Everything that we do...

LANDFILL CLOSURE COUNTDOWN

32 years
40 weeks
00 days
11 hours
11 min
55 sec

acak.statwindow.com/landfill
01. New Central Transfer Station Design Update
   Chris Coleman, Tetra Tech

02. Rate Request
   Heidi Thomerson
   Mark Spafford

03. Energy from Waste White Paper
   Marc Rogoff
   Geosyntec Consultants
01. New Central Transfer Station Design Update
Chris Coleman, Tetra Tech
FALL 2018
10/2018 Master Plan Finalized
11/2018 Assembly Approved Master Plan Concepts

FALL 2019
Variance Request: Community Meeting #1 and Urban Design Commission Hearing

WINTER / SPRING 2020
Conditional Use Permit & Platting Requested: Community Meeting #2 and Planning & Zoning Commission Hearing
Building Permitting Process Initiated

SUMMER 2020
Groundbreaking: construction begins

SUMMER 2021-22
Two seasons of construction

SUMMER 2023
Final season of construction and project completion

Where we are today, September 2019
02. **Rate Request**
Heidi Thomerson & Mark Spafford
Disposal Rate History
Rates to Consumer Price Index ("CPI") Perspective

Solid Waste Disposal Rate Per Ton

Avg rates adjusted for CPI

$ per ton - CTS


100 95 90 85 80 75 70 65 60 55 50 45 40
Revenues must cover operating expenses, and the utilities must adhere to the following basic financial policies:

- Operating Reserves
- Capital Reserves
- System Reinvestment Funding (i.e. – Depreciation)
- Dividends
Rate Analysis Update to our Plan

We have a plan now.

SWS

Disposal

Collections
## Disposal Revenue Requirement

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected 2018</th>
<th>Actual 2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue with Proposed Increase</td>
<td>$23,446,536</td>
<td>$23,314,640</td>
<td>$25,572,809</td>
<td>$28,619,596</td>
<td>$30,206,332</td>
<td>$31,892,239</td>
</tr>
<tr>
<td>Net Revenue with rate increase</td>
<td>$(1,489,629)</td>
<td>$(670,496)</td>
<td>$333,854</td>
<td>$2,306,104</td>
<td>$2,306,097</td>
<td>$3,670,228</td>
</tr>
</tbody>
</table>

### Proposed Annual Rate Increase

<table>
<thead>
<tr>
<th>Year</th>
<th>0.00%</th>
<th>0.00%</th>
<th>6.25%</th>
<th>6.25%</th>
<th>6.25%</th>
<th>6.25%</th>
</tr>
</thead>
</table>

The chart and table above illustrate the projected and actual disposal revenue requirements, annual expenditures with CTS, and net revenue with a rate increase for the years 2018 to 2022. The proposed annual rate increase is shown to be 6.25% for each of the years 2019 to 2022.
Disposal

Disposal Revenue Requirement

- **Projected 2018**: $5,000,000
- **Actual 2018**: $10,000,000
- **2019**: $15,000,000
- **2020**: $20,000,000
- **2021**: $25,000,000
- **2022**: $30,000,000

**Annual Expenditures-with CTS**

**Projected Revenue Under Existing Rates**

**Revenue with Proposed Increase**

<table>
<thead>
<tr>
<th>Year</th>
<th>Proposed Annual Rate Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>0.00%</td>
</tr>
<tr>
<td>2019</td>
<td>6.25%</td>
</tr>
<tr>
<td>2020</td>
<td>6.25%</td>
</tr>
<tr>
<td>2021</td>
<td>6.25%</td>
</tr>
<tr>
<td>2022</td>
<td>6.25%</td>
</tr>
</tbody>
</table>
Collections

Collections Revenue Requirement

Projected 2018 | Actual 2018 | 2019 | 2020 | 2021 | 2022
---|---|---|---|---|---
$- | $11,238,360 | $12,006,250 | $12,876,692 | $13,202,327 | $13,581,724

Cash Flow Summary

<table>
<thead>
<tr>
<th>FYE</th>
<th>Projected 2018</th>
<th>Actual 2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Under Existing Rates</td>
<td>$11,445,000</td>
<td>$11,238,360</td>
<td>$11,238,360</td>
<td>$11,238,360</td>
<td>$11,238,360</td>
<td>$11,238,360</td>
</tr>
<tr>
<td>Revenue with Proposed Increase</td>
<td>$11,445,000</td>
<td>$11,238,360</td>
<td>$12,006,250</td>
<td>$12,876,692</td>
<td>$13,202,327</td>
<td>$13,581,724</td>
</tr>
<tr>
<td>Annual Expenditures</td>
<td>$11,940,660</td>
<td>$11,688,918</td>
<td>$11,306,941</td>
<td>$12,398,788</td>
<td>$12,646,764</td>
<td>$12,899,699</td>
</tr>
<tr>
<td>Net Cash Flow After Increase</td>
<td>$(495,660)</td>
<td>$(450,557)</td>
<td>$699,309</td>
<td>$477,904</td>
<td>$555,563</td>
<td>$682,025</td>
</tr>
</tbody>
</table>

Proposed Annual Rate Increase

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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</thead>
<tbody>
<tr>
<td>Proposed Annual Rate Increase</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
</tr>
</tbody>
</table>
64-gal with Recycle

Rate:
Current - $27.62/month
VS.
Proposed - $29.00/month

Residential Service

3CY, 2 times/wk

Rate:
Current - $263.00/month
VS.
Proposed $276.00/month

Commercial Service
03. Energy from Waste White Paper
Marc Rogoff, Geosyntec Consultants
Solid Waste Recycling and Processing

Marc J. Rogoff

Waste-to-Energy
Technologies and Project Implementation

Marc J. Rogoff | Francois Screve

Second Edition

Third Edition
WTE PREFERRED ALTERNATIVE IN EUROPE

2,179+ WTE plants worldwide; 77 in U.S.
WASTE-TO-ENERGY IN THE U.S.

- 77 WTE plants in 25 states
- 14%
- 4 facilities in PNW:
  - Spokane
  - Vancouver
  - Portland
  - Modesto
**EVALUATION CRITERIA**

**STATE OF TECHNOLOGY**
- Degree to which technology has been proven on a commercial scale
- Operating History
- Freedom from high failure modes
- Demonstrated reliability of entire system

**TECHNICAL PERFORMANCE**
- Compatibility with full spectrum of MOA waste system
- Ability to produce marketable byproducts
- Need for pre processing

**TECHNICAL RESOURCES**
- Proven contractor experience with technology
- Proximity of technical support
- Availability to provide support on continuing basis
ADVANTAGES OF MASS BURN PLANTS

• Commercially proven
• Mature technology addressing high risks with design and operational procedures
• High gross energy output
• U.S. based vendors
• Pool of experienced professionals
CLOSER LOOK AT MASS BURN TECHNOLOGY
ENVIRONMENTAL BENEFITS OF WTE

- WTE is Renewable Energy
- Reduces Greenhouse Emissions
- Reduces Reliance on Landfills
- Reduces Truck Traffic and Related Emissions
- Complements Recycling
INSIDE THE NEW MULTI MILLION DOLLAR WASTE PLANT
WEST PALM BEACH
ECONOMICS OF MASS BURN TECHNOLOGY

**REVENUES**
- Electric Sales
- Biosolids Tipping Fees
- Supplemental Waste Fees
- Recovered Metals

**EXPENSES**
- Debt Service
- Operating Fees
- Potable and Non Potable Water
- Propane
- Lime Pebble
- Lime Dolomite
- Urea
- Carbon
PRO FORMA MODEL

ASSUMPTIONS
CPI/Inflation, Growth, Reserves

OPERATING REVENUE
Monthly Charges
Disposal Charges
Interest
Miscellaneous

OPERATING EXPENSES
Employees
Administration
Services & Supplies Fuel

WASTE FLOW
Trash
Recyclables

CUSTOMERS

FLEET REPLACEMENT PLAN

CAPITAL IMPROVEMENT PLAN
PRO FORMA RATE MODEL

Projected Year 1 Tipping Fee by Scenario (Low to High)
CONCLUSIONS

01. Mass incineration is the most well established and reliable WTE technology

02. The MOA generates 1,000 tpd; 1,200 tpd with neighboring Boroughs

03. WTE can incinerate MOA biosolids effectively

04. WTE is a practical goal of the ISWMP

05. Various economic scenarios suggest required tipping fees range from $58.04 to $85.67
FUTURE STEPS

✓ SWRAC Resolution of Support
✓ Waste Composition and Fuel Analysis
✓ Confirm Site
✓ Confirm Energy Pricing
✓ Confirm Neighboring Boroughs Interest
✓ Develop Borough Implementation Team
✓ Procurement Options
✓ Develop Financing Plan
Thank you.
#DoSomething