sort =

WasteSorting handle

Properties:

total\_residential\_waste: [1x1 TotalResidentialWaste]

total\_commercial\_waste: [1x1 TotalCommercialWaste]

total\_delivered\_waste: [1x1 TotalDeliveredWaste]

waste\_to\_MRF: [1x1 struct]

recyclables: [1x1 struct]

biowaste: [1x1 struct]

restwaste\_to\_cRDF: [1x1 struct]

restwaste\_to\_dRDF: [1x1 struct]

restwaste\_to\_biological: [1x1 struct]

restwaste\_to\_thermal: [1x1 struct]

restwaste\_to\_landfill: [1x1 struct]

mrf =

MRFSorting handle

Properties:

waste\_to\_MRF: [1x1 struct]

recyclables\_extracted: [1x1 struct]

recyclables\_to\_PPDF: [1x1 struct]

residues\_to\_thermal: [1x1 struct]

residues\_to\_landfill: [1x1 struct]

rdf =

RDFSorting handle

Properties:

restwaste\_to\_cRDF: [1x1 struct]

restwaste\_to\_dRDF: [1x1 struct]

cRDF\_extracted: 0

dRDF\_extracted: 0

screened\_materials\_to\_landfill: [1x1 struct]

fe\_metal\_recovered: [1x1 struct]

nonfe\_metal\_recovered: [1x1 struct]

fines\_to\_biological: [1x1 struct]

fines\_to\_landfill: [1x1 struct]

residues\_to\_landfill: [1x1 struct]

bio =

BiologicalTreatment handle

Properties:

biowaste: [1x1 struct]

restwaste\_to\_biological: [1x1 struct]

fines\_to\_biological: [1x1 struct]

total\_biological\_input: [1x1 struct]

presort\_materials\_recovered: [1x1 struct]

compost\_extracted: 1.2629e+003

biogas\_extracted: 0

residues\_to\_thermal: [1x1 struct]

residues\_to\_landfill: [1x1 struct]

incineration

ppdf burning

rdf burning

restwaste\_to\_thermal; % the additional restwaste added from the sorting process (function input)

mrf\_recyclables\_to\_PPDF; % the input arising from fines generated during the RDF sorting process (function input)

mrf\_residues\_to\_thermal; % residues generated by the materials recovery facility sent for thermal treatment (function input)

cRDF\_extracted; % cRDF extracted from the thermal treatment process (function input)

dRDF\_extracted; % dRDF extracted from the thermal treatment process (function input)

bio\_residues\_to\_thermal; % residues from the biological treatment process sent to thermal treatment (function input)

**INCINERATION INPUT**

**RESTWASTE TO THERMAL**

**Delivered waste residue**

('Waste Collection'!$C$11\*'Waste Collection'!E24/1000\*(1-'Waste Collection'!$H$27-'Waste Collection'!$H$28)\*'Waste Collection'!H29

**Mixed material container residue**

+'Waste Collection'!$G$11\*'Waste Collection'!E61/1000\*(1-'Waste Collection'!$D$56-'Waste Collection'!$D$57)\*'Waste Collection'!$D$58+

**Collected commercial waste residue**

'Waste Collection'!$E$92\*(1-'Waste Collection'!$F$114-'Waste Collection'!$F$115)\*'Waste Collection'!$F$116)\*'MRF & RDF Sorting'!$B$35

**BIO\_RESIDUES\_TO\_THERMAL**

**Composting presort residue**

+'Biological Treatment'!C41\*'Biological Treatment'!C43\*'Biological Treatment'!$D$66+

**Biogasification presort residue**

'Biological Treatment'!C94\*'Biological Treatment'!C96\*'Biological Treatment'!$D$120

**MRF Residues to Thermal**

=('MRF & RDF Sorting'!B128\*(1-'MRF & RDF Sorting'!$D$136)-'Biological Treatment'!B17)\*'Thermal Treatment'!$B$11

**RDF BURNING INPUT**

cRDF\_extracted; % cRDF extracted from the thermal treatment process

dRDF\_extracted; % dRDF extracted from the thermal treatment process

**PPDF INPUT**

mrf\_recyclables\_to\_PPDF

classdef ThermalTreatment < Behavior

properties

restwaste\_to\_thermal

mrf\_recyclables\_to\_PPDF

mrf\_residues\_to\_thermal

cRDF\_extracted;

dRDF\_extracted;

bio\_residues\_to\_thermal;

total\_incineration\_input;

incineration\_energy\_output;

ferrous\_metal\_recovered;

cRDF\_energy\_output;

dRDF\_energy\_output;

PPDF\_energy\_output; non\_hazardous\_residues\_to\_landfill;

hazardous\_residues\_to\_landfill;

'Biological Treatment'!C54\*(1-'Biological Treatment'!C55)\*'Biological Treatment'!D67+'Biological Treatment'!C107\*(1-'Biological Treatment'!C108)\*'Biological Treatment'!D121