Appendix B – Costs to Businesses

Transfer/Processing (C&D and Solid Waste)

Duties	Count ¹	Total: Wage & Benefit Cost / Hour ²	Hours/Day	Day/Year	Cost/Lab Service ³	Total Costs/Year
Sampling and Analysis (low range): Costs incurred by the solid waste operator to perform a composite sample as described in section 17410.5 and to send the sample to a laboratory for testing. This cost is based on a low range estimate that 10 solid waste operators are sending material offsite to land application and thus would be required to perform sampling. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to take samples based on industry standards to be sent for laboratory analysis and no more than 12 sampling days per year (1 sample per month). The laboratory analysis cost (\$365) is the highest lab service cost from the only two laboratories in California that perform testing for pathogen reduction, heavy metals, and physical contamination. The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year) plus (count) x (day/year) x (cost/lab services).	10	\$40.62	0.33	12	\$365.00	\$45,408.55

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

Sampling and Analysis (high range):	140	\$40.62	0.33	52	\$365.00	\$2,754,785.49
Costs incurred by the solid waste operator to perform a	170	Ψ-0.02	0.00	32	ψ303.00	Ψ2,7 04,7 00.40
composite sample as described in section 17410.5 and						
to send the sample to a laboratory for testing. This high						
range assumes that 140 of 735 transfer/processing						
facility operators are sending material offsite to land						
application and thus would be required to perform						
sampling. The number of facilities (140) assumes that						
20 percent of the 735 facilities identified in						
CalRecycle's SWIS database. The mean total hourly						
compensation (\$29.29) includes wages and benefits,						
for a refuse and recyclable material collector						
conducting this task according to the US Bureau of						
Labor Statistics. It assumes that the worker will take no						
more than 0.33 hours to take samples based on						
industry standards to be sent for laboratory analysis						
and no more than 104 samples per year (2 samples						
per week). The laboratory analysis cost (\$365) is the						
highest lab service cost from the only two laboratories						
in California that perform testing for pathogen						
reduction, heavy metals, and physical contamination.						
The formula to calculate the total cost for this high						
range is as follows: (count) x (total wage and						
benefits/hour) x (hours/day) x (day/year) plus (count) x						
(day/year) x (cost/lab services.						

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

Appendix b - Costs to businesses	4.0	# 40.00	0.00	40	N 1 / A	#4.000.55
Recordkeeping (low range): Costs incurred by the solid waste operator to perform recordkeeping as described in sections 17414 and 17414.2. This low range cost assumes that 10 solid waste operators are sending material offsite to land application and thus would be required to perform recordkeeping. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to record the sampling based on industry standards to be sent for laboratory analysis and no more than 104 sampling records per year (2 times per week). The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).	10	\$40.62	0.33	12	N/A	\$1,608.55
Recordkeeping (high range): Costs incurred by the solid waste operator to perform recordkeeping as described in sections 17414 and 17414.2. This high range cost assumes that 140 of 735 transfer/processing facility operators are sending material offsite to land application and thus would be required to perform sampling. The number of facilities (140) assumes that 20 percent of the 735 facilities identified in CalRecycle's SWIS database. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to record the sampling based on industry standards to be sent for laboratory analysis and no more than 104 sampling records per year (2 times per week). The formula to calculate the total cost for this high range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).	140	\$40.62	0.33	52	N/A	\$97,585.49

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

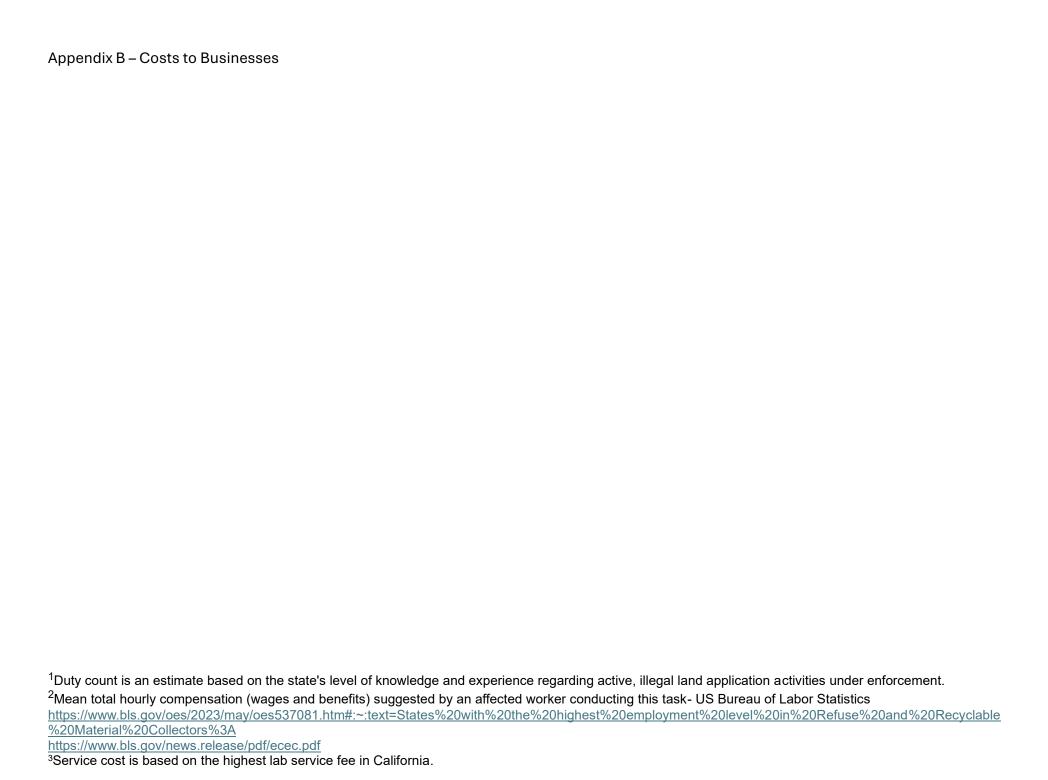
Appendix B - Costs to Businesses

Operating Document Amendments (low	10	\$40.62	0.33	1	N/A	\$134.05
range): Costs incurred by the solid waste operator to perform amendments to the operating document to reflect the new operating standards regarding material sent to land application. This cost is based on a low range estimate that 10 solid waste operators are sending material offsite to land application and thus would be required to amend their operating document. The mean total hourly compensation (\$29.29) includes wages and benefits, for an affected refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to update and incorporate these regulations into the report of facility information. The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).		V 1010 <u>-</u>				
Operating Document Amendments (high range): Costs incurred by the solid waste operator to perform amendments to the operating document to reflect the new operating standards regarding material sent to land application. This high range cost assumes that 735 solid waste operators are sending material offsite to land application and thus would be required to amend their operating document. The number of facilities (735) is based on the solid waste facility data reflected in CalRecycle's SWIS database. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to update and incorporate these regulations into the report of facility information. The formula to calculate the total cost for this high range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).	735	\$40.62	0.33	1	N/A	\$9,852.38

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.



Appendix B – Costs to Businesses

Compostable Material Handling

Duties	Count	Total: Wage & Benefit Cost / Hour	Hours/Day	Day/Year	Cost/Lab Service	Total Costs/Year
Sampling and Analysis (low range): Costs incurred by the solid waste operator to perform a composite sample as described in section 17868.6 and to send the sample to a laboratory for testing. This cost is based on a low range estimate that 10 solid waste operators are sending material offsite to land application and thus would be required to perform sampling. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to take samples based on industry standards to be sent for laboratory analysis and no more than 12 sampling days per year (1 sample per month). The laboratory analysis cost (\$365) is the highest lab service cost from the only two laboratories that perform testing for pathogen reduction, heavy metals, and physical contamination. The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year) plus (count) x (day/year) x (cost/lab services).	10	\$40.62	0.33	12	\$365.00	\$45,408.55

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B – Costs to Businesses

Appendix b - Costs to businesses	450	A 40 00	0.00	1.50	4005.00	40.054.555.00
Sampling and Analysis (high range):	150	\$40.62	0.33	52	\$365.00	\$2,951,555.88
Costs incurred by the solid waste operator to perform a						
composite sample as described in section 17868.6 and						
to send the sample to a laboratory for testing. This cost						
is based on a high range estimate that 150 of 360						
composting operators are sending material offsite to						
land application and thus would be required to perform						
sampling. The number of facilities (150) is based on the						
total count of chipping and grinding activities plus 20						
percent of the total composting activities as identified in						
CalRecycle's SWIS database. The mean total hourly						
compensation (\$29.29) includes wages and benefits,						
for a refuse and recyclable material collector						
conducting this task according to the US Bureau of						
Labor Statistics. It assumes that the worker will take no						
more than 0.33 hours to take samples based on						
industry standards to be sent for laboratory analysis						
and no more than 52 samples per year (1 sample per						
week). The laboratory analysis cost (\$365) is the						
highest lab service cost from the only two laboratories						
that perform testing for pathogen reduction, heavy						
metals, and physical contamination. The formula to						
calculate the total cost for this high range is as follows:						
(count) x (total wage and benefits/hour) x (hours/day) x						
(day/year) plus (count) x (day/year) x (cost/lab						
services).						

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B – Costs to Businesses

Recordkeeping (low range):	10	¢40.62	0.33	12	N/A	¢1 608 55
Costs incurred by the solid waste operator to perform recordkeeping as described in section 17869. This cost is based on a low range estimate that 10 solid waste operators are sending material offsite to land application and thus would be required to perform recordkeeping. The mean total hourly compensation (\$29.29), includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to record the sampling based on industry standards to be sent for laboratory analysis and no more than 12 sampling records per year (1 time per month). The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).	10	\$40.62	0.33	12	IN/A	\$1,608.55

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

Recordkeeping (high range):	150	\$40.62	0.33	52	N/A	\$104,555.88
Costs incurred by the solid waste operator to perform recordkeeping as described in section 17869. This cost is based on a high range estimate that 150 solid waste operators are sending material offsite to land application and thus would be required to perform recordkeeping. The number of facilities (150) is based on the solid waste facility data reflected in CalRecycle's SWIS database. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to record the sampling based on industry standards to be sent for laboratory analysis and no more than 52 sampling records per year (1 time per week). The formula to calculate the total cost for this		Ψ+0.02	0.30	52	IV/A	φ104,333.00
high range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).						
Operating Document Amendments (low range): Costs incurred by the solid waste operator to perform amendments to the operating document to reflect the new operating standards regarding material sent to land application. This cost is based on a low range estimate that 10 solid waste operators are sending material offsite to land application and thus would be required to amend their operating document. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to update and incorporate these regulations into the report of facility information. The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year).	10	\$40.62	0.33	1	N/A	\$134.05

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B – Costs to Businesses

Operating Document Amendments (high	360	\$40.62	0.33	1	N/A	\$4,825.66
range):						
Costs incurred by the solid waste operator to perform						
amendments to the operating document to reflect the						
new operating standards regarding material sent to						
land application. This cost is based on a high range						
estimate that 360 solid waste operators are sending						
material offsite to land application and thus would be						
required to amend their operating document. The						
number of facilities (360) is based on the solid waste						
facility data reflected in CalRecycle's SWIS database.						
The mean total hourly compensation (\$29.29) includes						
wages and benefits, for a refuse and recyclable						
material collector conducting this task according to the						
US Bureau of Labor Statistics. It assumes that the						
worker will take no more than 0.33 hours to update and						
incorporate these regulations into the report of facility						
information. The formula to calculate the total cost for						
this high range is as follows: (count) x (total wage and						
benefits/hour) x (hours/day) x (day/year).						

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

In-Vessel Digestion

Duties	Count	Total: Wage & Benefit Cost / Hour	Hours/Day	Day/Year	Cost/Lab Service	Total Costs/Year
Sampling and Analysis (low range): Costs incurred by the solid waste operator to perform a composite sample as described in section 17896.62 and to send the sample to a laboratory for testing. This cost is based on a low range estimate that 1 solid waste operators are sending material offsite to land application and thus would be required to perform sampling. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to take samples based on industry standards to be sent for laboratory analysis and no more than 12 sampling days per year (1 sample per month). The laboratory analysis cost (\$365) is the highest lab service cost from the only two laboratories that perform testing for pathogen reduction, heavy metals, and physical contamination. The formula to calculate the total cost for this low range is as follows: (count) x (total wage and benefits/hour) x (hours/day) x (day/year) plus (count) x (day/year) x (cost/lab services).	1	\$40.62	0.33	12	\$365.00	\$4,540.86

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

Appendix B Costs to Basinesses						
Sampling and Analysis (high range):	3	\$40.62	0.33	52	\$365.00	\$59,031.12
Costs incurred by the solid waste operator to perform a						
composite sample as described in section 17896.62						
and to send the sample to a laboratory for testing. This						
cost is based on a high range estimate that three (3)						
solid waste operators are sending material offsite to						
land application and thus would be required to perform						
sampling. The number of facilities (3) assumes 20						
percent of the total in-vessel digesters as identified in						
CalRecycle's SWIS database. The mean total hourly						
compensation (\$29.29) includes wages and benefits,						
for a refuse and recyclable material collector						
conducting this task according to the US Bureau of						
Labor Statistics. It assumes that the worker will take no						
more than 0.33 hours to take samples based on						
industry standards to be sent for laboratory analysis						
and no more than 52 samples per year (1 sample per						
week). The laboratory analysis cost (\$365) is the						
highest lab service cost from the only two laboratories						
that perform testing for pathogen reduction, heavy						
metals, and physical contamination. The formula to						
calculate the total cost for this high range is as follows:						
(count) x (total wage and benefits/hour) x (hours/day) x						
(day/year) plus (count) x (day/year) x (cost/lab						
services).						

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

Appendix B – Costs to Businesses						
Recordkeeping (low range): Costs incurred by the solid waste operator to perform recordkeeping as described in section 17896.45. This cost is based on a low range estimate that 1 solid waste operators are sending material offsite to land application and thus would be required to perform recordkeeping. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to record the sampling based on industry standards to be sent for laboratory analysis and no more than 12 sampling records per year (1 times per month). The formula to calculate the total cost for this low range is as follows: (Count) x (total wage and benefits/hour) x (hours/day) x (day/year).	1	\$40.62	0.33	12	N/A	\$160.86
Recordkeeping (high range): Costs incurred by the solid waste operator to perform recordkeeping as described in section 17896.45. This cost is based on a high range estimate that 17 solid waste operators are sending material offsite to land application and thus would be required to perform recordkeeping. The number of facilities (17) is based on the solid waste facility data reflected in CalRecycle's SWIS database. The mean total hourly compensation (\$29.29) includes wages and benefits, for a refuse and recyclable material collector conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no more than 0.33 hours to record the sampling based on industry standards to be sent for laboratory analysis and no more than 52 sampling records per year (1 time per week). The formula to calculate the total cost for this high range is as follows: (Count) x (total wage and benefits/hour) x (hours/day) x (day/year).	3	\$40.62	0.33	52	N/A	\$2,091.12

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B - Costs to Businesses

Operating Document Amendments (low	1	\$40.62	0.33	1	N/A	\$13.40
•	l	ֆ40.0∠	0.33	I	IN/A	φ13. 4 0
range):						
Costs incurred by the solid waste operator to perform						
amendments to the operating document to reflect the						
new operating standards regarding material sent to						
land application. This cost is based on a low range						
estimate that 1 solid waste operators are sending						
material offsite to land application and thus would be						
required to amend their operating document. The mean						
total hourly compensation (\$29.29) includes wages and						
benefits, for a refuse and recyclable material collector						
conducting this task according to the US Bureau of Labor Statistics. It assumes that the worker will take no						
more than 0.33 hours to update and incorporate these						
regulations into the report of facility information. The formula to calculate the total cost for this low range is						
as follows: (Count) x (total wage and benefits/hour) x						
(hours/day) x (day/year).						
Operating Document Amendments (high	17	\$40.62	0.33	1	N/A	\$227.88
, · · · · · · · · · · · · · · · · · · ·	17	Φ40.02	0.33	I	IN/A	φ ΖΖ1.00
range):						
Costs incurred by the solid waste operator to perform amendments to the operating document to reflect the						
new operating standards regarding material sent to						
land application. This cost is based on a high range						
estimate that 17 solid waste operators are sending						
material offsite to land application and thus would be						
required to amend their operating document. The						
number of facilities (17) is based on the solid waste						
facility data reflected in CalRecycle's SWIS database.						
The mean total hourly compensation (\$29.29) includes						
wages and benefits, for a refuse and recyclable						
material collector conducting this task according to the						
US Bureau of Labor Statistics. It assumes that the						
worker will take no more than 0.33 hours to update and						
incorporate these regulations into the report of facility						
information. The formula to calculate the total cost for						
this high range is as follows: (Count) x (total wage and						
benefits/hour) x (hours/day) x (day/year).						

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.

Appendix B – Costs to Businesses

Costs to Businesses

Item	Low Range	High Range
Transfer/Processing	\$47,151.15	\$2,862,223.36
Compostable Material Handling	\$47.151.15	\$3,060,937.42
In-Vessel Digestion	\$4,715.11	\$61,350.11
Costs Per Typical Business	\$4,715.11	\$20,387.48
Recordkeeping Costs Per Typical Business	\$160.85	\$697.04
Total Costs to All Businesses (1,112)	\$99.017.41	\$5,985,510.89

Costs to Small Businesses

Item	Low Range	High Range		
Costs Per Typical Small	\$89.02	\$5,380.44		
Business				
Total Costs to All	\$18,961.83	\$1,146,033.83		
Small Businesses (213				
of 1,112)				

¹Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

²Mean total hourly compensation (wages and benefits) suggested by an affected worker conducting this task- US Bureau of Labor Statistics https://www.bls.gov/oes/2023/may/oes537081.htm#:~:text=States%20with%20the%20highest%20employment%20level%20in%20Refuse%20and%20Recyclable%20Material%20Collectors%3A

³Service cost is based on the highest lab service fee in California.