

MOA Annual Update

September 2024



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Site Map 2024



Photo 06/2024

Landfill Airspace

As of 12/31/2023

Projected Airspace Volume Consumed	25,258,327.06 Cubic Yards
In Place Waste Density (3-Year Average)	1,584 lb/CY
Remaining Airspace of the Landfill	7,391,672.94 Cubic Yards

Airspace Consumed
(Annual Survey Date 1/18/2023 – 1/24/2024)

- Solid Waste Placed (CY)	458,241 Cubic Yards
- Tonnage Accepted Between Surveys:	
MSW	321,494 Tons
Fire Debris	0 Tons
Total	321,494 Tons

Landfill Site Life

Density	Remaining Tons	Annual Tons*	Remaining Life
1,250	4,619,796	325,000	14.1 years
1,350	4,989,379	325,000	15.2 years
1,450	5,358,963	325,000	16.3 years
1,550	5,728,547	325,000	17.4 years

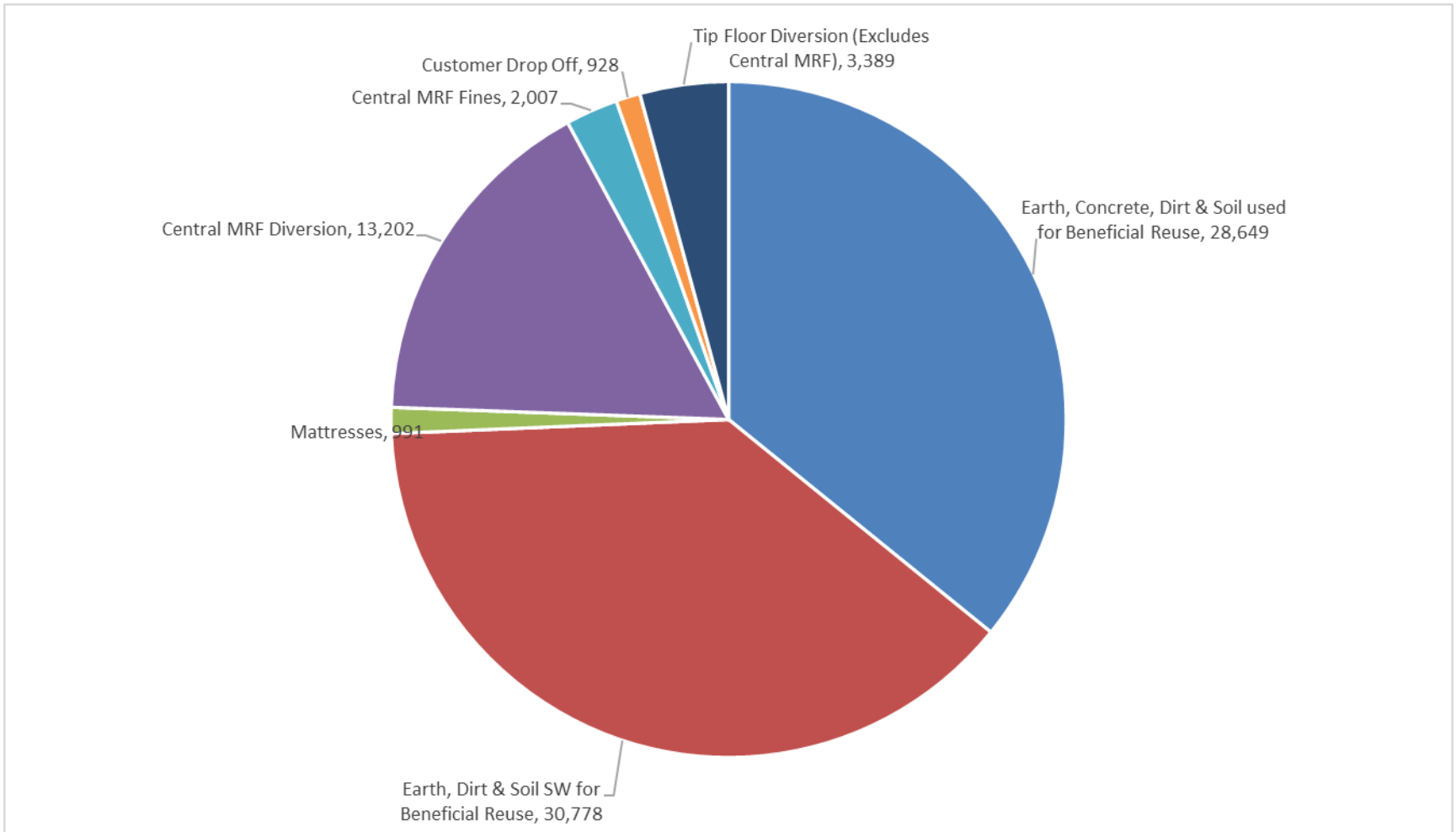
*Based off of the Joint Technical Documents projection for annual waste tons accepted at the facility.

Diversion Analysis

6/2023-5/2024

Earth, Concrete, Dirt & Soil used for Beneficial Reuse			28,649
Earth, Dirt & Soil SW for Beneficial Reuse			30,778
Mattresses/Carpets			991
Central MRF Diversion			13,202
Central MRF Fines			2,007
Customer Drop Off			928
Tip Floor Diversion (Excludes Central MRF)			3,389
Annual Goal	44,735	Total	79,945

Diversion Analysis



Diversion Goals

<u>Initiative</u>	<u>Projected</u>	<u>2023 Totals</u>
Central MRF Diversion	13,863 Tons (5% Increase)	13,202 Tons
Tip Floor Diversion	3,898 Tons (15% Increase)	3,389 Tons
*All Others	66,521 Tons (5% Increase)	63,353 Tons
Totals	84,281	79,945
**Diversion Goal	44,735	

***Includes: Appliances, Soils, E-Waste, Mattresses, Tires, and Treated Wood**

****Food waste has been removed from the diversion goal for Republic and included in the contract with Recology**

Green House Gas Update

This GHG inventory represents a snapshot of GHG emissions at Central Landfill from 2019 to 2022. LFG-derived GHG emissions would have occurred because of placement of the waste at any landfill facility in the region.

The Site has implemented several programs and projects that directly or indirectly lead to lowered GHG emissions. Waste diverted from disposal at the MRF results in GHG reductions. Though those reductions will be indirect and offsite, the reductions are attributable to development of the MRF. Improved LFG capture could also achieve GHG emission reductions, which could result from improvements to the GCCS and/or cover management practices.

Source	2020	2021	2022	2023
Landfill Methane	72,343	68,886	62,183	51,608
Landfill Equipment	1,513	1,277	1,977	2,175
Total GHG Emissions	73,856	70,163	64,160	53,783
Biogenic CO ₂	16,761	15,481	12,679	10,379

All emissions in MTCO₂e

SB 1383 Organics Program Update

- \$2.5 Million grant received from State of California to install food waste depackaging program. Expected operational date: March 2025
- Food waste generated in County planned to be received at facility.
- SB 1383 sampling is being performed quarterly by Republic at all the transfer station facilities.
- Food waste tonnage numbers by calendar year:
 - 2019 7,148
 - 2020 5,840
 - 2021 8,560
 - 2022 8,658
 - 2023 8,229

New Developments

Central Landfill Improvements 2023

- Completed construction of Cell R-4
- Installed 10 vertical gas/leachate extraction wells
- Installed 10 clean-outs along leachate pipeline
- Placed 155 automated wellheads on gas extraction wells

Transfer Station Improvements 2023

- Replacing sections of concrete tipping floor at Sonoma TS, Guerneville TS, and Healdsburg TS
- Painted buildings/structures
- Implemented carpet recycling program

Current Year Developments

- Construct Cell R-5
- Construct additional dual leachate/gas extraction wells
- In process of upgrading LFGTE engines with Air Fuel Ratio Devices
- Complete permitting for food waste processing equipment

Cell R-5 Blasting (May 2024)



Cell R-4 Construction (January 2023)



2023 Gas Construction (October 2023)



Transfer Station Beautification (2024)



Landfill Tornado (February 2024)

