brick, what does the manufacturer here in Denton do with their brick that aren't used. Is there some type of partnership that we could have with them. Cox has not spoken with Acme directly but understand they use a lot of their waste material in the process. Cox can reach out to Acme and have some conversations with them.

Program Performance FY12/13 – FY 16/17 is based on diversion. Diversion is accounted for by weight. Over the last five years there were 301,984 tons accepted for rubble, and 93,035 accepted for BMR. Of the rubble about nine percent was diverted and of the BMR about ten percent was diverted.

The diversion for rubble means the end product was sold or moved offsite. There is about 140,000 tons that staff cannot account for. The assumption is this was either used for road base (which is not diverted) or another capital project which is not accounted for. It could have left the site without being weighed.

Challenges:

The source material is very contaminated

Limited market for recovered material; other processing firms are more efficient

Financial Overview:

Historical Income/ Loss FY 12/13 – FY 16/17 was reported with approximately \$1,000,000 loss per year. The best actual numbers to run both of the operations would be FY 16/17 which is \$3,386,971. This year FY 18/19 has been brought down to \$2,705,737 because of some recent changes listed below.

- Removed 10 FTEs (Previously assigned to Mining/BMR)

- Reduced temporary labor expense by \$268,000

- Debt service represents \$1.2 million of the \$2.7 million FY 18/19 budget

Briggs asked if it is fair to say in all of the years past that the sales or revenues may not be completely accurate. Cox stated the numbers are factual, but not sure if they are complete.

Briggs asked if there has been an amount assigned to air space. Cox answered that data is available.

There was discussion regarding the rubble diversion.

Briggs asked if we could sell the materials we can't process to Big Cities. Boerner answered that staff has been having discussions with Big Cities they take concrete free of charge, we have to charge for that. Big Cities will not accept contaminated materials. The quality of materials that we have now on site would not be accepted. We would have to pay a premium for them to take it.

Council Direction – June 26, 2018

Blue Ridge Recommendation

- Discontinue BMR operations due to financial losses, expensive equipment, and operational inefficiencies.

- Discontinue in-house rubble processing. Use rates/policy to regulate volumes accepted

Council Direction

- Temporarily convert BMR into a public disposal area (PDA)

- Relocate recycling drop-off near the PDA

- Temporarily suspend rubble processing operations

- Present results & analysis to Committee on the Environment

Cox showed pictures of the conversion of BMR to PDA and explained the processes. About half of the cost has been cut.

Briggs asked the tons diverted has reduced does that mean the tons going into the landfill has increased. Cox stated what we have to remember is the class of customer using this is completely different than what it was before. The amount of waste coming into the scales through adjusting rates has also been reduced. Solid waste will try and manage as much at the gate as we can and try and divert what we can while being safe and welcoming for our citizens.

Another area that has been cleaned up is the recycling drop off area. It was open access at Mayhill Road and Spencer Road. Cardboard diversion was at 90 percent. Single stream diversion was less than one percent. Actual amount landfilled was at 99 percent, it was too contaminated to sort.

It was recently moved inside the Solid Waste Facility with monitored assess. Cardboard diversion remained at 90 percent. Single stream diversion increased to 80 percent with only 20 percent landfilled.

Briggs asked about recycling mattresses, do we still do that. Cox answered that the only part that we can recycle is the springs and some of the metals the remainder has to be landfilled. Boerner stated the only viable option is landfilling. We are not taking them apart, it is labor intensive and tears up the machines.

Boerner stated as far as tires are concerned, to go in the landfill they have to be shredded or quartered. There are minimal options for a waste tire. Briggs asked about the tires being shredded for the use at playgrounds. Boerner answered he had read a study where those tires had harbored a mold that was found to be a problem for children. Cox added that when a new cell is started at the landfill the shredded tires was used for the base of those cells. Would not be diverted but reused.

Remaining Challenges:

- \$1.5 million process rubble stockpiles. 20 percent recoverable material (80 percent has soil/waste).
 - \$3.32 million potential airspace loss. Processing should recover approximately \$664,000.
 - \$180,000 in avoided cost for purchased aggregate
 - Located on top of future landfill cells
- Limited resale market. Use aggregate for roads and tipping pads

Options and Recommendations

Option 1:

- Discontinue acceptance of rubble from commercial entities
- Quality standards for material from City Departments (less than five percent contamination)
- Sort and process existing stockpiles over the next five years (approximately \$300,000/year) - Use material for internal operations
- Eliminate BMR and continue public disposal area and recycling drop-off

Option 2:

- Reinstate rubble and BMR operations, the associated operational expenses and capital investments. Requires increase to FY 18/19 budget approximately \$680,000.

Cost of Service Impact was explained for residential and commercial.

Environmental Impact

Emissions:

Option 1 requires 20 less pieces of heavy equipment

Other Factors:

Greenhouse gas reduced due to less waste accepted
Reduction in dust from BMR and Rubble processing

Cox added that this presentation will be taken to PUB for their recommendations and would like to know this Committee's recommendations.

Meltzer would like the environmental impacts compared with the alternatives.

Briggs would like the sustainability aspect looked at not just financial. Also explore partnerships with others. Reducing what is put in the landfill is a goal.

Ryan would like staff to look at rates to encourage people to presort their items.

There was a great deal of discussion on this item.

Consensus from the Committee Members was Option 1.

C. COE18-041 - Receive a report, hold a discussion, and give staff direction regarding Sustainability Plan Updates and future projects.

Katherine Barnett gave this presentation.

Background

- The Sustainability staff has been working on updating the Sustainability Plan for more than a year.
- They received input from Internal stakeholder meetings, Community meetings and Community survey.

Key Points

- Provide the Committee on the Environment with draft and overview of Executive Summary.
- Update Committee on upcoming Sustainability Plan related projects
- Seek input and direction

LEED for Cities

The STAR communities program was recently transitioned to the LEED for Cities program.

The City of Denton is now Silver Level Certified in the LEED for Cities program. Staff will provide information about maintaining this certification as it becomes available.

Executive Summary

Based on Internal and Community Feedback several changes will be included in the updated plan. There will be new goals, new strategies, new actions and proposed new or revised focus areas.

New goals, strategies and actions will include:

- Set reduction targets for municipal and community greenhouse gas emissions
- Complete Greenhouse Gas Contribution Analysis
- Complete Assessment of climate hazards and vulnerabilities
- Utilize 100 percent renewable energy by 2020
- Improve park and open space opportunities within walking distance of residents' homes
- Partner with city departments and local organizations to implement tree planning goals to increase canopy coverage.
- Add GHG Fleet policy goal to 25 percent by 2025
- Increase amount of non-road trail systems
- Promote Water Conservation
- Create and Implement a Resiliency/Climate Vulnerability Plan
- Implement the Clear Creek Master Plan
- Bee City USA & Monarch City USA
- Denton Sustainable School Program
- LEED for Cities
- Sustainability and Conservation Workshops
- Equity and Empowerment

Briggs would like to know about how the strategic plan, key focus areas and updating the sustainability plan all come together. Would also like to know when the strategic plan will be updated.

Barnett answered the Sustainability Plan is a separate document and has more than 30 metrics that staff tracks not all ramp up into the Strategic Plan. Briggs would like them all to be consistent with the key focus areas, strategic goals and sustainability plan.

Meltzer asked if this can come back to this Committee, Barnett agreed it would.

The Strategic Plan will go Council on January 7.

D. COE18-042 - ACM Update:

1. Tree City USA
2. Recycling - Empty, Clean, Dry
3. Update Matrix Items - Planning
4. Sustainability Advisory Council
5. Sustainability Outreach Monthly Report
6. Matrix

CONCLUDING ITEMS

Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Public Utilities Board or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda

Briggs: Pilot program for giving away garbage disposals
Dyno dirt in bags to sell
Partner with Kroger for earth day to hand out bags
Recycle app – what can and cannot be recycled

Meltzer: Increase fees for imported trash from other areas for the landfill
Separate composting, curb side
What are strategies are there to improve recycle product output

Adjournment: 3:08 pm

Approved Jan. 22, 2019