



**City of Denton**  
**MINUTES**  
**COMMITTEE ON THE ENVIRONMENT**

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

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**Tuesday, January 22, 2019**

**11:00am**

**City Council Work Session Room**

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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, January 22, 2019 at 11:00 a.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; Ethan Cox, Director Solid Waste; Katherine Barnett White, Sustainability and Customer Initiatives Manager; JT Douglas, Conservation Coordinator; Sarah Luxton, Sustainability Coordinator; Brandy Neal, SW and Recycling Business Acct Coordinator; Eugene McKinnie, Solid Waste Operations Manager; Tina Ek, Utilities Business Supervisor and Vanessa Ellison, Recycling Education Coordinator; Kim Mankin, Administrative Manager

**REGULAR MEETING**

- A. **COE19-001** - Consider approval of the Committee on the Environment of the Denton City Council Meeting minutes of December 3, 2018.

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

- B. **COE19-002** - Receive a report, hold a discussion, and give staff direction regarding the Solid Waste department's residential and commercial recycling operations.

Ethan Cox presented this item beginning with introducing the team that worked on these case analysis for Solid Waste. Brandy Neal, SW and Recycling Business Acct Coordinator; Eugene McKinnie, Solid Waste Operations Manager; Tina Ek, Utilities Business Supervisor and Vanessa Ellison, Recycling Education Coordinator

**Recycling purpose and objectives**

-Department objective is to reduce per capita waste disposal.

-Purpose is to preserve natural resources and save energy. Prevent pollution and to reduce waste sent to landfills.

-Participants are customers (residential, commercial and drop off sites) and operations (collections, material recovery facility and the landfill).

**Recycling Scope and Definitions**

-Scope is commercial/residential recyclable collections and drop-off locations.

-Definitions are recyclables, materials recovery facility, contamination and diversion.

## **Materials Recovery Facility**

### **Pratt Industries**

-Land lease and processing agreements expires on October 2, 2027

-Program materials include:

Plastic

Aluminum and tin cans

Glass

Mixed paper

Cardboard

-Contamination – Pratt may reject any load with greater than 15 percent contamination

-Regional Facility – Pratt may accept non-Denton recyclables at a fee of \$5.00/ton

Briggs how do the rates compare for Pratt versus others for landfill rates. Cox answered they receive the wholesale rate.

Recycling Process Overview was looked at on a flow chart and was explained very briefly.

## **Recycling – Market Impact**

-Global Market

China bans recycled paper/plastic (Jan 2018)

Demand for recyclable material drops 40%+

Excess Materials = Low Commodity Prices

Meltzer asked about the China ban and if there are any other countries that are available to step in the place for the recyclables. Cox answered right now Southeast Asia has picked up some, Vietnam too. That is only a temporary solution, their contracts are one to two years. There was some further discussion on the foreign markets.

-Impact on Local Recycling

Low Prices = Processors cannot afford extensive material sorting/cleaning

Processors refusing contaminated material

Contaminated material is sorted at the MRF and landfilled

Cox added that the City of Denton is in great shape because we do have the contract with Pratt and are not in the same shape as other communities.

Meltzer asked how solvent is Pratt. Cox answered financially healthy and can move the products. They do have third party recyclers.

## **Financial overview**

- Reduced commodity revenues require offsetting reductions in expenditures to prevent rate increases  
- Cities renegotiating with recyclers are altering programs and/or increasing rates to deal with new and rising costs

If the market does not rebound, residents and businesses will begin paying for recycling. At \$25 to \$90/ton, a residential bill would go up between \$0.65 to \$1.66 per month.

For some communities, the value proposition has already changed. The reduction in tonnage being diverted coupled with increased costs has caused them to reevaluate their program. We're not currently in that position.

### **Recycling Performance FY17/18**

A few things are looked at beginning with adoption. That is the number of customers with City of Denton recycling service. Residential is 100 percent with commercial being 26.7 percent.

There was a discussion regarding the sizes of carts both recycling and refuse and the pros and cons for each.

Participation is the percentage of customers setting out recycling containers for collection. Residential is 67.3 percent with commercial being 100 percent.

Briggs asked where municipal is. Cox answered it is in commercial. Briggs would like that separated out.

Contamination is the percent of dirty or wrong materials placed in the recycling container. Residential is 32.7 percent with commercial being 39.2 percent.

Diversion is the percent of diverted tonnage relative to all tonnage collected. Residential is 11.8 percent with commercial being 2 percent.

Meltzer asked what percentage of Pratt's business is the City of Denton. Cox didn't have the answer but knows they have refused a few other Municipalities and outside haulers, he will find the answer.

### **Environmental Considerations**

-Preserves Natural Resources and saves energy

Prevents – Use of raw materials and energy for new products

Requires – Use of raw materials for collection trucks, containers etc.

Use of energy for equipment to collect, sort, & transport recyclable materials

-Prevent Pollution and Reduce Waste Set to Landfill

Prevents – Pollution associated with sourcing and transportation of raw materials

Methane output from decomposition of paper/cardboard

Gas to energy facility utilizes methane to generate electricity

Other gas is collected and converted to carbon dioxide via flare

Use of approximately 15,850 yd<sup>3</sup> of landfill airspace (FY 17/18)

Causes – Emissions from Solid Waste recycling fleet

Emissions from equipment used to sort, transport, & process recyclable materials

Because of low demand and abundant supply, the industry's focus has shifted to quality rather than quantity. That is true locally as we have seen contamination rates go up.

### **Recycling contamination**

Wrong materials and dirty materials photos were shown and explained.

Meltzer asked if there are any ordinances or fines or repercussions for contamination. Cox will talk about that later.

Cox also showed maps of 'Contamination in Denton' with a legend of the different percentages for residential and commercial.

### **Contamination Audits and Education**

Targeted Commercial Audit target high contamination routes. Staff 'lifts the lid' to identify the source of contamination and performs an educational intervention and they monitor the results. The 'Recycle Right' campaign is a marketing tool that is being used. Cox showed photos of successes after an audit on the square.

There was also photos of a multifamily property that had success after an audit. Some multi-families do a great job, some of the property managements try but the tenants are lacking.

One of the challenges with multi-family is when moisture is on the bottom of the container because of being left open in a rain event. The cardboard gets soggy and will probably get rejected.

Briggs do they not have newer containers with holes where the moisture can drain out. Cox answered we can look into it. Briggs asked about drilling holes in the current containers. Cox stated we need to be careful with that materials once wet we are dealing with leachate, we do not want that draining out and in the stormwater system. We will look into it, we don't want to exchange one problem for another. Cox added that there are certain types of containers that may be able to be used that have small openings for this type of recycling material, he will look into it.

Meltzer talked different ways to affect behaviors so that recycling isn't contaminated.

Briggs stated we have contamination in the parks because you can't tell the difference in the containers. The stickers are faded and difficult to determine recycling from refuse. If we had the right containers in the parks they would do a better job of recycling.

Ryan stated there are some multifamily that are more college student and if the dumpsters are side by side you are more likely to get compliance.

Cox went on to say that what Solid Waste can do beyond education is to try putting a brightly colored note on the cart to say why they didn't pick it up.

Meltzer asked about putting notes on trash containers that have recycling materials in it. There was some discussion.

Ryan asked the average number of carts that can be added to the truck before it is taken to Pratt. Eugene McKinnie answered that number can change based on the contents of the container. It is possible to go the entire route before going to Pratt to empty the load. When it has rained and the containers are out they have to break up the route because of the weight of the containers and the weight issue.

Cox stated that if it is good with this Committee they want to start with monitoring the results. We will be prepared in early March for complaints after this has gone through Council.

Ryan stated that one thing that is unclear for him and others on the list is the 'plastics 1-7'. Vanessa Ellison answered with plastics on the bottom of everything it will have plastics 1-7 if it is recyclable. The hard plastics cannot be broken down such as the plastic children's cars. Vanessa and her group will put together a list of common things that are not recyclable.

Cox then went on with the presentation talking about Multifamily and Commercial Expanding Recycling Adoption.

Commercial adoption is currently at 24.8 percent that recycle with the City. Multifamily is at 35.3 percent.

Staff has also been working with commercial businesses that if a container will not fit to add carts.

As far as a 'Mandatory Recycling Ordinance' staff would like to try a few things first. There are city considerations and customer considerations.

Briggs would like talk about making space for recycling containers for new development.

Cox talked about the Criteria Manual that has the information. The Denton Development Code states that you must have an enclosure for the refuse and recycling. It does not state you have to have recycling but have to have an adequate enclosure to accommodate. If you are going to require for new or existing you will need to go back to the ordinance level. Chapter 24 is the Solid Waste Ordinance and is very out dated. Staff hopes to go through all the case analysis with this committee and get additional policy direction and then do a full update of Chapter 24.

### **Conclusions and recommendations**

Cost containment

Maintain weekly collections and resize recycling collection routes to improve efficiency.

Contamination:

Continue audits, continue education campaigns, recognize businesses and institutions that 'Recycle right' and implement compliance and enforcement processes.

Increasing adoption and participation:

Continue with voluntary adoption for commercial & multifamily

Educate new & existing participants and celebrate/recognize successes

Briggs stated that when she went to Los Angeles for a tour they had a conveyor where the kids could do what the conveyors sorters do. That way they learned easier. It was fun while they learned. When she met with Pratt they suggested talking to larger businesses about baling their own paper, full sheets of paper is better than shredded. Send truck loads full of cardboard to Pratt instead of to landfill.

Lastly many people in schools think that putting recycling items in plastic bags is good. We need to make sure more people know about that.

Meltzer asked what cities do a great job of low contamination rates and how do they do it.

There is an organization called the recycling partnership that has funding for multifamily. Cox will follow up with them again.

Meltzer asked about separating cardboard from paper and also organics.

Meltzer also asked about trading carts either up or down.

Ryan talked about total waste streams and diversion percentages, Texas Town and Country magazine. Ryan also asked about the recycling that may be contaminating and the routes associated.

The committee is interested in seeing the full analysis. Continue with the voluntary adoption for commercial and multifamily until the analysis is completed.

**C. COE19-003 - ACM Update:**

1. Update Air Quality Monitoring
2. Sustainability Events
3. 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: Air quality stay on matrix  
Food diversion stay on matrix  
Sustainable Implementation Committee**

**Metzler: Is there anything we are missing relative to the environment**

**Adjournment: 12:49pm**

**Approved on Feb. 4, 2019.**