

Economic and Fiscal Impact Statement – Appendix B

Recycling and Disposal Reporting System Regulatory Update

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Summary

This document is an appendix to the STD 399 form completed for the RDRS regulatory updates. Appendix A explains the logic that the Department of Resources Recycling and Recovery (CalRecycle) used to derive the answers provided for each question within the STD 399. This document, Appendix B, provides the specific methodology that CalRecycle used to estimate the costs for the regulatory changes. Specifically, for any given change, the cost per quarter is the product of the number of entities affected, the hours it will take a given entity to comply, and the wages per hour for the entity. This document explains how CalRecycle determined the number of entities affected by the regulatory updates, the hours it would take entities to comply with the updates, and the wages to use when calculating costs per entity. Throughout this appendix, wages and costs are reported in US dollars (\$). Wages always refer to wages per hour.

The proposed regulatory changes can be grouped into five categories:

1. Collection Method ([Senate Bill \(SB\) 343 \[Allen, Chapter 507, Statutes of 2021\]](#))
2. Exported Mixed Plastic Waste ([Assembly Bill \(AB\) 881 \[Gonzalez, Chapter 501, Statutes of 2021\]](#))
3. Jurisdiction of Origin by Recyclers and of Recycling
4. Source Sector
5. Other Changes

The rest of the document details the costs for each of these changes, separately for each of three components: the cost to train entities on the new reporting requirements, the cost to gather and transfer needed data, and the cost to report in RDRS.

Together, CalRecycle estimates that these changes will cost reporting entities, including both government and nongovernmental operations, \$8,605,140 (Table 1). Note that the sum of the sub-totals in the table may not match the grand total, since individual values were rounded after calculating the grand total.

Table 1: *The total cost of the updated regulations through a year of their full implementation.*

Type	Cost (\$)
Collection Method	3,471,531
Mixed Plastic Export	28,237
Altered Origins	4,284,998
Source Sector	670,005
Other	150,370
Total	8,605,141

Wages and Entities

To assess wages, CalRecycle used the California Employment Development Department's 2021 [Quarterly Census of Employment and Wages \(QCEW\)](#) dataset and the Bureau of Labor Statistics (BLS) [Employer Costs for Employee Compensation Summary report](#) for March 2022. CalRecycle used the first source to estimate salaries for RDRS activity types, separately for government versus privately operated facilities. CalRecycle then used the BLS report to add overhead (e.g., benefits) onto the wages.

To use the QCEW dataset, CalRecycle first applied several filters. CalRecycle selected wages from North American Industry Classification System (NAICS) industries that were known to be associated with RDRS activities, particularly the waste management and bookkeeping industries (Table 2). Within each industry, CalRecycle kept only wages associated with California, and removed Federal government wages since the economic assessment does not include costs to Federal agencies. Wages in the QCEW dataset are also organized by NAICS level (e.g., 5- versus 6-digit NAICS code). If an industry had wage observations for more than one NAICS level, then CalRecycle used only the wage for the most granular (largest number) NAICS code.

Table 2: 2021 average wage of employees by industry according to the Employment Development Department's Quarterly Census of Employment and Wages dataset, adjusted to provide the total cost to the employer.

Industry	Activity	Government Wage (\$)	Private Wage (\$)
Sewage Treatment Facilities	Recycler/Composter	80.43	50.90
Solid Waste Landfill	Disposal	69.98	59.26
Accounting and Bookkeeping Services	All		66.63
Materials Recovery Facilities	Recycler/Composter, Transfer/Processor		48.39
Other Nonhazardous Waste Disposal	Disposal		51.94
Other Waste Collection	Hauler		38.25
Recyclable Material Merchant Wholesalers	Recycler/Composter, Broker/Transporter, Hauler, Transfer/Processor, Broker/Transporter		47.58
Solid Waste Collection	Broker/Transporter		50.02
Solid Waste Combustors and Incinerators	Disposal		73.14

Once CalRecycle used the QCEW dataset to obtain wages, the BLS report was used to adjust those wages for overhead. According to the BLS report, wages account for

61.9% of total employment costs for state and local governments, whereas wages account for 70.4% of total costs for private employers. If wages equal total costs multiplied by some percentage (wages = total cost * percent), then total cost expressed as a wage is wage divided by the stated percentage. Thus, the total cost for governments, expressed in terms of wages, is the government wage divided by 0.704, and the total cost for private employers is the private employer wage divided by 0.619. Table 2 provides these adjusted final wages by NAICS industry.

CalRecycle used the wages within Table 2 to calculate wage by RDRS activity type. Within this table, the census industries do not use the same terminology as activities in the RDRS regulations, which is to be expected. CalRecycle therefore mapped RDRS activities onto the industries using institutional knowledge of the system. Using these mappings, CalRecycle calculated the wage for each RDRS activity as follows: 1) for every NAICS industry associated with a given RDRS activity, if there was both a private and a government wage present, then CalRecycle kept the larger of the two to be conservative (i.e., to overestimate rather than underestimate costs); 2) CalRecycle averaged the selected wages and rounded to the nearest dollar. Recycler/composters, for example, are associated with sewage treatment plants, materials recovery facilities, wholesalers, and accountants. CalRecycle therefore averaged the following wages: \$80.43 (sewage), \$48.39 (materials recovery), \$47.58 (wholesalers), and \$66.63 (accountants). The wage \$80.43 was used for sewage treatment plants because that was the larger of the government (\$80.43) and private (\$50.90) wages for that NAICS industry. CalRecycle rounded the average of the recycler/composter wages to the nearest dollar, producing a final wage for recycler/composters of \$61/hour. Table 3 reports the averaged hourly wages for each RDRS activity.

Note that CalRecycle did also obtain wage estimates from the survey that was hosted during informal rulemaking preparations for this proposed rulemaking. However, CalRecycle acquired wage estimates only for recycler/composters, transfer/processors, and disposal facilities. Because the numbers reported for those facilities were qualitatively similar to, if not the same as, the Employment Development Department estimates, CalRecycle chose to use the latter only.

Table 3: *The number of reporting entities and final estimated wage by activity type, including overhead.*

Activity	Number	Wage (\$)
Broker/Transporter	44	55
Contract Hauler	31	52
Disposal	149	65
Food Waste Self-Hauler	4	52
Recycler/Composter	640	61
Transfer/Processor	404	55

In addition to wages, Table 3 reports the number of entities that were required to report in RDRS as of 23 September 2022. CalRecycle obtained the count of entities

from [RDRS Public Report 0](#), filtering the report to entities that were “Active” (Registration Status), “Required” (Reporting Status), and not “Provisional” (i.e., not created by other reporting entities). Two points regarding the count of entities need explanation. First, the “Disposal” activity count includes landfill, transformation, engineered municipal solid waste (EMSW) conversion, and other disposal facilities. CalRecycle does not calculate costs separately for the four disposal facility types. Second, the count of recycler/composters includes “dependent” entities. RDRS regulations allow facilities with onsite recycler/composters to combine the recycler/composters’ reporting. These “dependent” recycler/composters do not report themselves, but instead report under the RDRS number of a parent recycler/composter, transfer/processor, or disposal facility. Even though these dependent entities do not report themselves, they still exist and are subject to RDRS regulations. CalRecycle therefore included dependent entities in the total count of recycler/composters. For information on why CalRecycle included only Active, Required, and non-provisional entities from Public Report 0, see Appendix A (Section A.3. within the Economic Impact Statement section).

Temporal Implementation

When estimating costs, CalRecycle calculated the cost through a year of full implementation of the proposed regulations. Portions of the regulations do not take effect until 2024 Q4, so estimated costs span the start of implementation through 2025 Q4. However, changes that do not start until 2024 Q4 do not impose costs before the start of implementation, meaning most costs were estimated for only 1 year (i.e., 4 four quarters). CalRecycle notes in the document where the number of quarters used differed from four.

Collection Method

Within collection method, CalRecycle first assessed how many entities reported already gathering this information. Of the respondents who reported accepting material for recycling (14), 14 entities indicated that they obtain collection methods for accepted materials. This may indicate that collection method is likely already gathered as part of standard business practice.

Within the survey, the average time estimated to gather collection method was 15 hours. However, one entity reported a time double the highest of the rest (80 vs 40). CalRecycle felt that this was an overestimate and instead used the average of the other values, which was 10. The average time estimated to report collection method was 9 hours.

When calculating the costs associated with collection method, only 1 year is needed for the interval. Collection method is not needed to be reported until 2024 Q4, and nothing needs to happen before that point. Thus, the total cost from 2024 Q1 through 2024 Q3 is zero.

Cost to Gather and Pass Along

Besides wages, the costs to gather and pass along collection method will depend on how long it takes each entity to acquire such information and how many entities are doing so. Importantly, CalRecycle expects that the hourly requirement will vary by activity type, since entities differ in their operations and corresponding information available to them. For example, food waste self-haulers should not incur a cost to gather and pass along collection method. The entity is the generator, so the entity should know how they generated the material. The other activity types will incur a cost, but that cost should vary.

Contract haulers will be responsible for delivering the majority of the collection method information. However, since CalRecycle has designed collection method to be similar to standard collection types (e.g., residential mixed waste versus residential source-separated recycling), and because contract haulers already gather source sector (residential versus commercial), it is expected that contract haulers should be able to determine the collection method from their routes, franchise agreements, and other readily available sources. Therefore, while no contract haulers completed the survey, CalRecycle expects that their hours to gather collection method would be less than that for the other activity types. According to the survey, it will take entities on average 10 hours to gather collection method. Assuming that this time includes both time to obtain information from contract and self-haulers, and if 80% of these entities' information will come from contract haulers (since 20% of solid waste tons are estimated to be from self-haul in RDRS), then the self-hauler portion of this hour amount is 20% of 10, or 2 hours. Here, CalRecycle assumes that the time to gather information from self-haulers will approximate the time it will take contract haulers to gather collection

method from their contractees. This hour amount likely still overestimates the time it will take contract haulers to gather collection method, since contract haulers will not have to ask generators for collection method and will instead be able to infer it from franchise agreements and other sources. CalRecycle therefore adjusted the gathering time down to 1.5 hours.

For the other activity types – transfer/processors, disposal facilities, recycler/composters, and broker/transporters – CalRecycle assumed that each activity type will require similar hours to gather collection method. Note that brokers and transporters will likely receive fewer tons from self-haulers than the other activity types and thus require fewer hours (since contract haulers will provide collection method for the other materials). However, to be conservative, CalRecycle applied the same hour estimate for the other activity types to broker/transporters. CalRecycle obtained this hour estimate as the average reported within the survey (10 hours). Note that these activity types do not pass along collection method information to destinations.

In addition to hours, as noted earlier, the cost of gathering collection method depends on the number of entities obtaining such information. For contract haulers, the 2018 rulemaking for [AB 901 \(Gordon, Chapter 746, Statutes of 2015\)](#), which established the RDRS regulations, estimated that approximately 1,000 contract haulers would be required to collect and pass along information to destination entities (AB 901 Economic and Fiscal Impact Statement Form 399 and Supplemental Information. California Department of Resources Recycling and Recovery, September 2018). The updated regulations have not changed who is subject to the regulations, so CalRecycle assumed that 1,000 contract haulers would be required to gather and transfer collection method information because CalRecycle has no evidence suggesting that there has been significant changes in the number of contract haulers. Further, the 2018 rulemaking estimated almost 200 contract haulers would be required to report in RDRS, yet only 31 are currently listed as such (Table 3). CalRecycle therefore considers the 1,000 contract haulers to be a conservative estimate (i.e., one that likely overestimates rather than underestimates the true number). For the activity types other than contract haulers, CalRecycle used the count of RDRS entities provided by Public Report 0 (Table 3).

Table 4 provides the final count of RDRS entities, as well as hours to obtain collection method per entity per quarter, number of quarters, and wage. Combining these pieces of information, CalRecycle estimated that the total cost to gather and pass along collection method was \$3,246,600.

Table 4: For each reporting entity activity, the total estimated cost over four quarters of gathering collection method.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Broker/Transporter	44	4	10.0	55	96,800
Contract Hauler	1,000	4	1.5	52	312,000
Disposal	149	4	10.0	65	387,400
Recycler/Composter	640	4	10.0	61	1,561,600
Transfer/Processor	404	4	10.0	55	888,800

Cost to Report

To estimate the cost for reporting collection method, CalRecycle relied upon an analogous approach as for acquiring and passing along collection method. CalRecycle calculated cost as the product of number of entities, hours to submit collection method per quarter, number of quarters, and hourly wage of the person submitting the reports. CalRecycle used the same number for entities as reported in the gathering collection method section of this Appendix B. However, note that CalRecycle does not set the number of contract haulers to 1,000, but rather uses the number who have sent outflows of recycling/composting, brokering/transporting, and end use out of state. To estimate the hours to submit quarterly reports, CalRecycle relied upon the survey and existing data within RDRS. From the survey, the average time to submit collection method to RDRS was 9 hours. CalRecycle compared this with the time taken for stakeholders to submit reports in RDRS. In RDRS, 60% of quarterly reports are submitted within 5 hours of being started. 51% are submitted within 1 hour. There are some large submission times, but these likely stem from users starting quarterly reports and finishing them several days or weeks later since the system saves progress. Given that most quarterly reports are submitted in under 5 hours and half are submitted in less than 1 hour, CalRecycle adjusted the survey estimate down to a quarter of an hour. The addition of collection method, being a minor component relative to the rest of the RDRS report, should only minorly affect reporting time. Combining the time to report estimate with the number of reporting entities, CalRecycle estimates the total cost for reporting to be \$74,977 (Table 5).

Table 5: For each reporting entity activity, the total estimated cost over four quarters of reporting collection method.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Broker/Transporter	44	4	0.25	55	2,420
Contract Hauler	31	4	0.25	52	1,612
Disposal	149	4	0.25	65	9,685
Recycler/Composter	640	4	0.25	61	39,040
Transfer/Processor	404	4	0.25	55	22,220

Note that food waste self-haulers are not present in the table. This entity type does not report collection method in RDRS.

Cost to Train

CalRecycle estimates that for each activity type, entity staff would need 2 hours of training. These staff should already be familiar with the RDRS reporting system. Further, the gathering of collection method should be straightforward, since it is similar to source sector and follows standard common collection system terminology (e.g., source-separated recycling). But, CalRecycle estimated two hours to include both training on the new reporting in RDRS and training regarding the collection method options.

Assuming a one-time 2 hour of training and an analogous equation as for the reporting section, the total training cost for each activity type would be: \$149,954.

Table 6: For each reporting entity activity, the estimated training cost for collection method.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Broker/Transporter	44	1	2	55	4,840
Contract Hauler	31	1	2	52	3,224
Disposal	149	1	2	65	19,370
Recycler/Composter	640	1	2	61	78,080
Transfer/Processor	404	1	2	55	44,440

As for the cost to report table, food waste self-haulers are not present in the training cost table. This entity type does not report collection method in RDRS.

Exported Mixed Plastic Waste

Like collection method, the costs for the proposed regulations related to exported mixed plastic can be separated into several components: gathering origins, passing them along, entering them into RDRS, and training. However, when calculating the costs for these components, CalRecycle does not include the costs to gather and pass along origins. While the regulatory updates do require such behavior for mixed plastic, the regulatory updates also require this behavior for all recyclable materials. Thus, the costs for gathering and passing along origins for mixed plastic are incorporated into the requirements for all recyclable materials. The costs for mixed plastic therefore include only reporting and training.

When assessing costs of reporting and training for exported mixed plastic waste, CalRecycle did not assume that all entities in RDRS would export mixed plastic. Within the survey, only 2 entities indicated that they export mixed plastic. Likewise, few entities have reported exporting mixed plastic in RDRS (Table 7). These entities, additionally, comprise only broker/transporters, recycler/composters, and transfer/processors (Table 8).

Table 7: The total, average per quarter, and maximum per quarter number of unique entities that have reported exporting mixed plastic waste in RDRS from 2019 Q3 through 2022 Q2.

Total Unique	Average	Maximum
29	11	17

Table 8: The total number of unique entities within each activity type that have reported exporting mixed plastic waste in RDRS from 2019 Q3 through 2022 Q2.

Activity Type	Number
Broker/Transporter	4
Recycler/Composter	11
Transfer/Processor	14

Cost to Report and Train

To estimate cost, CalRecycle had to determine the number of reporting entities who export mixed plastic waste. To be conservative, CalRecycle assumed that the total number of unique entities that were ever observed to export mixed plastic waste (29) could all export mixed plastic waste in a single quarter. CalRecycle estimated cost to report in RDRS for one year (four quarters). Though a full implementation of the regulatory updates will not occur until the end of 2025 Q4, origins for mixed plastic waste do not need to be reported until 2024 Q4. The total cost prior to 2024 Q4 is thus zero, except for the one-time training cost.

Within the survey, the average time estimated to report exported mixed plastic was 4 hours. Given the number of reporting entities, wages per hour, and four quarters of implementation, the total estimated cost to report origins in RDRS is \$26,576 (Table 9).

Table 9: The total estimated cost over four quarters of reporting exported mixed plastic origins in RDRS.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Broker/Transporter	4	4	4	55	3,520
Recycler/Composter	11	4	4	61	10,736
Transfer/Processor	14	4	4	55	12,320

For training, CalRecycle estimated that reporting entity staff will need 1 hour of training. These staff should already be familiar with the RDRS reporting system. They will simply need training on how to enter origins. Since some entities will already be familiar with entering origins, due to reporting origins for solid waste and green material, this hour estimate is likely an overestimate. But some entities will not have provided origins before. These two scenarios led CalRecycle to estimate a middle-ground value of one hour. Assuming a one-time 1 hour of training and an analogous equation as for the reporting section, the training cost for all entities would be: \$1,661 (Table 10).

Table 10: The estimated cost of training for reporting exported mixed plastic origins in RDRS.

Activity	Number Entities	Quarters	Hours	Hourly Wage	Cost (\$)
Broker/Transporter	4	1	1	55	220
Recycler/Composter	11	1	1	61	671
Transfer/Processor	14	1	1	55	770

Altered Origins Requirements

The updated regulations alter reporting of origins. First, the updated requirements expand origins to materials beyond solid waste and green material for beneficial reuse, specifically for recycling, composting, and mixed plastic waste. Second, existing regulations do not allow certain entities to gather origins for solid waste or green material for beneficial reuse. The updates will allow the gathering of such information.

Just as for collection method and mixed plastic, the cost of these updated regulations will include collecting the information, passing it along, reporting it in RDRS, and training. Notably, the updated regulations regarding origins do not require all entities to comply. Recycler/composters, for example, may *elect* to determine and provide origins for residual solid waste materials sent to disposal. All entities, on the other hand, must provide origins for mixed plastic sent to an entity. The fact that origins are not always required creates variable costs among entities. However, to be conservative, here CalRecycle assumed that whenever entities had an option, they would choose to follow the most burdensome form of the regulations. CalRecycle therefore assumed that all entities would specifically track origins for their inbound materials, using one of the methods specified in the proposed regulations.

Cost to Gather and Pass Along

To estimate the cost of gathering and passing along expanded origins, CalRecycle first needed to determine hours. According to the survey, the average time to gather and pass along origins was 12 (rounded to the nearest hour). A few respondents reported hours that were extreme compared to the others (e.g., more than 13 times greater than the average when excluding those values), so CalRecycle chose to remove these values. In addition, within survey respondents, only 50% of recycler/composters did not already collect origins for inbound materials (the other activity types had higher instances of collecting origins), indicating that many entities may already collect origins for inbound materials. To constrain the economic impact to costs beyond pre-existing business practices, CalRecycle therefore reduced the number of hours to 6. CalRecycle also additionally halved the hours for contract haulers, since haulers should already know the origins from their routes, contract agreements, and other sources.

To actually determine cost, as before, CalRecycle multiplied the number of reporting entities by the number of hours, quarters, and hourly wage. As for the other regulatory updates, CalRecycle used Public Report 0 to find the number of entities currently required to report in RDRS. CalRecycle adjusted the number of contract haulers to 1,000, following the 2018 AB 901 rulemaking's estimate of contract haulers in the state. CalRecycle increased the number of quarters to seven because these origins updates are slated to take effect in 2024 Q1 (which is when CalRecycle estimates that the proposed regulations will be effective), yet the

regulations will not be entirely implemented for one year until the end of 2025 Q3. Taken together, CalRecycle estimated the total cost to gather origins as \$4,173,330 (Table 11).

Table 11: For each reporting entity activity, the total estimated cost over seven quarters of gathering and passing along origins.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Broker/Transporter	44	7	6	55	101,640
Contract Hauler	1,000	7	3	52	1,092,000
Disposal	149	7	6	65	406,770
Recycler/Composter	640	7	6	61	1,639,680
Transfer/Processor	404	7	6	55	933,240

Note that food waste self-haulers are not included in the cost because they should not incur a cost to tell destinations their jurisdiction of origin.

Cost to Report

The updated origins requirements mostly involve the collection and transfer of origins information among reporting entities. When a reporting entity needs to report such origins in RDRS, the updated requirements will create additional burden only if the new origins are more granular than were previously available, thus taking more time to calculate and enter into RDRS. CalRecycle anticipates that such reporting will take only an additional half an hour per quarter. This reporting burden will also only apply to transfer/processors and disposal facilities. CalRecycle already accounted for the cost to report origins for exported mixed plastic, and only transfer/processors and disposal facilities will potentially have more granular origins for solid waste and green material for beneficial reuse as a result of the updated regulations. CalRecycle therefore estimated the total cost to report by multiplying the number of reporting entities by the number of hours, quarters, and hourly wage, yielding a total cost of \$111,668 (Table 12).

Table 12: For transfer/processors and disposal facilities, the total estimated cost over seven quarters of reporting origins.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Disposal	149	7	0.5	65	33,898
Transfer/Processor	404	7	0.5	55	77,770

Cost to Train

Entities are already familiar with the concept of jurisdiction of origin. Further, entities who report jurisdiction of origin in RDRS should not need training on how to do so. CalRecycle therefore does not anticipate further training costs to entities for the altered origins requirements.

Source Sector

The updated regulations require entities to distinguish between residential and commercial self-haul for solid waste. However, this regulatory change applies only to transfer/processors and disposal facilities, since only these entities report source sector for self-hauled material. Contract haulers do report source sector, but by definition, contract haulers can report only contract-hauled residential or contract-hauled commercial as the source sector.

Cost to Gather

To estimate the cost of gathering source sector, CalRecycle first determined hours. From the survey, the average time to gather source sector was 5 hours. A few respondents reported hours that were extreme compared to the others (e.g., more than 19 times greater than the average when excluding those values), so CalRecycle chose to remove these values.

To actually determine cost, as before, CalRecycle multiplied the number of reporting entities by the number of hours, quarters, and hourly wage. As for the other regulatory updates, CalRecycle used Public Report 0 to find the number of entities currently required to report in RDRS. Taken together, CalRecycle estimated the total cost to gather source sector information as \$638,100 (Table 13).

Table 13: For transfer/processors and disposal facilities, the total estimated cost over four quarters of gathering source sector.

Activity	Number Quarters	Hours	Wage (\$)	Hourly Entities Cost (\$)
Disposal	149	4	5	65 193,700
Transfer/Processor	404	4	5	55 444,400

Cost to Report

The updated source sector requirements mostly involve the collection of source sector with increased granularity. CalRecycle anticipates that the additional time to report this information within RDRS will be minimal, taking only an additional quarter hour per quarter (similar to collection method). Transfer/processors and disposal facilities are already familiar with source sector and should thus require minimal time to report the new source sector granularity. To calculate the cost to report source sector, CalRecycle multiplied the number of reporting entities by the number of hours, quarters, and hourly wage, yielding an estimated total cost of \$31,905 (Table 14).

Table 14: For transfer/processors and disposal facilities, the total estimated cost over four quarters of reporting source sector.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Disposal	149	4	0.25	65	9,685
Transfer/Processor	404	4	0.25	55	22,220

Cost to Train

Transfer/processor and disposal facilities are already familiar with the concept of source sector. Further, entities who report source sector in RDRS should not need training on how to report slightly altered categories. CalRecycle therefore does not anticipate further training costs to entities regarding source sector.

Other Reporting Changes

For the other regulatory changes, such as providing a Solid Waste Information System (SWIS) number, requesting approval for alternative methods, and reporting materials within mixed material outflows, CalRecycle anticipates that together these changes will likely take half an hour for entities to meet reporting obligations per quarter. Providing the SWIS number should take only a few minutes one-time. Requesting approval for alternative methods and listing the materials with mixed material outflows should likewise be rare. Disregarding the few outlier values, the survey produced an average time of 1 hour. CalRecycle expects that most entities already know the component materials in outflows of “mixed” materials, as entities should be unlikely to sell or transfer materials to a destination without providing *any* information about the material content of the outflows. For the entities that send outflows of mixed materials, CalRecycle does not think that it should take more than 15 minutes to list the materials in those outflows. Note that CalRecycle did not estimate separate costs for gathering, reporting, and training. For training, none of these regulatory requirements are conceptual changes, and should require no training in how to report in RDRS. Using half an hour for the total time for these changes, CalRecycle estimated a total cost of \$150,370 (Table 15).

Table 15: For each entity, the total estimated cost over four quarters for other changed regulatory requirements.

Activity	Number Entities	Quarters	Hours	Hourly Wage (\$)	Cost (\$)
Broker/Transporter	44	4	0.5	55	4,840
Contract Hauler	31	4	0.5	52	3,224
Disposal	149	4	0.5	65	19,370
Food Waste Self-Hauler	4	4	0.5	52	416
Recycler/Composter	640	4	0.5	61	78,080
Transfer/Processor	404	4	0.5	55	44,440

Note that CalRecycle does not estimate the cost of the change requiring newly created entities to report immediately as opposed to one quarter after becoming subject to reporting. CalRecycle has no way of estimating the number of entities that will be created in the future. The costs associated with such entities would likely be accounted for by the other conservative estimates in this analysis.