RECYCLING STREET LIGHTS

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Street Light Recycling

Learning Objectives

Participants will be able to:

1. Identify…………How to select a qualified recycling partner
2. Compare…………Recycling approaches and alternatives
3. Describe…………Best practices when establishing recycling programs
4. Analyze…………Expected results from engaging a qualified recycler
How to select a recycling partner for street light recycling

- Tender process - number and types of fixtures, frequency, how to be managed, disposed, re-used, re-purposed, or recycled

- Environmental Stewardship / Health and Safety - Recyclers qualifications: Quality Control Procedures, Approved vendors, any Environmental or Regulatory infractions

- Integrity/reputation/track record - references, Insurance, Workers Safety/ Insurance Boards, or equivalent state compensation boards

- Logistics and support - recycler works with you to make it easier on your end, with terms equally beneficial to both parties

- Benefits of packaging street lights - in gaylord boxes vs. loose in a dumpster with breakage of lamps & glass

- Benchmark commodity pricing to protect both generator and recycler - AMM value on day of proposal, vs AMM value on day of pickup referencing B/L
Recycling Approaches and Impacts

Awareness of Environmental and Health Impacts

- Disposal at scrap yards vs. proper packaging and transport protocols
- Domestic vs Export (price vs Int’l trade restrictions, compliance) - may be restrictions on rebates from electrical authorities if re-purposed
- Packaging/handling/transport determines risk to environment and people and value of recovery
- Resale of fixtures or components

- Proper protective equipment, training, tools and dismantling techniques
- Minimize glass lens and lamp breakage with potential mercury releases, cross contaminated materials affecting recovery and potential value
- Landfill impacts - going on in underserved communities
- Mercury effects on human health - neurological, renal [kidney] cardiovascular, and immunological
- Bioaccumulation in the environment through the air and ingestion
Typical Cobra Head Street Light
Packaging/Transport Options
Components of Typical Light Fixtures

- Aluminum Shell, Reflector
- Glass or Plastic Lens Covers
- Capacitors (oil or dry - if > 35 yrs old may contain PCBs)
- Igniters, Ballasts (transformers w/steel laminations and Cu, Cu/Al or Al windings)
- Photocells
- Mercury Lamps - MV, HPS, LPS, Metal Halide (HPS dominate)
- Insulated Wire
- Foam or insulated gaskets
- Miscellaneous ferrous components (bolts, brackets, screws, etc)
- Recyclable packaging wastes (cardboard, plastic, skids, paper, other)
Visual Components:
What happens to the old street lights?

<table>
<thead>
<tr>
<th>Material</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Body</td>
<td>33.5% - 50%</td>
</tr>
<tr>
<td>*Ballast (core/coil)</td>
<td>30%</td>
</tr>
<tr>
<td>Cu, cu/al or al windings – weights vary</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Ferrous</td>
<td>0.5%</td>
</tr>
<tr>
<td>Plastic Covers or Base</td>
<td>16.5%</td>
</tr>
<tr>
<td>Clear Lenses</td>
<td>10%</td>
</tr>
<tr>
<td>Ceramic Lamp Holder</td>
<td>2%</td>
</tr>
<tr>
<td>HID Lamps</td>
<td>1.5 -2%</td>
</tr>
<tr>
<td>Insulated Wire</td>
<td>0.5%</td>
</tr>
<tr>
<td>Photo Cell</td>
<td>1.0%</td>
</tr>
<tr>
<td>Capacitors, Igniters</td>
<td>1.0 to 2%</td>
</tr>
</tbody>
</table>
Variation by Composition and Weight
Weights should be indexed to the AMM Non Ferrous Scrap Old Aluminum Sheet & Cast Price or other index FOB nearest city on the day of pickup or other established criteria as agreed or identified.

Example: 10% of low side quote:
Benchmark (AMM index at right) shows Atlanta Market Range 37-42 (cents/pound)

So Therefore 10% of .37 = $.0370/lb
Expected results from engaging a qualified recycler

✓ Accurate and Reliable Reporting
✓ Health and Safety Compliance
✓ Environmental Compliance
✓ Fair market costs/credits based on the following:
  • Proposal / tender requirements
  • Packaging and Transportation Logistics
  • Current commodity market pricing
✓ Certificates of Recycling, Disposal and/or Destruction
✓ Mutually Beneficial Client/Recycler Partnerships
WE DO NOT RECYCLE THESE COBRA HEADS!
How to select a recycling partner for street light recycling

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THANK YOU