November 10, 2021

TO: Members of the Facility & Plan Review Subcommittee

Los Angeles County Solid Waste Management Committee/

Integrated Waste Management Task Force

FROM: Ramon Herman, Staff

STAFF REPORT 2021 SEMI WASTE CHARACTERIZATION STUDIES AND QUARTERLY MONITORING REPORTS FOR VARIOUS LANDFILLS

As requested by the Facility and Plan Review Subcommittee, below is the staff's report on the Waste Characterization and Quarterly Monitoring Reports submitted by the respective landfill facilities:

- 2021 Semi Annual Fall Waste Characterization for Chiquita Canyon Landfill dated October 15, 2021. The Waste Characterization Study was conducted over one operating week period, from September 13 to September 18. For this period of study, the landfill sampled approximately 40,300 tons out of the total incoming waste. Below is information on the top three materials from the collected sample:
- Organic materials composed of approximately 71% of the total collected sample for this study period. Compared to previous study period of Spring 2021, the percentage of organics was reported at 71% (out of 38,700 tons).
- Other Waste including inert solids, household hazardous waste and tires and rubber products composed of **13**% of the total collected sample. Compared to Spring 2021, the percentage of these wastes was reported at **11**% (out of 38,700 tons).
- Metals composed of **5**% of the total collected sample. Compared to Spring 2021, the percentage of metals was reported at 9% (*out of 38,700 tons*).
- **2021 Semi Annual Fall Waste Characterization for Sunshine Canyon Landfill** dated October 27, 2021. The Waste Characterization Study was conducted during a six-day period, on the week of September 27. For this period of study, the Landfill sampled approximately 45,000 tons out of the total incoming waste. Below is information on the top three materials from the collected sample:
- Organic materials composed of 79% of the total collected sample for this study period.
 Compared to previous study period of Spring 2021, the percentage of organics was reported at 75% (out of 47,800 tons)
- Other Waste including inert solids, household hazardous waste and tires and rubber products composed of **10**% of the total collected sample. Compared to Spring 2021, the percentage of these wastes was reported at **10**% (out of 47,800 tons).

• Plastics composed of 4% of the total collected sample. Compared to Spring 2021, the percentage of plastics was reported at 6% (out of 47,800 tons).

2021 Semi Annual Fall Waste Characterization for Antelope Valley Recycling and Disposal Facility dated October 6, 2021. The Waste Characterization Study was conducted during a five-day period, on the week of September 20th. For this period of study, the Landfill sampled approximately 228 tons out of the total incoming waste. Below is information on the top three materials from the collected sample:

- Organic materials composed of 69% of the total collected sample for this study period.
 Compared to previous study period of Spring 2021, the percentage of organics was reported at 65% (out of 198 tons)
- Other Waste including inert solids, household hazardous waste and tires and rubber products composed of 2% of the total collected sample. Compared to Spring 2021, the percentage of these wastes was reported at 3% (out of 198 tons).
- Plastics composed of **28**% of the total collected sample. Compared to Spring 2021, the percentage of plastics was reported at **24**% (*out of 198 tons*).

2021 Semi Annual Fall Waste Characterization for Lancaster Landfill & Recycling Facility dated October 6, 2021. The Waste Characterization Study was conducted during a five-day period, on the week of September 20th. For this period of study, the Landfill sampled approximately 155 tons out of the total incoming waste. Below is information on the top three materials from the collected sample:

- Organic materials composed of 24% of the total collected sample for this study period.
 Compared to previous study period of Spring 2021, the percentage of organics was reported at 37% (out of 139 tons)
- Other Waste including inert solids, household hazardous waste and tires and rubber products composed of 22% of the total collected sample. Compared to Spring 2021, the percentage of these wastes was reported at 5% (out of 139 tons).
- Plastics composed of **50**% of the total collected sample. Compared to Spring 2021, the percentage of plastics was reported at **49**% (*out of 139 tons*).

3rd Quarter 2021 Monitoring Report for Chiquita Canyon Landfill dated October 15, 2021.

- Based on the report, the Chiquita Canyon Landfill disposed of 534,000 tons in the third quarter of 2021. Compared to the second quarter of 2021, the disposal tonnage increased by 7% (498,000 to 534,000 tons).
- The beneficial reuse material (including diversion and soil) total for the third quarter of 2021 was **156,000 tons**. Compared to the second quarter of 2021, the beneficial reuse tonnage increased by **19%** (*126,000 tons to 156,000*).

3rd Quarter 2021 Monitoring Report for Sunshine Canyon Landfill dated October 15, 2021.

- Based on the report, the Sunshine Canyon Landfill disposed of **723,600 tons** in the third quarter of 2021. Compared to the second quarter of 2021, the disposal tonnage increased by **7%** (676,000 to 723,600 tons).
- The beneficial reuse material (including diversion and soil) total for the third quarter of 2021 was **12,900 tons**. Compared to the second quarter of 2021, the beneficial reuse tonnage decreased by **68%** (21,700 tons to 12,900).

NOTE: By design, the Waste Characterization study only provide a "snap-shot" of the composition of the waste stream during the study period. As such, it may not accurately depict of the overall waste stream composition for the respective facility.

Chiquita Waste Characterization Report based on SB 1383 Definition¹ Fall 2021 Waste Type **Waste Materials** Quantity (Load in Tons) Residential Commercial Industrial Other Total % Corrugated Container 141.8 809.4 642.7 1593.9 3.95 Mixed Paper 666.1 156.9 0 823 2.04 68.5 9.6 0 Newspaper 78.1 0.19 High Grage Ledger 11.9 375.1 25.2 412.2 1.02 Other Paper 1204 2244.6 160.1 0 3608.7 8.95 Leaves, Grass, Prunings 983.6 2645.2 0 3628.8 9.00 Food Waste 1950.1 9354.8 214.6 11519.5 28.56 Organics Wood Wastes 216 1273.1 1019.8 124.9 2633.8 6.53 Agricultural Crop Residues 0.00 0 0.00 Manure Textile & Leather 1807.4 2518.9 0 0 4326.3 10.73 Sewage Sludge 0 0 0.00 Industrial Sludge 0.00 70.96 High-Density Polyethylene (HDPE) 66 0.19 Polyethylene Terephthalte (PET) 25.9 28 0 239.9 0.59 186 337.3 724.9 80.9 0 Film Plastics 1143.1 2.83 Plastics Other Plastics 306.4 877 74.5 0 1257.9 3.12 6.73 Refillable Beverage Glass 13 0.03 210.1 1002.6 0 California Redemption Value Glass 1212.7 3.01 Glass Other Recyclable Glass 145.7 0.54 72.9 Other Non-Recyclable Glass 226.8 226.8 0.56 4.14 0.55 Aluminum Cans 36.7 167.8 16.8 221.3 Bi-Metal Containers & Tin Cans 12.6 184.9 197. 0.49 Ferrous Metals 24.7 286.4 311.1 0.77 Metals Non-Ferrous Metal Include Aluminum 40.2 888.5 216.5 22.2 1167.4 2.89 0.00 White Goods 4.70 62.4 2694.8 31.3 551.9 3340.4 8.28 Inert Solids (concrete, brick, sand) Household Hazardous Waste (pounds) 669.4 1623.4 4.02 Other 954 0 408.9 Waste Tires & Rubber Products 56.6 465.5 1.15 13.46 Ash 0.00 Asbestos 0 0.00 Auto Shredder Waste 0 0 0.00 Special Waste **Auto Bodies** 0 0.00 Other Specific Waste 0 0.00 0.00 7934.3 699 Total 26526.4 5178.2 40337.9 100.00

Percent Difference of The Total Waste Stream						
Chiquita Canyon Landfill	Spring '21	Fall '21				
Organics	70.86	70.96				
Plastics	6.09	6.73				
Glass	3.42	4.14				
Metals	8.58	4.7				
Other Waste	11.06	13.46				
Special Waste	0.00	0				

Sunshine Canyon Characterization Report based on SB 1383 Definition ¹							
		Fall 2021					
Waste Type	Waste Materials	Quantity (Load in Tons)					
		Residential	Commercial		Other	Total	%
	Corrugated Container	221.2	284.2	116.5	0.0	621.9	1.38
	Mixed Paper	244.2	16.4	0.0	0.0	260.7	0.5
	Newspaper	63.0	0.0	0.0	0.0	63.0	0.14
	High Grage Ledger	251.0	4.4	0.0	0.0	255.4	0.5
	Other Paper	1866.5	1023.5	252.9	0.0	3142.9	6.99
	Leaves, Grass, Prunings	1487.6	1939.4	4469.7	390.7	8287.3	18.42
Organics	Food Waste	11101.8	2756.9	147.5	0.0	14006.3	31.14
Organics	Wood Wastes	1146.6	1020.6	2294.2	54.7	4516.0	10.04
	Agricultural Crop Residues	0	0	0	0	0	0.00
	Manure	0.0	0.0	0.0	0.0	0	0.00
	Textile & Leather	2873.1	1459.4	104.1	0.0	4436.7	9.86
	Sewage Sludge	0	0	0	0	0	0.00
	Industrial Sludge	0	0	0	0	0	0.00
	g						79.12
	High-Density Polyethylene (HDPE)	22.6	7.6	11.5	0.0	41.7	0.09
	Polyethylene Terephthalte (PET)	118.6	17.7	1.4	0.0	137.7	0.32
Plastics	Film Plastics	352.1	272.6	135.7	0.0	760.4	1.69
	Other Plastics	603.6	192.6	50.4	0.0	846.6	1.88
							3.97
	Refillable Beverage Glass	0.0	0.0	0.0	0.0	0	0.00
	California Redemption Value Glass	798.3	75.9	0.0	0.0	874.2	1.94
Glass	Other Recyclable Glass	14.3	0.0	0.0	0.0	14.3	0.03
	Other Non-Recyclable Glass	211.6	148.7	0.0	0.0	360.3	0.80
							2.78
	Aluminum Cans	132.2	41.0	0.0	0.0	173.3	0.39
	Bi-Metal Containers & Tin Cans	280.1	19.5	0.0	0.0	299.6	0.67
Metals	Ferrous Metals	221.8	0.0	0.0	0.0	221.8	0.49
ivictais	Non-Ferrous Metal Include Aluminum	437.5	543.3	12.6	0.0	993.4	2.23
	White Goods	0.0	0.0	0.0	0.0	0.0	0.00
							3.75
	Inert Solids (concrete, brick, sand)	1870.6	1608.5	0.0	0.0	3479.1	
Other	Household Hazardous Waste (pounds)	218.8	0.0	404.1	0.0	622.9	
Waste	Tires & Rubber Products	509.4	20.5	37.8	0.0	567.7	1.20
			•				10.3
	Ash	0	-		0		
Cmacial	Asbestos Auto Shraddor Wasta	0		0	0		
Special	Auto Shredder Waste	0			0		
Waste	Auto Bodies	0		0	0		
	Other Specific Waste	0	0	0	0	0	0.0
	Total	25046.5	11452.7	8038.4	445.4	44983.2	

Percent Difference of The Total Waste Stream						
Chiquita Canyon Landfill	Spring '21	Fall '21				
Organics	70.86	79.12				
Plastics	6.09	3.97				
Glass	3.42	2.78				
Metals	8.58	3.75				
Other Waste	11.06	10.38				
Special Waste	0.00	0.00				

Manure Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal i Ferrous M Non-Ferro White Go Other Waste Ash Asbestos	, , ,	isposal Facility Report based on SB 1383 Definition ¹					
Organics Organics Organics Other Paper Leaves, Grood Wasses Food Wasses Wood Wasses Agricultur Manure Textile & Sewage Ses Industrial Plastics Refillable California Other Pla Aluminum Bi-Metal Ferrous Non-Ferro White Go Other Waste Inert Solic Househol Waste Ash Asbestos	Waste Materials		Fall 2021				
Mixed Paragrams Newspaps High Grag Other Paragrams Food Was Wood Was Agricultur Manure Textile & Sewage S Industrial High-Den Polyethyls Film Plast Other Pla Refillable California Other Nor Mon-Ferro White Go Other Mon-Ferro White Go Other Househol Waste Ash Asbestos	Waste Materials	Quantity (Load in Tons) Residential Commercial Industrial Other Total %					
Mixed Paragrams Newspaps High Grag Other Paragrams Food Was Wood Was Agricultur Manure Textile & Sewage S Industrial High-Den Polyethyls Film Plast Other Pla Refillable California Other Nor Mon-Ferro White Go Other Mon-Ferro White Go Other Househol Waste Ash Asbestos	ted Container	2.3	12.8	1.4	0.0	16.4	7.2
Organics Plastics Glass Metals Metals Plastics Plastics Refillable California Other Non Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos		5.1	5.2	1.4	0.0	11.5	5.0
Plastics High-Den Polyethyle Film Plast Other Page California Other Nor Page California Other Nor Plastics High-Den Polyethyle Film Plast Other Pla	•	0.4	0.4	0.1	0.0	1.0	0.4
Organics Other Pag Leaves, G Food Was Wood Wa Agricultur Manure Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos	•	0.0		0.1	0.0	0.2	0.0
Organics Leaves, G Food Was Wood Wa Agricultur Manure Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos	· · · · · · · · · · · · · · · · · · ·	2.2	5.5	1.8	0.0	9.5	4.1
Organics Food Was Wood Wa Agricultur Manure Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos	•	2.4	13.9	4.5	0.0	20.8572	9.:
Plastics Wood Wa		2.4	13.9	0.2	0.0	3.957	1.7
Agricultur Manure Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos		8.2	76.6	0.2	0.0	85.5	37.4
Manure Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos		0.1916	76.6	0.7	0.0	0.1916	0.1
Textile & Sewage S Industrial High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Other Nor Mon-Ferro White Go Other Househol Waste Inert Solic Househol Tires & Refillable Sewage S Industrial Refillable California Other Nor Mon-Ferro White Go Ash Asbestos	ural Crop Residues						
Plastics High-Den Polyethyle Film Plast Other Pla Refillable California Other Non Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos		0.0	_	0.0	0.0	2.622	2.6
Plastics High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous N Non-Ferro White Go Other Waste Ash Asbestos		0.7	0.2	0.0	0.0	0.9	0.9
Plastics High-Den Polyethyle Film Plast Other Pla Refillable California Other Nor Aluminum Bi-Metal Ferrous N Non-Ferro White Go Other Waste Ash Asbestos		0	_	0	0	0	0.0
Plastics Polyethylo Film Plast Other Pla Refillable California Other Rec Other Non Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos	al Sludge	0	0	0	0	0	0.0
Plastics Polyethylo Film Plast Other Pla Refillable California Other Rec Other Non Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Ash Asbestos							69.0
Plastics Film Plast Other Pla Refillable California Other Red Other Not Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Waste Inert Solid Househol Tires & Ri Ash Asbestos	nsity Polyethylene (HDPE)	0.5	6.5	0.4	0.0	7.4	3.2
Metals Other Pla Refillable California Other Rec Other Nor Aluminum Bi-Metal Ferrous M Non-Ferro White Go Inert Solic Househol Waste Ash Asbestos	/lene Terephthalte (PET)	17.1	18.6	4.6	0.0	40.4	17.
Metals Other Non-Ferro White Go Other Waste Refillable California Other Rec Other Non Bi-Metal Ferrous M Non-Ferro White Go Inert Solic Househol Tires & Ri Ash Asbestos		6.7	6.2	1.0	0.0	13.9	6.0
Metals California Other Rec Other Not Aluminum Bi-Metal I Ferrous M Non-Ferro White Go Other Househol Waste Ash Asbestos	astics	1.1	3.4	1.2	0.0	5.7	2.4 27. 5
Metals California Other Rec Other Not Aluminum Bi-Metal I Ferrous M Non-Ferro White Go Other Househol Waste Ash Asbestos	lo Povorago Glass	0.0	0.0	0.0	0.0	0	0.0
Metals Aluminum Bi-Metal Ferrous M Non-Ferro White Go Other Househol Waste Ash Asbestos	ia Redemption Value Glass	0.0	0.0	0.0	0.0	0.4	0.0
Metals Aluminum Bi-Metal I Ferrous M Non-Ferro White Go Inert Solid Househol Waste Ash Asbestos	ecyclable Glass	0.3	0.0	0.1	0.0	0.4	0.2
Metals Aluminum Bi-Metal Ferrous M Non-Ferro White Go Inert Solic Househol Waste Ash Asbestos	on-Recyclable Glass	0.4	0.0	0.0	0.0	0.4	0.0
Metals Bi-Metal Ferrous M Non-Ferro White Go Inert Solid Househol Tires & Ri Ash Asbestos	on recyclable diass	0.2	0.0	0.0	0.0	0.2	0.4
Metals Bi-Metal Ferrous M Non-Ferro White Go Inert Solid Househol Tires & Ri Ash Asbestos	m Cans	0.1	0.0	0.0	0.0	0.1	0.0
Metals Ferrous M Non-Ferro White Go Unert Solic Househol Tires & R Ash Asbestos	l Containers & Tin Cans	0.0	0.0	0.0	0.0	0.0	0.0
White Go White Go Unert Solic Other Waste Ash Asbestos		0.4	2.0	0.0	0.0	2.5	1.3
Other Househol Waste Tires & Ri Ash Asbestos	rous Metal Include Aluminum	0.2	0.0	0.0	0.0	0.2	0.0
Other Waste Househol Tires & Ri Ash Asbestos	oods	0.0	0.0	0.0	0.0	0.0	0.0
Other Househol Waste Tires & R Ash Asbestos							1.2
Waste Tires & Ri Ash Asbestos	ids (concrete, brick, sand)	1.2	3.1	0.0	0.0	4.3	1.
Ash Asbestos	old Hazardous Waste (pounds)	0.0	0.0	0.0	0.0	0.0	0.
Asbestos	Rubber Products	0.0	0.0	0.0	0.0	0.0	0.
Asbestos							1.
		0	0	0	0	0	0.
Special Auto Shre	S	0	0	0	0	0	0.
	redder Waste	0	0	0	0	0	0.
Waste Auto Bodi	dies	0	0	0	0	0	0.
Other Spe	pecific Waste	0	0	0	0	0	0.
							0.

Percent Difference of Th	e Total Waste	Stream
Chiquita Canyon Landfill	Spring '	21 Fall '21
Organics	64.89	69.03
Plastics	24.16	27.54
Glass	2.76	0.45
Metals	5.32	1.23
Other Waste	2.86	1.88
Special Waste	0	0.00

Lancaster Landfill & Recycling Center Report based on SB 1383 Definition 1 Fall 2021 Waste Type **Waste Materials** Quantity (Load in Tons) Commercial Industrial Other Residential Total Corrugated Container 2.29 Mixed Paper 0.0 0.0 0.3 0.0 0.3 0.18 0.00 Newspaper 0.0 0.0 0.0 0.0 0.0 High Grage Ledger 0.0 0.0 0.0 0.0 0.0 0.00 2.1 2.2 1.1 0.0 5.4 3.46 Other Paper Leaves, Grass, Prunings 1.9158 1.23 0.7 0.9 0.4 0.0 7.54 Food Waste 8.1 3.6 0.0 0.0 11.7055 **Organics** 0.7 Wood Wastes 0.7 7.5 0.0 9.0 5.78 Agricultural Crop Residues 0 0.0 0.00 0 Manure 0.0 0.0 0.0 0.0 0 0.00 5.1 Textile & Leather 3.30 1.4 2.0 1.7 0.0 0.0 0.00 Sewage Sludge 0 0 0 Industrial Sludge 0.0 O 0.00 23.79 High-Density Polyethylene (HDPE) 0.6 0.1 0.0 0.0 0.7 0.45 Polyethylene Terephthalte (PET) 0.6 0.2 0.0 0.0 0.8 0.52 Film Plastics 0.0 0.0 0.0 0.1 0.07 **Plastics** 0.1 Other Plastics 44.6 29.4 3.4 0.0 76.0 48.94 49.98 Refillable Beverage Glass 0.0 0.0 0.0 0.0 0.00 California Redemption Value Glass 0.0 0.1 0.0 0.0 0.1 0.09 Glass Other Recyclable Glass 0.2 0.0 0.0 0.0 0.2 0.15 Other Non-Recyclable Glass 0.0 0.0 0.0 0.0 0.0 0.15 0.39 Aluminum Cans 0.1 0.1 0.0 0.0 0.2 0.13 Bi-Metal Containers & Tin Cans 0.2 0.0 1.55 0.3 1.9 2.4 Ferrous Metals 0.0 0.0 0.0 0.0 0.0 0.00 Metals Non-Ferrous Metal Include Aluminum 0.3 0.0 0.0 0.4 0.24 0.0 2.06 White Goods 0.2 3.0 0.0 0.0 3.2 3.97 Inert Solids (concrete, brick, sand) 0.0 0.0 33.9 0.0 33.9 21.84 Household Hazardous Waste (pounds) 0.0 0.0 0.1 0.0 0.1 0.08 Other 0.1 0.0 0.0 0.2 Tires & Rubber Products 0.1 0.10 Waste 22.02 Ash 0 0 0.00 0 0 0.00 Asbestos 0 Auto Shredder Waste 0 0 0.00 0 Special 0.0099 Waste **Auto Bodies** 0.0099 0 0.00 Other Specific Waste 0.00 0.00 Total 60.5 45.5 50.8 0.0 155.3 100

Percent Difference of The Total Waste Stream						
Chiquita Canyon Landfill		Spring '21	Fall '21			
Organics		36.76	23.79			
Plastics		48.91	49.98			
Glass		2.91	0.39			
Metals		6.13	3.97			
Other Waste		5.29	22.02			
Special Waste		0	0.00			

Supplemental Information

Staff categorized the different landfills waste characterization from the operator's report based on CalRecycle's definition of organic waste. ¹According to Calrecycle (SB-1383), the definition of organic waste is any solid wastes containing material originated from living organisms and their metabolic waste products, including but not limited to food, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges. (Source: Proposed Short-lived Climate Pollutants (SLCP): Organic Waste Reductions Regulations)