

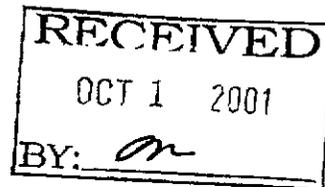
STATE OF CALIFORNIA CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Base Year Modification Request Certification  
Part 1: Generation Study - No Extrapolation Diversion Data

To request a substitution for a previously approved base-year used in calculating the diversion rate for your jurisdiction, please complete and sign this form and return it to your Office of Local Assistance (OLA) representative at the address below, along with any additional information requested by OLA staff. When all documentation has been received, your OLA representative will work with you to prepare for your appearance before the Board. If you have any questions about this process, please call (916) 341-6199 to be connected to your OLA representative.

Mail completed documents to:

California Integrated Waste Management Board  
Office of Local Assistance  
1001 I Street, 9th Floor  
PO Box 4025  
Sacramento, CA 95812-4025



General Instructions:

Please select the **ONE** choice below that best explains your request to the Board.  
 1. Use a recent generation-based study to calculate our current reporting-year generation amount, but not officially change our existing Board-approved base year.  
 2. Use a recent generation-based study to officially change our existing Board-approved base year to a new base year.  
 The shaded cells on these sheets are protected. If you have problems using these sheets, please contact your Office of Local Assistance representative.

Section I: Jurisdiction Information and Certification			
<i>All respondents must complete this section.</i>			
I certify under penalty of perjury that the information in this document is true and correct to the best of my knowledge, and that I am authorized to make this certification on behalf of:			
Jurisdiction Name Rancho Palos Verdes		County Los Angeles	
Authorized Signature 		Title Director of Public Works DIRECTOR OF PUBLIC WORKS	
Type/Print Name of Person Signing Dean E. Allison		Date 9/28/01	Phone ( ) Include Area Code (310) 544-5252
Person Completing This Form (please print or type) Dean E. Allison		Title Director of Public Works	
Affiliation:	Director of Public Works		
Mailing Address	City	State	ZIP Code
30940 Hawthorne Blvd.	Rancho Palos Verdes	California	90275
E-mail address	Deana@rpv.com		

<b>Section II: Information for New Generation-Based Study for Existing or New Base Year</b>			
Attach additional sheets if necessary— reference each response to the appropriate cell number (e.g., 4).			
<i>Note: New base years must be representative of a jurisdiction's disposal and diversion.</i>			
1. Current Board-approved existing base-year:		2. Proposed new generation-based study year:	
1990		1999	
3. Explain how the proposed generation study year is representative of average annual jurisdiction disposal and diversion:			
The proposed generation study year is representative of both diversion and disposal occurring annually within the City. Disposal tonnage is obtained from the DRS, and the system reports have been reasonably consistent since inception, including 1999's tonnage. Diversion tonnage was obtained through a detailed assessment of diversion activities within the City. No extrapolation was used; only actual weights were obtained or estimates identified based on Board or industry-recognized studies. Many of the programs identified and audited have been in place since at least 1995, including residential and nonresidential programs. Diversion rate using CIWMB adjustment method is inaccurate because just the			
4. Enter your diversion rates below.			
Diversion rate calculated using existing base year	a. 10 %	Diversion rate calculated using new generation-based study	b. 32 %
For existing base year pounds/person/day based on generation	6.51	For new generation based study pounds/person/day based on generation	8.4
Residential generation 73 %	Non-Residential Generation 27 %	Residential generation 51% %	Non-Residential generation 49% %
Population existing generation-based study 41,667		Population new generation-based study 44,150	
5. If there is an increase between 4a and 4b, please explain how the new diversion rate is consistent with your current diversion implementation efforts. If the proposed new generation tonnage results in an increase in your pounds/person/day, please explain how this is consistent with your current diversion implementation efforts and provide any examples, e.g. change in jurisdiction's demographics.			
The new diversion rate is consistent with current diversion implementation efforts including green waste and mixed recyclables curbside collection, multi-family recyclables collection, business sector waste reduction and recycling efforts, and other policies, ordinances, and outreach efforts. The City conducted a detailed technical outreach and assistance waste auditing program to numerous businesses and institutions within the City, and uncovered considerable amounts of diversion as well as implementing new programs. Much of the business sector information was unknown during the initial solid waste study in 1990. Plus, other new diversion efforts have been implemented since 1990. The change in per capita generation is due to improved data collection and capture provided by the 1999 waste generation study and improved reporting by recyclers and haulers.			
6. If the difference between the proposed diversion rates in 4a and 4b is greater than 5 percentage points, please explain the specific reasons for the difference. (For example: new/improved curbside diversion programs.)			
The new diversion rate is consistent with current diversion implementation efforts including green waste and mixed recyclables curbside collection, multi-family recyclables collection, business sector waste reduction and recycling efforts, and other policies and incentives implemented since 1990. In addition, the improved reporting provided by the waste audits and haulers and recyclers has improved the diversion rate as well. The City is mainly a residential community, however ongoing remodeling and construction activities and related tonnage occurring in the residential sector and along with construction in the commercial sector, which has been growing steadily due to the good economy, are reported by the commercial haulers and under commercial tonnage. Therefore, there is a significant change in the non-residential generation tonnage between 1990 and now.			

<b>7. Disposal Tonnage: (enter values)</b>	24370 <small>Residential</small>	21723 <small>Non-Residential</small>	46093 <small>Total</small>
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Please select the ONE choice below that best explains your disposal data and complete the required tables.

a. All tons claimed are from the Board's Disposal Reporting System (No explanation required. Go to Section 8.)

b. All tons claimed are from a 100 percent audit of hauler and self-haul tonnage. (Please complete Reporting Year Tonnage Request and Modification Certification sheet found at <http://www.ciwmb.ca.gov/lcentral/forms/rytnmdrq.doc>)

c. Some Disposal Reporting System data were corrected. (Please complete Reporting Year Tonnage Modification Request and Certification sheet found at <http://www.ciwmb.ca.gov/lcentral/forms/rytnmdrq.doc>)

8. In the table below, list the summarized diversion activities, and diversion data records that support your claim and are available for Board audit. (Note: The Board expects the jurisdictions to be able to provide all back-up documentation, if requested) Include type of record and location—for example, weight tickets from transfer stations. This section should capture all diversion tonnage (form will perform all addition calculations). If any diversion is from restricted wastes, [agricultural wastes, inert solids (e.g., concrete, asphalt, dirt, etc.), white goods, and scrap metal] please identify those programs/waste types and fill out section 10. Please mark as Attachment 8 all copies of survey forms.  
\*Please provide detailed Non-Residential waste information in Section 9.

\*Please provide detailed non-Residential waste audit information in Section 9.

**Note: The Board has indicated that it will be scrutinizing total source reduction amounts greater than 5% of total generation. Please be prepared to provide additional details substantiating your claim.**

Diversion Activity	Actual tons	Relative Percent to Total Generation	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at <a href="http://www.ciwmb.ca.gov/lcentral/paris/codes/reduce.htm">http://www.ciwmb.ca.gov/lcentral/paris/codes/reduce.htm</a>					
<b>Residential Activities:</b>					
<b>Source Reduction</b>					
Backyard composting			The City offers 1-2 composting workshops to residents a year and offers rebates for purchasing bins. (no tonnage available)		
Grasscycling		0.0%	The City promotes residential grass cycling by offering composting and wise-gardening workshops 1-2 a year (no tonnage available)		
<b>Other Residential source reduction (list each program separately)</b>					
Enter program name		0.0%			
Enter program name		0.0%			
Enter program name		0.0%			
Enter program name		0.0%			
Enter program name		0.0%			
<b>Subtotal Residential Source Reduction</b>	<b>0</b>	<b>0.0%</b>			
<b>Recycling</b>					
Curbside Recycling	5013	7.4%	Newspaper, mixed paper, CRV, OCC, used oil (oil not counted in diversion quantity)		Hauler Reports (WMI & Ivy)
Buyback centers	120	0.2%	CRV containers	Data provided by Los Angeles County Sanitation District Recycling Facility	LA County Sanitation District Recycling Facility
Drop-off centers					

Diversion Activity	Actual tons	Relative Percent to Total Generation	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmb.ca.gov/lccentral/paris/codes/reduce.htm">http://www.ciwmb.ca.gov/lccentral/paris/codes/reduce.htm</a>					
<b>Other Residential recycling (list each program separately)</b>					
Enter program name					
Enter program name					
Enter program name					
Enter program name					
<b>Subtotal Residential Recycling</b>	<b>5133</b>	<b>7.6%</b>			
<b>Composting</b>					
<b>Green waste drop-off</b>					
<b>Curbside green waste</b>			5,212 tons based on hauler records of greenwaste collected and taken to landfill. DRS identifies 3,138 tons used for ADC at county landfills. Green waste is also sent by Waste Management, Inc. (hauler and landfill operator) to a composting facility. From the balance of 2073 ton, 1700 was used as ADC in Mid Valley landfill and 373 tons was composted and sold as soil amendment.		
	5212	7.7%		Weigh tickets of haulers / landfill.	Hauler Record
<b>Christmas Tree program</b>					
<b>Other Residential composting (list each program separately)</b>					
Enter program name					
Enter program name					
Enter program name					
Enter program name					
<b>Subtotal Residential Composting</b>	<b>5212</b>	<b>7.7%</b>			
<b>Subtotal Residential Diversion</b>	<b>10345</b>	<b>15.3%</b>			
<b>Non-Residential Activities:</b>					
<b>Source Reduction</b>					
<b>Non-Residential Waste Audits*</b>	2074	3.1%	See Section 9	See Section 9	See Section 9
<b>Other non-Residential source reduction (list each program separately)</b>					
Community Park Grasscycling	297	0.4%	Grasscycling at City parks	7.61 tons per acre Reusing Turfgrass Clippings to Improve Turfgrass Health and Performance in Southern CA/ California Turfgrass Culture study.	Calculated
City Land Clearing Mulching Program	601	0.9%	Mulching of weed abatement/land clearing materials of City areas. Materials are brush, grass, weeds, bushes, overgrowth, etc.	Conversion factor provided by City of Rancho Palos Verdes landscape contractor at 2.5 tons per acre per quarter. Mulching and clearing is done 4x per year.	
County Land Clearing Mulching Program	262	0.4%	Mulching of weed abatement/land clearing materials of land areas within City limits (e.g., county maintained areas). Materials are brush, grass, weeds, bushes, overgrowth, etc.	Conversion factor provided by City of Rancho Palos Verdes landscape contractor at 2.5 tons per acre per quarter per service, and by LA County Agriculture Department. Calculation based on service hours. 104.75 hours and one acre per hour rate of labor. Independently verified by City of RPV with own department.	
Enter program name					
Enter program name					
<b>Subtotal Non-Residential Source Reduction</b>	<b>3233</b>	<b>4.8%</b>			

Diversion Activity	Actual tons	Relative Percent to Total Generation	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmb.ca.gov/qcentral/paris/codes/reduce.htm">http://www.ciwmb.ca.gov/qcentral/paris/codes/reduce.htm</a>	(A)	(A/Total Generation)			
<b>Recycling</b>					
<b>Non-Residential Waste Audits*</b>	1048	1.5%	See Section 9	See Section 9	See Section 9
<b>Other non-Residential recycling (list each program separately)</b>					
Various Haulers	807	1.2%	Paper, cardboard, and other materials collected by haulers other than the residential hauler and audited businesses. (No double counting with audits or green waste).	Haulers required to report scaled recycled tonnage	Hauler Reports to City/ City Hall
Chandler's Pit	3147	4.6%	Resale of inert material as aggregate. Does not include inert recycling for use as land reclamation of 94,006 tons in 1999 (Does not include tonnage from franchised haulers)		Facility Record at Chandler's Pit
Road Inerts Crushed/Reused by City			City's road materials crushed/reused in 1999.	10,700 tons reused, not counted. Reuse in substantial quantities occurs only once every 7-8 years. Required by Contract. City road construction engineer contractor calculations	Report from contractor / City.
City Public Works Road Resurfacing Program	500	0.7%	Asphalt removed from streets and processed (size reduction ) and reused on City Trails (horse/hiking)	City of RPV engineering estimate. 2,250 tons removed. Only 500 tons processed / recycled.	
<b>Subtotal Non-Residential Recycling</b>	<b>5501</b>	<b>8.1%</b>			
<b>Composting</b>					
<b>Non-Residential Waste Audits*</b>	28	0.0%	See Section 9	See Section 9	See Section 9
<b>Other non-Residential composting (list each program separately)</b>					
Stable Manure Composting	1620	2.4%	Manure, 1/5 spread on ground to compost on site. 2/5 hauled to facilities where manure is composted and sold as mulch to nurseries.	9 tons/horse/year defecation rate/ Journal of Equine Veterinary Science, 1989. Only 3/5 of total amount composted.	Calculated from Stable occupancy rates
SCE Tree Trimming Mulch Program	665	1.0%	Tree Trimmings used as mulch. Utility tree maintenance and recycling program.	Tonnage data provided by SCE	Tonnage data provided by SCE
City Tree Trimming / Mulching Program	210	0.3%	Tree Trimmings used as mulch / compost on city medians and trails.	Data from City's landscapers records	
Enter program name					
Enter program name					
<b>Subtotal Non-Residential Composting</b>	<b>2523</b>	<b>3.7%</b>			
<b>Subtotal Non-Residential Diversion</b>	<b>11258</b>	<b>16.6%</b>			
<b>Residential/Non- Residential Diversion Activities</b>					
ADC			Included in Hauler Greenwaste program		
Sludge					
Scrap metal					
Construction and demolition			Included in Chandler Pit Program (above)		
Landfill salvage	9	0.0%	Front-end salvage at SERRF (metals only)		Facility Record / SERRF
<b>Subtotal Residential/Non-Residential diversion</b>	<b>9</b>	<b>0.0%</b>			
<b>Total Res/Non-Res Source Reduction Tons</b>	<b>3233</b>	<b>4.8%</b>			

Diversion Activity	Actual tons	Relative Percent to Total Generation	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmb.ca.gov/lccentral/paris/codes/reduce.htm">http://www.ciwmb.ca.gov/lccentral/paris/codes/reduce.htm</a>	(A)	(A/Total Generation)			
<b>Total Diversion Tons</b>	<b>21611</b>	<b>31.9%</b>			
<b>Total Disposal Tons from Sec.7</b>	<b>46093</b>	<b>68.1%</b>			
<b>Total Generation Tons (Div+Dis)</b>	<b>67704</b>				
<b>Diversion Rate</b>	<b>32%</b>				

**9. Specific Non-Residential Sector Waste Audits-Top 10 Non-Residential Generators**

Please complete this table for the top 10 non-residential generators that were surveyed. List each non-residential generator separately from largest to smallest, based on total diversion tons. Audit reference number ties to your audit sheets.

**(Form will perform all addition calculations).**

Please provide an attachment 9 which includes all of the generators surveyed. Include for each generator (use type of generator in lieu of specific business name) diversion activity and material type and associated tonnage for each diversion activity/material type, and applicable conversion factors/sources. Include copies of survey form(s) used.

Type of Non-residential Generator	Audit Reference Number	Specific/Major Diversion Activities include material type (e.g. paper recycling, grasscycling). (List activities on one line)	Source Reduction Tons	Recycling Tons	Composting Tons	Total Diversion Tons	Percent of Total Generation (Total Diversion Tons/Total Generation in Section 8)	Survey Method Phone (P) Mail (M) On-site (O) Other ___
Golf Course	18	Grasscycling, Aluminum recycling	1065	4		1069.3	1.6%	O
Grocery Store	14	Grease, composting, pallets, OCC, reuse	93	647	28	768.2	1.1%	O
Green Hills Cemetary	48	Grasscycling	419			419	0.6%	O
School Site Programs	41	Grasscycling, pallet reuse, inventory liquidation, decrease in paper use (centralized printing), and cardboard box reuse	394			394.01	0.6%	O
Grocery Store	8	Grease, composting, pallets, OCC, reuse	44	203		247.4	0.4%	O
Junior College	42	Grasscycling, cans & bottles, OCC & paper, reuse & donation	43	21		63.28	0.1%	O
Restaurant	3	Grease recycling		17		17.01	0.0%	O
Radar Tracking Station	1	Grasscycling, reuse	11			10.97	0.0%	O
Gas Station	29	Cardboard, paper, tires and plastic		3		3.14	0.0%	O
Oil change	15	Paper mat reuse		8		7.81	0.0%	O
<b>Totals</b>			<b>2069.38</b>	<b>902.74</b>	<b>28</b>	<b>3000.12</b>	<b>4.4%</b>	

Summarize the non-residential diversion activities for the top 10 generators quantification methodology, and applicable conversion factors and sources. (e.g. Cardboard recycling: quantified by monthly tonnage receipts provided by the contact person at the business)

-#18 (Golf Course)

Grasscycling- Used factor of (7.61 tons/acre/year)(140 acres of grass) =1065.40 tons.  
Aluminum Recycling - 4 tons - est. weight

-#14 (Grocery store)

OCC recycling-(Average 6 bales/day)(700lbs/bale)(365 days/year) = 767 tons - store est. bale weight,USEPA uses 700-1100lbs/bale.  
Plastic bag/stretch wrap recycling-(store est. 100 lbs./week)(52 weeks) =2.6 tons  
Produce sent for composting -(4pallets of produce/week)(270lbs./pallet)(52 weeks) = 28 tons - store est. 270 lbs/pallet  
Grease Recycling- (55gal. drum)(410lbs/drum)(26 pickups/year) = 5.3 tons - USEPA 410lbs/55 gal. drum  
Reuse Plastic Buckets- (12 day)(1.9 lbs.)(365 days/year) = 4.2 tons - USEPA 1.9 lbs/5 gal. bucket  
Pallet Reuse - 9.5 pallets/day x 365 days x 40 pounds each = 69.4 tons (USEPA 40lbs each)  
Reusable Totes - (72/day)(1.5lbs/box not disposed)(365 days/year)=19.7 tons - USEPA 1.5lbs/OCC box

-#48 (Green Hills Cemetery) grasscycling (7.61tons/acre/year)(55 acres) = 419 tons (see earlier source for grasscycling conversion factor)

-#41 (School administrative building)

Grasscycling -(7.61 tons/acre/year)(49 acres) = 370 tons (see earlier source for grasscycling conversion)  
Pallet Reuse - (2.5pallets/week)(52 weeks/yr)(40 pounds each) /(2000pounds/ton) for 2.6 tons - (USEPA 40lbs each)  
Inventory Liquidation (donations) - 21.4 tons - 1,289 items donated, list provided w/ individual est. weights

-#8 (Grocery Store)

OCC recycling-(10bales/week)(700 lbs/bale)(52 weeks) = 182 tons - est bale weight from store, USEPA 700-1100lbs/bale  
Plastic bag/stretch wrap recycling - (12 containers/week)(4.8 lbs/container)(52 weeks) = 1.5 tons -auditor weighed out filled recycling container  
Meat rendering -collected in (2) 55 gallon containers/week, each weighing 100 lbs = 5.2 tons - est. weight from store  
Confidential program - 150 lbs/wk (52 weeks) = 3.9 tons - est. weight from store  
Grease Recycling- (55gal. drum)(410lbs/drum)(52 pickups/year) = 10.7 tons - USEPA 410lbs/55 gal. drum  
Reuse Plastic Buckets -(12/week)(1.9 lbs.)(52 weeks) = 0.6 tons - USEPA 1.9 lbs/5 gal. bucket  
Pallet Reuse - (40 pallets/week, each pallet counted only once at 40 pounds each.) for 41.6 tons  
Reusable Totes -(50/week)(1.5lbs/box not disposed)(52 weeks/year)=1.95 tons - USEPA 1.5lbs/OCC box

-#42 (Junior College)

Grasscycling - (7.61tons/acre/year)(4.52 acres) = 34.4 tons (see earlier source for grasscycling conversion factor)  
Yardwaste Mulched and Reused - 25 cu. yd./year (527 lbs/cu. yd.) = 6.58 tons - Tellus 527 lb/cu. yd. prunnings shredded  
Paper Towel to Rag Use - (30 lb case/week )(52 weeks) = 0.78 tons - measured weight of case  
Paper Recycling - 6 cu. yd./ 3 weeks (363.5 lb/cu. yd.) (52 weeks) = 18.9 tons - USEPA 363.5 lb/cu. yd mixed paper  
Newspaper - 0.25 tons - est. weight from campus coordinator  
Donations - 2.5 boxes/year (12.73 lb/box) = 0.02 tons - LA Co. 30 lb/33 gal  
Reuse Plastic Buckets -(2.5/month)(1.9 lbs.)(12 months) = 0.03 tons - USEPA 1.9 lbs/5 gal. bucket  
Pallet Reuse - (4 pallets/month) for 0.19 tons- see #14 for methodology  
Plastic Liner Elimination - 0.02 tons - est. weight  
Grease Recycling - 48 cu. ft. (57 lb/cu. ft.) = 1.37 tons - FEECO 57 lb/cu. ft.

-#3 (Restaurant) grease recycling - 24 pickups (24 cu. ft.) (57 lb/cu. ft. ) = 17 tons - FEECO 57 lb/cu. ft.

-# 1 (Radar tracking station) 30 acres grasscycled and (7.61 tons/acre/year=292.69lbs/acre/mow) calculate [30(293)(2.5 mows/year) ]/2000= 10.97 tons

-#29 (Gas station)

Paper recycling - 0.17 tons - est. weight from store owner  
OCC Recycling - 0.57 tons - est. weight from store owner  
Tire recycling - 240 tires/year (20 lb/tire) = 2.4 tons US EPA 20 lb/tire

#15 (Oil Change) paper mat reuse - 8 tons - est. weight by store owner



10. For each restricted waste type [i.e., agricultural waste, inert solids, (e.g. concrete, asphalt, dirt, etc.) scrap metals and white goods (PRC Section 41781.2)] and associated program, please provide the following information:

a. If the diversion program started on or after January 1, 1990, complete the following table.

(Note: program name refers to one specific diversion program for that waste type; (e.g., diversion conducted by City Public Waste Dept).

Restricted Waste Type	Specific Program name	Year started	Tonnage
Inert Solids	▼ Chandlers' Pit Inerts Resale Program including RPV inerts (does not include...)	1992	3147
Inert Solids	▼ City's road const. crushed/reused (not counted, once every 8 yrs.)	1998	10700
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		

b. If the diversion program started before January 1, 1990, on a separate sheet, marked attachment 10b, provide the following documentation: (Note: If documentation for a waste type and program has already been approved by the Board, you do not have to provide an attachment 10b for that waste type and program.

Instead please provide date of Board approval of preciously submitted information. \_\_\_\_\_ (Date)

If documentation is not available, go to 10d.

- How the diversion was the result of a local action taken by the jurisdiction, which specifically resulted in the diversion [PRC Sec. 41781.2 (c) (1)].
- That the amount of that waste type diverted from the jurisdiction in 1990 was less than or equal to the amount of that waste type disposed at a permitted disposal facility by the jurisdiction in any year before 1990. (Note: this criterion is applicable to the entire jurisdiction, not to individual programs [PRC Sec. 41781.2 (c) (2)]). Please include documentation.
- The jurisdiction is implementing, and will continue to implement, the diversion programs in its Source Reduction and Recycling Element.

c. If the diversion program started before January 1, 1990, and the documentation requested in 10b is available (but not yet approved by the Board), complete the table below for each program claimed:

Restricted Waste Type	Specific Program Name	New base year or reporting year diversion tonnage
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	

d. If the diversion program started before January 1, 1990, and the documentation requested in 10b is not available, please complete the table below for each program claimed. (Note: Only the difference between the new base year/reporting year and 1990 can be counted in the diversion rate calculation.)

Restricted Waste Type	Specific Program name	New base year or reporting year tonnage	1990 diversion tonnage	Difference
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			

**Attachment 9  
Business Audit Diversion for the City of Rancho Palos Verdes**

Reference Number	Business Type	Diversion Activity	Material Type	Conversion Factor and Source	Tons
1	Radar Tracking Station	Reuse	polystyrene p-nuts / bubble wrap	1.5 lb/33 gal USEPA	0.15
		Source Reduction	grasscycling	UC Extension Study of 7.61 tons/acre/yr	10.97
2	Fire station	Composting	green prunings	46.69 lbs per cy, Tellus	0.21
		Source Reduction	tree trimmings	Bridal trail reuse, 1080 lbs per cy, Tellus	0.38
3	Restaurant	Recycling	grease	410 lbs/55 gal. Drum USEPA	17.01
4	Flower Shop	Source Reduction	flower vases from reusable items	Estimated from shop owner	0.83
		Recycling	aluminum cans	27 cans per lb (US EPA), actual measurement of cans	0.01
5	Income tax	Source Reduction	cartidges	2.5 lbs each, US EPA	0.28
6	2-Story ofc building	Recycling	aluminum	27 cans per lb (US EPA), actual measurement of cans	0.02
7	Retail auto parts	Reuse	pallets	40 lbs per pallet, US EPA	1.46
		Recycling	OCC	50 lbs per cy, Tellus	3.08
		Source Reduction	inventory control	Estimated by manager	1.00
8	Grocery store	Recycling	grease	410 lbs / 55 gal = USEPA	10.66
		Recycling	meat rendering	est. wt given by Vons,	5.20
		Recycling	paper (confidential)	est. wt given by store	3.90
		Recycling	plastic bags/wrap	32 gal. = 4.8 lbs from UCLA, weighed out	1.50
		Recycling	OCC	est. bale wt. given by store	182.00
		Reuse	plastic buckets	1.9 lbs=5 gal plastic buckets USEPA	0.59
		Reuse	plastic totes	est. displacement of med. OCC box=1.5 lb.	1.95
Reuse	Pallets	40 pounds per pallet, US EPA	41.60		
9	Stockbroker firm	Recycling	toner cartridges		0.00
10	Church	Recycling	aluminum/ONP	27 cans per lb (US EPA), actual measurement of cans & 50 lbs per cy (Tellu	0.00
11	Property Manager	Recycling	security shredding	Weight provided by paper shredder	1.34
12	Newspaper Offices	Recycling	toner cartridges	2.5 lbs each - USEPA	6.69
13	Church	Reuse	cardboard boxes	estimated value considering 1.5 lbs./ box reused	0.05

Attachment 9	14 Grocery Store	Recycling	grease	410 lbs / 55 gal = USEPA	5.33
		Recycling	plastic bags/wrap	est. wt. given by store	2.60
		Recycling	OCC	est. bale wt. given by store	767.00
		Composting	produce	est. wt. given by store	28.00
		Reuse	plastic buckets	1.9 lbs=5 gal plastic buckets USEPA	4.16
		Reuse	plastic totes	est. displacement of med. OCC box=1.5 lb.	20.00
		Reuse	customer bag	0.77 lb/100 plastic bags = USEPA (corr) (no credit taken)	
		Reuse	Pallets	40 pounds each pallet. USEPA	69.35
15	Oil Change	Recycling	paper mats	Actual measurement	7.81
16	Corporate Office	Recycling	paper	8 lbs per 33 gallon container - USEPA	0.32
17	Liquor Store	Reuse	OCC trays donated	estimated weight provided by store	0.23
18	Golf Course	Recycling	aluminum	27 cans per lb - USEPA	3.90
		Source Reduction	grasscycling	7.61 tons/acre/year (CIWMB Study)	1,065.40
19	Financial Institution	Recycling	paper	8 lbs per 33 gallon container & 25.41 lbs per gallon, 33 gal - USEPA	0.82
20	Banquet Hall	Recycling	aluminum	27 cans per lb - USEPA	0.05
21	Church School	Recycling	aluminum	27 cans per lb - US EPA	1.25
		Recycling	paper	50 lbs per cy (Tellus) & 25.41 lbs per gallon, 33 gallon containers (USEPA)	0.93
		Source Reduction	donations		0.00
22	Golf Course Food Serv.	None			0.00
28	Financial Institution	Recycling	security shredding	Data provided by confidential records destruction company	0.62
29	Gas Station	Recycling	plastics/tires/OCC	40 lbs/item (plastics, actual wgt) & 20 lb each (rubber) & 2.2 lbs per box - US	3.14
30	Gas Station	Recycling	aluminum/green waste/OCC	27 cans per lb (Al) & 108 lbs per cy (grass) & 2.2 lbs per box - USEPA	1.75
31	Church School	No programs			
32 - 41	Schoolsite Programs	Source Reduction	grasscycling	7.61 tons/acre/year (CIWMB Study)	370.00
		Source Reduction	inventory donation	Estimated from school district	21.41
		Source Reduction	pallets	40 pounds each pallet. USEPA	2.60
42	Junior College	Recycling	grease	1595 lb./cu. Yd. UCLA	1.37
		Recycling	newspaper	estimate weight given	0.25
		Recycling	anything that tears	363.5 lbs/cu. Yd USEPA	19.00
		Source Reduction	mulched yardwaste	527 lbs/cu. Yd Tellus	7.00
		Source Reduction	grasscycling	7.61Tons/acre/yr (CIWMB Study)	34.40
		Source Reduction	rag use	estimate weight given	1.00

Attachment 9		Source Reduction	lost&found donations	30 lb./ 33 gal =textile donation LA Co.	0.02
		Source Reduction	plastic buckets	1.9 lbs=5 gal plastic buckets USEPA	0.03
		Source Reduction	pallets	40 pounds each pallet. USEPA	0.19
		Source Reduction	plastic trash liners eliminated	bags weighed	0.02
48	Green Hills Cemetery	Source Reduction	grasscycling	7.61 tons/ acre/ year (CIWMB Study)	418.55

Total Business Diversion **3,149.37**

**Attachment 9**  
**Additional Entities Surveyed (Information documented in Section 8)**

Reference Number	Entity	Diversion Activity	Material Type	Conversion Factor and Source	Tons
43	Other (Parks)	Grasscycling	grass	7.61 tons/acre/year (CIWMB study) (40 acres of grasscycled areas in RPV)	297.00
44	SCE	Composting (mulch)	Tree trimmings (mulch/compost)	SCE provided data	665.00
45	Chandler's Gravel Pit	Recycling	Inert materials	Facility record provided to City	3,147.00
46	Stables	Composting	Manure	9 tons/horse/year defecation rate - Jour. of Equine Vet Science 1989 (collecti	1,620.00
47	Roads	Recycling	Recycled / reused streets and ro	10,700 tons not counted, Every 7-8 years. Contractor/Engineer provided records	
49	SERRF	Recycling	Salvage	Facility record provided to City	8.67
50	Various Haulers	Recycling	Non-residential	Hauler records provided to City	806.75
51	City (Tree Trimming )	Composting(mulch)	tree trimmings (mulch/compost)	Contractor Tree Trimming Records (84 loads @2.5 tons /load, 952 trees)	210.00
52	City Landclearing	Source Reduction	yard waste (leave on site)	City Landscape contractor (2.5 tons per acre per quarter) Material not removed / disposed, required by contract.	600.80
	County Landclearing	Source Reduction	yard waste (leave on site)	2.5 tons per acre per service based on total service hours at one acre per ho Conversion provided by County Agriculture Dept. Verified by City of RPV	261.88
	City Public Works	Recycling	Asphalt from road resurfacing	total 2250 tons removed, City engineer estimate of approximately 500 tons crushed / processes and applied to horse/hiking trails.	500.00

**Total Additional Diversion** 8,117.10

<b>Rancho Palos Verdes</b>					
<b>Attachment 9 Detail</b>					
<b>Composting</b>					
2	Fire station	Composting	green prunings	46.69 lbs per CY, Tellus	0.21
14	Grocery Store	Composting	produce	est. wt. given by store	28.00
					<b>28.21</b>
<b>Recycling</b>					
3	Restaurant	Recycling	grease	410 lbs/55 gal. Drum USEPA	17.01
4	Flower Shop	Recycling	aluminum cans	27 cans per lb (US EPA), actual measurement of cans	0.01
6	2-Story ofc building	Recycling	aluminum	27 cans per lb (US EPA), actual measurement of cans	0.02
7	Retail auto parts	Recycling	OCC	50 lbs per cy, Tellus	3.08
8	Grocery store	Recycling	grease	410 lbs / 55 gal = USEPA	10.66
8	Grocery store	Recycling	meat rendering	est. wt given by Vons,	5.20
8	Grocery store	Recycling	paper (confidential)	est. wt given by store	3.90
8	Grocery store	Recycling	plastic bags/wrap	32 gal. = 4.8 lbs from UCLA, weighed out	1.50
8	Grocery store	Recycling	OCC	est. bale wt. given by store	182.00
9	Stockbroker firm	Recycling	toner cartridges		0.00
10	Church	Recycling	aluminum/ONP	27 cans per lb (US EPA), actual measurement of cans & 50 lbs per cy (Tellus)	0.00
11	Property Manager	Recycling	security shredding	Weight provided by paper shredder	1.34
12	Newspaper Offices	Recycling	toner cartridges	2.5 lbs each - USEPA	6.69
14	Grocery Store	Recycling	grease	410 lbs / 55 gal = USEPA	5.33
14	Grocery Store	Recycling	plastic bags/wrap	est. wt. given by store	2.60
14	Grocery Store	Recycling	OCC	est. bale wt. given by store	767.00
15	Oil Change	Recycling	paper mats	Actual measurement	7.81
18	Golf Course	Recycling	aluminum	27 cans per lb - USEPA	3.90
19	Financial Institution	Recycling	paper	8 lbs per 33 gallon container & 25.41 lbs per gallon, 33 gal - USEPA	0.82
20	Banquet Hall	Recycling	aluminum	27 cans per lb - USEPA	0.05
21	Church School	Recycling	aluminum	27 cans per lb - US EPA	1.25
21	Church School	Recycling	paper	50 lbs per cy (Tellus) & 25.41 lbs per gallon, 33 gallon containers (USEPA)	0.93
28	Financial Institution	Recycling	security shredding	Data provided by confidential records destruction company	0.62
29	Gas Station	Recycling	plastics/tires/OCC	40 lbs/item (plastics, actual wgt) & 20 lb each (rubber) & 2.2 lbs per box - USE	3.14
30	Gas Station	Recycling	aluminum/green waste/OCC	27 cans per lb (Al) & 108 lbs per cy (grass) & 2.2 lbs per box - USEPA	1.75
42	Junior College	Recycling	grease	1595 lb./cu. Yd. UCLA	1.37
42	Junior College	Recycling	newspaper	estimate weight given	0.25
42	Junior College	Recycling	anything that tears	363.5 lbs/cu. Yd USEPA	19.00
16	Corporate Office	Recycling	paper	8 lbs per 33 gallon container - USEPA	0.32
					<b>1,047.54</b>
<b>Source Reduction</b>					
1	Radar Tracking Station	Reuse	polystyrene p-nuts / bubble wrap	1.5 lb/33 gal USEPA	0.15
7	Retail auto parts	Reuse	pallets	40 lbs per pallet, US EPA	1.46
8	Grocery store	Reuse	plastic buckets	1.9 lbs=5 gal plastic buckets USEPA	0.59

8	Grocery store	Reuse	plastic totes	est. displacement of med. OCC box=1.5 lb.	1.95
8	Grocery store	Reuse	Pallets	40 pounds per pallet, US EPA	41.60
13	Church	Reuse	cardboard boxes	estimated value considering 1.5 lbs./ box reused	0.05
14	Grocery Store	Reuse	plastic buckets	1.9 lbs=5 gal plastic buckets USEPA	4.16
14	Grocery Store	Reuse	plastic totes	est. displacement of med. OCC box=1.5 lb.	20.00
14	Grocery Store	Reuse	customer bag	0.77 lb/100 plastic bags = USEPA (corr) (no credit taken)	0.00
14	Grocery Store	Reuse	Pallets	40 pounds each pallet. USEPA	69.35
17	Liquor Store	Reuse	OCC trays donated	estimated weight provided by store	0.23
1	Radar Tracking Station	Source Reduction	grasscycling	UC Extension Study of 7.61 tons/acre/yr	10.97
2	Fire station	Source Reduction	tree trimmings	Bridal trail reuse, 1080 lbs per cy, Tellus	0.38
4	Flower Shop	Source Reduction	flower vases from reusable items	Estimated from shop owner	0.83
5	Income tax	Source Reduction	cartidges	2.5 lbs each, US EPA	0.28
7	Retail auto parts	Source Reduction	inventory control	Estimated by manager	1.00
18	Golf Course	Source Reduction	grasscycling	7.61 tons/acre/year (CIWMB Study)	1,065.40
32 - 41	Schoolsite Programs	Source Reduction	grasscycling	7.61 tons/acre/year (CIWMB Study)	370.00
32 - 41	Schoolsite Programs	Source Reduction	inventory donation	Estimated from school district	21.41
32 - 41	Schoolsite Programs	Source Reduction	pallets	40 pounds each pallet. USEPA	2.60
42	Junior College	Source Reduction	mulched yardwaste	527 lbs/cu. Yd Tellus	7.00
42	Junior College	Source Reduction	grasscycling	7.61Tons/acre/yr (CIWMB Study)	34.40
42	Junior College	Source Reduction	rag use	estimate weight given	1.00
42	Junior College	Source Reduction	lost&found donations	30 lb./ 33 gal =textile donation LA Co.	0.02
42	Junior College	Source Reduction	plastic buckets	1.9 lbs=5 gal plastic buckets USEPA	0.03
42	Junior College	Source Reduction	pallets	40 pounds each pallet. USEPA	0.19
42	Junior College	Source Reduction	plastic trash liners eliminated	bags weighed	0.02
48	Green Hills Cemetery	Source Reduction	grasscycling	7.61 tons/ acre/ year (CIWMB Study)	418.55
					<b>2,073.62</b>