

Appendix F

Market Impact Assessment Models

Summary of the Structure of the Financial Model

A financial model was developed to input and summarize data and to perform certain calculations. The following is a brief summary of the financial model.

Module 1: Model Output Summary

- Summarizes changes in key tonnage, revenue, and job figures.

Module 2: Scenario Assumptions

- Percentage capacity at which each technology in each area is assumed to be operating (these assumptions can be changed with each model run).
- Assumed conversion technology tipping fee in each area (these assumptions can be changed with each model run).

Module 3: Tonnage Assumptions

- Establishes waste disposal baseline in each of two regions (2003).
- Estimates waste disposal projections, through 2010, before the effects of conversion technologies.

Module 4: Tonnage Availability Based Upon Comparative Tipping Fees

- Looks up refuse tonnage being disposed of at comparable or higher tipping fees than the assumed conversion technology tipping fee.
- Looks up green waste tonnage being processed at comparable or higher tipping fees than the assumed conversion technology tipping fee.
- References how much tonnage is required to operate the conversion technology facilities at the assumed capacities separately for refuse and green waste.
- Compares available tonnage to tonnage required by conversion technology to determine whether there is sufficient feedstock available if availability were based solely on cost.

Module 5: Refuse Tonnage and Tipping Fee Projections (2003–2010)

- Lists projected tonnage to be disposed, as well as the tipping fee anticipated to be charged.
- Adds all tonnage at or above each tipping fee level to calculate how many tons would be available for alternative processing options if waste flow decisions are based solely on price.

Module 6: Green Waste Tonnage and Tipping Fee Projections (2003–2010)

- Lists projected tonnage to be composted, mulched, or used for ADC by tipping fee anticipated to be charged.
- Adds all tonnage at or above each tipping fee level to calculate how many tons would be available for alternative processing options if waste flow decisions are based solely on price.

Module 7: Combined Refuse and Green Waste Tonnage and Tipping Fee Projections (2003–2010)

- Lists projected tonnage to be disposed of, composted, mulched, or used for ADC by tipping fee anticipated to be charged.
- Adds all tonnage at or above each tipping fee level to calculate how many tons would be available for alternative processing options if waste flow decisions are based solely on price.
- Determines percentage of available tonnage represented by refuse to assist in other calculations.

Module 8: Change in Revenue Due to Pre-Sorting Materials for Conversion Technologies

- Per ton revenues by material type, as determined from data in the *U.S. Recycling Economic Information Study* by R.W. Beck, July 2001; forecast for 2004 through 2010 based upon past CPI increases by region.
- Recycling tonnage by material type determined in Module 11 is multiplied by revenue per ton figures to determine conversion technologies effect on recycling revenue in each region.

Module 9: Jobs and Revenues Created From Additional Diversion From Pre-Sorting Materials for Conversion Technology

- Recycling jobs generated by 1,000 tons determined by material type, based upon data in the *U.S. Recycling Economic Information Study* by R.W. Beck, July 2001.
- Jobs per 1,000 tons are multiplied by tonnage diverted from disposal due to conversion technology preprocessing in order to determine recycling related jobs created through use of conversion technology in each area.

Module 10: Change in Tons Disposed Due to Tonnage Entering Conversion Technology Facility and Effect on Landfill Revenue and Jobs

- References tonnage assumed to be sent to conversion technology facilities.
- References residual tonnage sent to landfills due to pre-sorting and to residue left after conversion technology process.
- Determines net tonnage no longer directed to landfilling.
- Determines lost landfill revenue based on average tipping fees at disposal facilities.
- Determines lost landfill jobs based upon jobs per 1,000 annual tons landfilled, as determined by data from the California section of the *U.S. Recycling Economic Information Study* by R.W. Beck, July 2001.

Module 11: Calculation of Individual Material Diverted

- Projects growth in materials diverted based upon population-based expansion of existing diversion programs and diversion rates.

- Projects growth in materials diverted based upon new diversion programs to be implemented.
- Projects growth in materials diverted from pre-sorting at conversion technology facilities (from Module 17).

Module 12: Calculation of Individual Material Disposed

- Projects tonnage to be disposed based upon population growth.
- Projects changes in waste composition and tonnage disposed based upon new diversion programs to be implemented (i.e., subtracts newly diverted materials from disposal stream).

Module 13: Conversion Technology – Required Incoming Tonnage, Added Revenue, and Jobs

- Tonnage required to be sent to conversion technology facilities to meet post-sorting requirements is referenced from Module 17 and summarized.
- Additional jobs created by conversion technology are calculated.
- Additional revenue generated for conversion technology facilities is calculated.

Module 14: Conversion Technology Facility Configurations

- Full capacity facility configurations are listed by daily capacity.
- Annual capacity is calculated based upon operations continuously run 90 percent of the time (329 days per year).
- Facility capacity in tons, based upon variable capacity levels selected in Module 2.

Module 15: Additional Diversion From Pre-Sorting Materials For Conversion Technologies

- This module summarizes the additional diversion, by material type, gained through pre-sorting for conversion technologies, as determined in Module 17.

Module 16: Tons Disposed From Tonnage Entering Conversion Technology Facilities

- This module summarizes tons removed during the pre-sorting process but not diverted, and the residual tons left after the conversion technology process, as determined in Module 17.

Module 17: Material Processing at Acid Hydrolysis or Gasification Facility

- References selected facility capacities from Module 14.
- Determines required incoming tonnage to meet capacity.
- Determines additional diversion and disposal by material type based upon waste composition, as determined in Module 12.

Model Runs and Model Outputs: Changes in Tons, Jobs, and Revenues as a Result of Conversion Technology Facilities

For each scenario below, we have calculated the change in

- Tons disposed at landfills
- Tons recycled
- Tons of green waste sent for composting, mulching, or use as ADC
- Landfill revenue
- Recycling industry revenue (paper, plastic, glass, metal)
- Composting/mulching industry revenue
- Jobs at landfills
- Jobs in the recycling industry (paper, plastic, glass, metal)
- Jobs in the composting/mulching industry.

Diversion Credit Scenarios

Scenario 2. Conversion technology diversion credit for refuse

Scenario 2 (A and B) assumes that jurisdictions would leave all existing diversion programs in place and would redirect residential and/or commercial refuse from landfills to conversion technology facilities. Refuse collection operations would remain virtually unchanged; only the destination facility would change. The quantity of waste that was redirected would qualify for new diversion credit (similar to transformation) in order to help the jurisdiction achieve compliance with AB 939 diversion goals. This scenario is run under two conditions, with diversion credit provided for tonnage sent to conversion technology facilities, as outlined below.

(A) No cap on the diversion credit allowed.

Under Scenario 2-A, the quantity of incoming conversion technology tonnage is equal to the additional tonnage that needs to be diverted by cities with lower than 45 percent reported diversion rates in 2002 in order to reach 50 percent diversion. For example, a jurisdiction with 35 percent diversion would send 15 percent of the waste generated by the jurisdiction to conversion technology facilities. We assume that jurisdictions with diversion rates between 45 and 50 percent might receive a good faith effort designation, and would not use conversion technology. We also assume that jurisdictions with diversion rates above 50 percent would continue to use landfills.

Jurisdictions in the San Francisco Bay region would therefore send approximately 874,000 tons to conversion technology facilities. Based on assumed conversion technology facility configurations, the San Francisco Bay region would have more than enough conversion technology capacity for this tonnage. The model was run at the capacity needed to accept only this amount of tonnage in 2003, and the resulting increases in recycling due to preprocessing are shown in the model output for Scenario 2-A.

Jurisdictions in the Greater Los Angeles region would therefore attempt to send approximately 1,881,000 tons to conversion technology facilities in 2003. Based on the assumed conversion technology facility configurations, the Greater Los Angeles region would not have enough conversion technology capacity for this tonnage. The model was run at full capacity of 1,368,000 in 2003 instead, and the results are shown in the output for Scenario 2-A.

(B) With diversion credit only given for up to 10 percent of the jurisdiction's waste generation.

Under Scenario 2-B, the quantity of incoming conversion technology tonnage is equal to the additional tonnage to be diverted by cities, with lower than 45 percent reported diversion rates in 2002 in order to reach 50 percent diversion, but with no more than 10 percent of generation from any one city being accepted. For example, a jurisdiction with 35 percent diversion would send only 10 percent of the waste generated by the jurisdiction to conversion technology facilities, not the full 15 percent needed to reach 50 percent diversion.

Jurisdictions in the San Francisco Bay region would therefore send approximately 556,000 tons to conversion technology facilities. Based on the assumed conversion technology facility configurations, the San Francisco Bay region would have more than enough capacity for this tonnage. The model was run at the capacity needed to accept only this amount of tonnage in 2003.

Jurisdictions in the Greater Los Angeles region would therefore attempt to send approximately 987,000 tons to conversion technology facilities. Based on the assumed conversion technology facility configurations, the Greater Los Angeles region would have more than enough capacity for this tonnage. The model was run at the capacity needed to accept only this amount of tonnage in 2003. Results are shown in model output 2-B.

Under both Scenario 2-A and Scenario 2-B, impacts were evaluated as of 2003. After this point, facility capacities and the tonnage needed by each city to reach 50 percent will increase at differing rates.

Scenario Three. Existing residential programs are eliminated and all residential waste is sent to conversion technology facilities for full diversion credit

In Scenarios 3 and 4, we assume that diversion credit is given for conversion technology facilities without the requirement that all existing diversion programs remain intact.

This scenario assumes that the feedstock is the residential waste stream from jurisdictions that abandoned three stream collection systems (separate collection of refuse, recyclables, and green waste) and begin collecting mixed solid waste to send to conversion technology facilities. Jurisdictions could save money on collection costs by reducing the number of trucks and labor that are typical of a three-stream system. Collection costs vary considerably by location and local conditions.

In a low cost area, costs for a separate green waste program might be \$2 per household per month, costs for a separate recycling collection program might be \$1 per household per month, and overall residential rates might be \$13 per household per month. In a higher cost area, costs for a separate green waste program might be \$4 per household per month, costs for a separate recycling collection program might be \$3 per household per month, and overall residential rates

might be \$21 per household per month. Using those two examples, cost savings from the elimination of the recycling and green waste collection programs could range from 23 percent to 33 percent.

A typical breakdown of the residential waste stream from a three stream system with excellent diversion program participation is approximately 50 percent to 60 percent refuse, 25 percent to 30 percent source-separated green waste, and 15 percent to 20 percent single stream recyclables.

For modeling simplicity, we assumed 50 percent refuse, 30 percent green waste, and 20 percent recyclables as the composition of the waste stream in order to calculate impacts on recycling and organics markets.

Under this scenario, we assume conversion technology facilities are operating at capacity, as determined by the assumed facility configurations described previously.

Scenario Four. Residential refuse and green waste to conversion technology facilities, residential single stream recyclables collection left intact

In Scenarios 3 and 4, we assume that diversion credit is given for conversion technology facilities without the requirement that all existing diversion programs remain intact.

This scenario assumes that the feedstock is the residential waste stream from jurisdictions that abandoned separate green waste collection and instead collect refuse and green waste together to send to conversion technology facilities, with recyclables still being separately collected and processed at an MRF.

In a low cost area, costs for a separate green waste program might be \$2 per household per month and overall residential rates might be \$13 per household per month. In a higher cost area, costs for a separate green waste program might be \$4 per household per month, and overall residential rates might be \$21 per household per month. Using those two examples, cost savings from the elimination of green waste collection program could range from 15 percent to 19 percent.

The composition breakdown of the material sent to conversion technology facilities would therefore be 63 percent refuse and 37 percent green waste. Conversion technology facilities are assumed to run at capacity for the facility configurations defined previously.

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Model Output Summary

1 - Effects if Feedstock All Drawn from Material Destined for Landfilling

| I/R/C* | Resulting Effects On Landfills | Greater Los Angeles | | San Francisco Bay | |
|--------|----------------------------------|---------------------|-----------------|-------------------|------------------|
| | | 2003 | 2010 | 2003 | 2010 |
| | <u>Tonnage</u> | | | | |
| R | Decrease in Tons Disposed | 1,291,575 | 2,028,519 | 1,313,268 | 2,068,524 |
| R | Decrease in Green Waste Tons | | | | |
| R | Increase in Tons Diverted | 152,753 | 238,977 | 175,858 | 281,938 |
| | <u>Revenue</u> | <u>2003</u> | <u>2010</u> | <u>2003</u> | <u>2010</u> |
| R | Landfills | \$ (36,189,932) | \$ (74,061,229) | \$ (56,667,514) | \$ (109,879,995) |
| R | Composting | | | | |
| R | Recycling | \$ 436,167,031 | \$ 873,691,646 | \$ 428,660,336 | \$ 924,672,794 |
| R | CT | \$ 54,714,280 | \$ 102,282,903 | \$ 55,856,920 | \$ 112,174,486 |
| C | Total Revenue Effect | \$ 454,691,379 | \$ 901,913,320 | \$ 427,849,742 | \$ 926,967,285 |
| | <u>Jobs</u> | <u>2003</u> | <u>2010</u> | <u>2003</u> | <u>2010</u> |
| R | Lost to Landfills | (865) | (1,359) | (880) | (1,386) |
| R | Lost to Composting | | | | |
| R | Gained from Additional Recycling | 3,630 | 6,018 | 3,705 | 6,194 |
| R | Gained from CT | 1,094 | 1,721 | 1,117 | 1,763 |
| C | Change in Jobs | 3,859 | 6,380 | 3,942 | 6,571 |

* I/R/C = Input, Referenced or Calculated

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Scenario Assumptions

| I/R/C | <u>Assumptions of Conversion Technology Capacity in Use</u> | | | | |
|-------|---|------|-----------------|------|--------------|
| I | Greater Los Angeles Area | 100% | Acid Hydrolysis | 100% | Gasification |
| I | San Francisco Bay Area | 100% | Acid Hydrolysis | 100% | Gasification |

| I/R/C | <u>Assumed Conversion Technology Tipping Fee</u> | |
|-------|--|----------|
| I | Conversion Technology Tip Fee Per Ton - LA | \$ 40.00 |
| I | Conversion Technology Tip Fee Per Ton - SF | \$ 40.00 |

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Tonnage Availability Based Upon Comparative Tipping Fees - Greater Los Angeles Area

Conversion Technology Tonnage Requirements Exclusively from Material Destined for Landfilling

| I/R/C | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| I | Tipping Fee Growth Rate (1) | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% |
| R/C | CT Tip Fee Per Ton | \$ 40.00 | \$ 41.00 | \$ 42.03 | \$ 43.08 | \$ 44.16 | \$ 45.26 | \$ 46.39 | \$ 47.55 |
| C | CT Tip Fee (rounded to nearest | \$ 40.00 | \$ 40.00 | \$ 40.00 | \$ 40.00 | \$ 40.00 | \$ 50.00 | \$ 50.00 | \$ 50.00 |
| R | Tons Available To Be Sent To CT, based on price | 5,763,453 | 9,037,650 | 9,588,265 | 9,752,177 | 9,919,881 | 5,242,993 | 5,287,034 | 5,721,562 |
| R | Tons Required by CT, after sorting | 1,151,500 | 1,151,500 | 1,316,000 | 1,316,000 | 1,645,000 | 1,645,000 | 1,645,000 | 1,809,500 |
| C | % of Tons Usable | 84% | 84% | 85% | 85% | 84% | 84% | 84% | 84% |
| R | Total Tons Required to Fullfill Need, pre-sorting | 1,367,857 | 1,364,123 | 1,547,839 | 1,547,839 | 1,967,345 | 1,967,345 | 1,967,345 | 2,151,060 |
| C | Required Tons Available | 1,367,857 | 1,364,123 | 1,547,839 | 1,547,839 | 1,967,345 | 1,967,345 | 1,967,345 | 2,151,060 |

(1) Estimated CPI growth for region based upon prior 10-year trend.

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Tonnage Availability Based Upon Comparative Tipping Fees - San Francisco Bay Area

Conversion Technology Tonnage Requirements Exclusively from Material Destined for Landfilling

| I/R/C | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| I | Tipping Fee Growth Rate (1) | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% |
| I/C | CT Tip Fee Per Ton | \$ 40.00 | \$ 41.40 | \$ 42.85 | \$ 44.35 | \$ 45.90 | \$ 47.51 | \$ 49.17 | \$ 50.89 |
| C | CT Tip Fee (rounded to nearest) | \$ 40.00 | \$ 40.00 | \$ 40.00 | \$ 40.00 | \$ 50.00 | \$ 50.00 | \$ 50.00 | \$ 50.00 |
| R | Tons Available To Be Sent To CT, based on price | 5,414,208 | 5,414,208 | 5,414,208 | 5,414,208 | 4,271,032 | 4,271,032 | 4,271,032 | 4,271,032 |
| R | Tons Required by CT, after sorting | 1,151,500 | 1,151,500 | 1,316,000 | 1,316,000 | 1,645,000 | 1,645,000 | 1,645,000 | 1,809,500 |
| C | % of Tons Usable | 82% | 82% | 83% | 83% | 82% | 82% | 82% | 82% |
| R | Total Tons Required to Fullfill Need, pre-sorting | 1,396,423 | 1,398,000 | 1,586,618 | 1,586,618 | 2,015,635 | 2,015,635 | 2,015,635 | 2,204,254 |
| C | Required Tons Available | 1,396,423 | 1,398,000 | 1,586,618 | 1,586,618 | 2,015,635 | 2,015,635 | 2,015,635 | 2,204,254 |

(1) Estimated CPI growth for region based upon prior 10-year trend.

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**Tipping Fee Projections (2003-2010)
Cumulative Total Tons Available At Each Tip Fee Level**

| I/R/C | Refuse Tonnage Available at Each Tipping Fee Level - Greater Los Angeles Area | | | | | | | | |
|-------|---|------------|------------|------------|------------|------------|------------|------------|------------|
| | Tip Fee Per Ton | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| C | \$0 to \$10.00 | 18,128,402 | 18,414,118 | 18,705,867 | 18,962,299 | 19,223,539 | 19,489,700 | 19,760,899 | 20,037,256 |
| C | \$10.01 to 20.00 | 18,128,402 | 18,414,118 | 18,705,867 | 18,962,299 | 19,223,539 | 19,489,700 | 19,760,899 | 20,037,256 |
| C | \$20.01 to \$30.00 | 16,956,695 | 17,226,125 | 17,501,360 | 17,745,025 | 19,223,539 | 19,489,700 | 19,760,899 | 20,037,256 |
| C | \$30.01 to \$40.00 | 5,763,453 | 9,037,650 | 9,588,265 | 9,752,177 | 9,919,881 | 13,984,010 | 14,192,304 | 14,447,961 |
| C | \$40.01 to \$50.00 | 1,004,058 | 1,013,496 | 2,601,243 | 4,558,260 | 4,809,784 | 5,242,993 | 5,287,034 | 5,721,562 |
| C | \$50.01 to \$60.00 | 376,234 | 379,770 | 383,340 | 386,560 | 389,807 | 863,926 | 871,183 | 2,712,346 |
| C | \$60.01 to \$70.00 | - | - | - | 386,560 | 389,807 | 393,082 | 396,384 | 399,713 |
| C | \$70.01 to \$80.00 | - | - | - | - | - | - | - | - |
| C | \$80.01 to \$90.00 | - | - | - | - | - | - | - | - |

| I/R/C | Refuse Tonnage Available at Each Tipping Fee Level - San Francisco Bay Area | | | | | | | | |
|-------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Tip Fee Per Ton | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| C | \$0 to \$10.00 | 6,939,664 | 7,045,976 | 7,154,014 | 7,236,414 | 7,319,847 | 7,404,323 | 7,489,859 | 7,576,469 |
| C | \$10.01 to 20.00 | 6,939,664 | 7,045,976 | 7,154,014 | 7,236,414 | 7,319,847 | 7,404,323 | 7,489,859 | 7,576,469 |
| C | \$20.01 to \$30.00 | 6,939,664 | 7,045,976 | 7,154,014 | 7,236,414 | 7,319,847 | 7,404,323 | 7,489,859 | 7,576,469 |
| C | \$30.01 to \$40.00 | 5,414,208 | 6,730,942 | 6,834,255 | 6,913,041 | 6,992,820 | 7,073,601 | 7,155,400 | 7,238,230 |
| C | \$40.01 to \$50.00 | 4,271,032 | 4,894,134 | 4,969,477 | 4,786,696 | 4,868,847 | 4,925,670 | 5,807,528 | 5,878,364 |
| C | \$50.01 to \$60.00 | 1,811,541 | 1,992,945 | 2,695,022 | 2,537,328 | 2,569,701 | 2,602,500 | 4,681,093 | 5,013,664 |
| C | \$60.01 to \$70.00 | 361,682 | 394,039 | 581,026 | 1,578,060 | 1,598,271 | 1,618,743 | 1,639,476 | 2,219,252 |
| C | \$70.01 to \$80.00 | - | 72,500 | 36,794 | 331,386 | 335,562 | 339,790 | 344,072 | 1,532,401 |
| C | \$80.01 to \$90.00 | - | - | - | - | - | - | - | 348,407 |

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**Tipping Fee Projections (2003-2010)
Tons At Each Tip Fee Level**

| I/R/C | Disposal Tipping Fees - Greater Los Angeles Area | | | | | | | | |
|-------|--|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Tip Fee Per Ton | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| I | \$0 to \$10.00 | - | - | - | - | - | - | - | - |
| I | \$10.01 to 20.00 | 1,171,707 | 1,187,993 | 1,204,507 | 1,217,274 | - | - | - | - |
| I | \$20.01 to \$30.00 | 11,193,242 | 8,188,475 | 7,913,095 | 7,992,848 | 9,303,658 | 5,505,690 | 5,568,595 | 5,589,295 |
| I | \$30.01 to \$40.00 | 4,759,395 | 8,024,154 | 6,987,022 | 5,193,917 | 5,110,097 | 8,741,017 | 8,905,270 | 8,726,399 |
| I | \$40.01 to \$50.00 | 627,824 | 633,726 | 2,217,903 | 4,171,700 | 4,419,977 | 4,379,067 | 4,415,851 | 3,009,216 |
| I | \$50.01 to \$60.00 | 376,234 | 379,770 | 383,340 | - | - | 470,844 | 474,799 | 2,312,633 |
| I | \$60.01 to \$70.00 | - | - | - | 386,560 | 389,807 | 393,082 | 396,384 | 399,713 |
| I | \$70.01 to \$80.00 | - | - | - | - | - | - | - | - |
| I | \$80.01 to \$90.00 | - | - | - | - | - | - | - | - |
| I | Weighted Average Tip Fee Per Ton | \$ 28.02 | \$ 29.21 | \$ 30.39 | \$ 31.57 | \$ 32.62 | \$ 33.91 | \$ 35.21 | \$ 36.51 |

| I/R/C | Disposal Tipping Fees - San Francisco Bay Area | | | | | | | | |
|-------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Tip Fee Per Ton | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| I | \$0 to \$10.00 | - | - | - | - | - | - | - | - |
| I | \$10.01 to 20.00 | - | - | - | - | - | - | - | - |
| I | \$20.01 to \$30.00 | 1,525,456 | 315,034 | 319,759 | 323,373 | 327,027 | 330,722 | 334,459 | 338,239 |
| I | \$30.01 to \$40.00 | 1,143,176 | 1,836,808 | 1,864,778 | 2,126,345 | 2,123,973 | 2,147,931 | 1,347,872 | 1,359,866 |
| I | \$40.01 to \$50.00 | 2,459,491 | 2,901,189 | 2,274,455 | 2,249,368 | 2,299,146 | 2,323,170 | 1,126,435 | 864,700 |
| I | \$50.01 to \$60.00 | 1,449,859 | 1,598,906 | 2,113,997 | 959,268 | 971,430 | 983,757 | 3,041,617 | 2,794,412 |
| I | \$60.01 to \$70.00 | 361,682 | 321,539 | 544,232 | 1,246,674 | 1,262,709 | 1,278,953 | 1,295,404 | 686,851 |
| I | \$70.01 to \$80.00 | - | 72,500 | 36,794 | 331,386 | 335,562 | 339,790 | 344,072 | 1,183,994 |
| I | \$80.01 to \$90.00 | - | - | - | - | - | - | - | 348,407 |
| I | Weighted Average Tip Fee Per Ton | \$ 43.15 | \$ 44.93 | \$ 46.04 | \$ 46.60 | \$ 48.17 | \$ 49.78 | \$ 51.43 | \$ 53.12 |

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Change in Revenue Due to Pre-Sorting Materials For Conversion Technologies Greater Los Angeles Area

Revenue Per Ton Factors*

| I/R/C | <u>Revenue Per Ton*</u> | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| I | Paper | \$ 483.84 | \$ 495.94 | \$ 508.34 | \$ 521.05 | \$ 534.08 | \$ 547.43 | \$ 561.12 | \$ 575.15 |
| I | Plastics | \$ 11,123.00 | \$ 11,401.08 | \$ 11,686.11 | \$ 11,978.26 | \$ 12,277.72 | \$ 12,584.66 | \$ 12,899.28 | \$ 13,221.76 |
| I | Organics | \$ 33.09 | \$ 33.92 | \$ 34.77 | \$ 35.64 | \$ 36.53 | \$ 37.44 | \$ 38.38 | \$ 39.34 |
| I | Other | \$ 296.00 | \$ 303.40 | \$ 310.99 | \$ 318.76 | \$ 326.73 | \$ 334.90 | \$ 343.27 | \$ 351.85 |

Total Change in Revenue - Greater Los Angeles Area

| I/R/C | <u>Acid Hydrolysis</u> | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| R | Paper | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Plastics | \$ 401,640,407 | \$ 419,696,557 | \$ 430,189,081 | \$ 440,943,707 | \$ 753,274,955 | \$ 772,106,645 | \$ 791,409,526 | \$ 811,194,641 |
| R | Organics | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Other | \$ 15,906,448 | \$ 15,765,271 | \$ 16,159,662 | \$ 16,563,407 | \$ 28,295,471 | \$ 29,003,010 | \$ 29,727,869 | \$ 30,470,914 |
| C | Total | \$ 417,546,855 | \$ 435,461,828 | \$ 446,348,743 | \$ 457,507,114 | \$ 781,570,426 | \$ 801,109,655 | \$ 821,137,395 | \$ 841,665,555 |

| I/R/C | <u>Gasification</u> | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| R | Paper | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Plastics | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Organics | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Other | \$ 18,620,176 | \$ 18,410,615 | \$ 23,589,213 | \$ 24,178,584 | \$ 24,783,124 | \$ 25,402,835 | \$ 26,037,716 | \$ 32,026,091 |
| C | Total | \$ 18,620,176 | \$ 18,410,615 | \$ 23,589,213 | \$ 24,178,584 | \$ 24,783,124 | \$ 25,402,835 | \$ 26,037,716 | \$ 32,026,091 |

* Revenue per ton factors determined from data in Table F-1 of Appendix F of the "U.S. Recycling Economic Information Study" by R.W. Beck, Inc., July 2001, adjusted by an estimated CPI of 2.5% per year in the Greater Los Angeles area. Revenue means the sum of revenue earned by companies dealing in the commodity, such as manufacturers, mills, MRFs, etc.

Appendix F

Change in Revenue Due to Pre-Sorting Materials For Conversion Technologies San Francisco Bay Area

Revenue Per Ton Factors*

| I/R/C | Revenue Per Ton* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| I | Paper | \$ 483.84 | \$ 500.77 | \$ 518.30 | \$ 536.44 | \$ 555.22 | \$ 574.65 | \$ 594.76 | \$ 615.58 |
| I | Plastics | \$ 11,123.00 | \$ 11,512.31 | \$ 11,915.24 | \$ 12,332.27 | \$ 12,763.90 | \$ 13,210.64 | \$ 13,673.01 | \$ 14,151.57 |
| I | Organics | \$ 33.09 | \$ 34.25 | \$ 35.45 | \$ 36.69 | \$ 37.97 | \$ 39.30 | \$ 40.68 | \$ 42.10 |
| I | Other | \$ 296.00 | \$ 306.36 | \$ 317.08 | \$ 328.18 | \$ 339.67 | \$ 351.56 | \$ 363.86 | \$ 376.60 |

Total Change in Revenue - San Francisco Bay Area

| I/R/C | Acid Hydrolysis | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| R | Paper | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Plastics | \$ 386,902,432 | \$ 410,425,364 | \$ 424,790,221 | \$ 439,657,758 | \$ 758,418,174 | \$ 784,963,018 | \$ 812,436,581 | \$ 840,872,138 |
| R | Organics | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Other | \$ 19,191,456 | \$ 19,902,371 | \$ 20,598,785 | \$ 21,319,886 | \$ 36,777,090 | \$ 38,064,456 | \$ 39,396,214 | \$ 40,775,612 |
| C | Total | \$ 406,093,888 | \$ 430,327,735 | \$ 445,389,006 | \$ 460,977,644 | \$ 795,195,264 | \$ 823,027,474 | \$ 851,832,795 | \$ 881,647,750 |

| I/R/C | Gasification | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| R | Paper | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Plastics | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Organics | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| R | Other | \$ 22,566,448 | \$ 23,333,603 | \$ 30,187,918 | \$ 31,244,705 | \$ 32,338,622 | \$ 33,470,621 | \$ 34,641,655 | \$ 43,025,044 |
| C | Total | \$ 22,566,448 | \$ 23,333,603 | \$ 30,187,918 | \$ 31,244,705 | \$ 32,338,622 | \$ 33,470,621 | \$ 34,641,655 | \$ 43,025,044 |

* Revenue per ton factors determined from data in Table F-1 of Appendix F of the "U.S. Recycling Economic Information Study" by R.W. Beck, Inc., July 2001, adjusted by an estimated CPI of 3.5% per year in the San Francisco Bay area. Revenue means the sum of revenue earned by companies

Appendix F

Additional Diversion From Pre-Sorting Materials For Conversion Technologies

Additional Jobs Per Thousand Tons Processed Per Year:

| I/R/C | Material Type | Jobs Per 1,000 Tons* |
|-------|---------------|----------------------|
| I | Paper | 1.38 |
| I | Plastics | 77.10 |
| I | Organics | 0.21 |
| I | Other | 7.25 |

Total Change in Recycling Jobs - Greater Los Angeles Area

| I/R/C | Acid Hydrolysis | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | 2,784 | 2,838 | 2,838 | 2,838 | 4,730 | 4,730 | 4,730 | 4,730 |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 390 | 377 | 377 | 377 | 628 | 628 | 628 | 628 |
| C | Total | 3,174 | 3,215 | 3,215 | 3,215 | 5,358 | 5,358 | 5,358 | 5,358 |

| I/R/C | Gasification | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------|------|------|------|------|------|------|------|------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | - | - | - | - | - | - | - | - |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 456 | 440 | 550 | 550 | 550 | 550 | 550 | 660 |
| C | Total | 456 | 440 | 550 | 550 | 550 | 550 | 550 | 660 |

Total Change in Recycling Jobs - San Francisco Bay Area

| I/R/C | Acid Hydrolysis | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | 2,682 | 2,749 | 2,749 | 2,749 | 4,581 | 4,581 | 4,581 | 4,581 |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 470 | 471 | 471 | 471 | 785 | 785 | 785 | 785 |
| C | Total | 3,152 | 3,220 | 3,220 | 3,220 | 5,366 | 5,366 | 5,366 | 5,366 |

| I/R/C | Gasification | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------|------|------|------|------|------|------|------|------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | - | - | - | - | - | - | - | - |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 553 | 552 | 690 | 690 | 690 | 690 | 690 | 828 |
| C | Total | 553 | 552 | 690 | 690 | 690 | 690 | 690 | 828 |

* Jobs per 1,000 tons factors determined from data in Table F-1 of Appendix F of the "U.S. Recycling Economic Information Study" by R.W. Beck, Inc., July 2001.

Appendix F

Change in Tons Disposed Due to Tonnage Entering Conversion Technology Facilities and Effect on Revenue and Jobs

Greater Los Angeles Area

Net Change in Disposal - Tonnage into CT Facility net Contamination Removed

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| R | Tons To CT | 1,367,857 | 1,364,123 | 1,547,839 | 1,547,839 | 1,967,345 | 1,967,345 | 1,967,345 | 2,151,060 |
| R | Residual From CT | 76,282 | 75,614 | 80,840 | 80,840 | 117,315 | 117,315 | 117,315 | 122,541 |
| C | Difference | 1,291,575 | 1,288,509 | 1,466,999 | 1,466,999 | 1,850,030 | 1,850,030 | 1,850,030 | 2,028,519 |

Landfill Revenue Lost

| | | | | | | | | | |
|---|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| R | Average Tipping Fee Per Ton | \$ 28.02 | \$ 29.21 | \$ 30.39 | \$ 31.57 | \$ 32.62 | \$ 33.91 | \$ 35.21 | \$ 36.51 |
| C | Revenue | \$ 36,189,932 | \$ 37,637,348 | \$ 44,582,100 | \$ 46,313,158 | \$ 60,347,979 | \$ 62,734,517 | \$ 65,139,556 | \$ 74,061,229 |

Landfill Jobs Lost

| | | | | | | | | | |
|---|---------------------|------|------|------|------|-------|-------|-------|-------|
| I | Jobs Per 1,000 Tons | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| C | Jobs | 865 | 863 | 983 | 983 | 1,240 | 1,240 | 1,240 | 1,359 |

San Francisco Bay Area

Net Change in Disposal - Tonnage into CT Facility net Contamination Removed

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| R | Tons To CT | 1,396,423 | 1,398,000 | 1,586,618 | 1,586,618 | 2,015,635 | 2,015,635 | 2,015,635 | 2,204,254 |
| R | Residual From CT | 83,155 | 84,050 | 90,580 | 90,580 | 129,200 | 129,200 | 129,200 | 135,730 |
| C | Difference | 1,313,268 | 1,313,950 | 1,496,038 | 1,496,038 | 1,886,435 | 1,886,435 | 1,886,435 | 2,068,524 |

Landfill Revenue Lost

| | | | | | | | | | |
|---|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| R | Average Tipping Fee Per Ton | \$ 43.15 | \$ 44.93 | \$ 46.04 | \$ 46.60 | \$ 48.17 | \$ 49.78 | \$ 51.43 | \$ 53.12 |
| C | Revenue | \$ 56,667,514 | \$ 59,035,774 | \$ 68,877,590 | \$ 69,715,371 | \$ 90,869,574 | \$ 93,906,734 | \$ 97,019,352 | \$ 109,879,995 |

Landfill Jobs Lost

| | | | | | | | | | |
|---|---------------------|------|------|-------|-------|-------|-------|-------|-------|
| I | Jobs Per 1,000 Tons | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| C | Jobs | 880 | 880 | 1,002 | 1,002 | 1,264 | 1,264 | 1,264 | 1,386 |

Appendix F

Calculation of Individual Materials Diverted
Greater Los Angeles Area

| I/R/C | | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Population Growth Rate | | 1.46% | 1.46% | 1.46% | 1.31% | 1.31% | 1.31% | 1.31% | 1.31% |
| | Total of Materials Listed Below | | | | | | | | | |
| C | Tonnage | | 7,999,129 | 8,125,756 | 8,255,498 | 8,382,215 | 8,512,181 | 8,645,546 | 8,782,472 | 8,923,130 |
| C | Plus: Increases Due to SB 1066 | | 175,321 | 538,564 | 546,427 | 553,585 | 560,837 | 568,183 | 575,626 | 583,166 |
| C | Subtotal, Recycling Before CT Tonnage | | 8,174,450 | 8,664,320 | 8,801,925 | 8,935,800 | 9,073,018 | 9,213,729 | 9,358,098 | 9,506,296 |
| C | Plus: Conversion Technology Sorting | | 36,109 | 36,812 | 36,812 | 36,812 | 61,353 | 61,353 | 61,353 | 61,353 |
| C | Total | | 8,210,559 | 8,701,132 | 8,838,737 | 8,972,612 | 9,134,371 | 9,275,082 | 9,419,451 | 9,567,649 |
| | Paper | | | | | | | | | |
| I | Projected Growth Rate | | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| C | Projected Growth | | 52,110 | 53,413 | 54,748 | 56,117 | 57,520 | 58,958 | 60,432 | 61,943 |
| I/C | Tonnage, In-State (1) | 2,084,412 | 2,136,522 | 2,189,935 | 2,244,683 | 2,300,800 | 2,358,320 | 2,417,278 | 2,477,710 | 2,539,653 |
| I/C | Projected Growth Rate | | 12.1% | 12.1% | 12.1% | 12.1% | 12.1% | 12.1% | 12.1% | 12.1% |
| C | Projected Growth | | 316,052 | 320,666 | 325,348 | 330,098 | 334,422 | 338,803 | 343,242 | 347,738 |
| I/C | Tonnage, Export (1) | 2,612,000 | 2,650,135 | 2,688,827 | 2,728,084 | 2,763,822 | 2,800,028 | 2,836,708 | 2,873,869 | 2,911,517 |
| C | Tonnage, In-State and Export | | 4,786,657 | 4,878,762 | 4,972,767 | 5,064,622 | 5,158,348 | 5,253,986 | 5,351,579 | 5,451,170 |
| R/C | Plus: Increases Due to SB 1066 | | 116,415 | 430,618 | 436,905 | 442,628 | 448,426 | 454,300 | 460,251 | 466,280 |
| C | Subtotal, Recycling Before CT Tonnage | | 4,903,072 | 5,309,380 | 5,409,672 | 5,507,250 | 5,606,774 | 5,708,286 | 5,811,830 | 5,917,450 |
| R/C | Plus: Conversion Technology Sorting | | - | - | - | - | - | - | - | - |
| C | Total | | 4,903,072 | 5,309,380 | 5,409,672 | 5,507,250 | 5,606,774 | 5,708,286 | 5,811,830 | 5,917,450 |
| | Plastic | | | | | | | | | |
| I | Projected Growth Rate | | | 8.7% | 8.7% | 8.7% | 8.7% | 8.7% | 8.7% | 8.7% |
| C | Projected Growth | | | 12,085 | 13,136 | 14,279 | 15,521 | 16,872 | 18,340 | 19,935 |
| I/C | Tonnage (1) | | 138,906 | 150,991 | 164,127 | 178,406 | 193,927 | 210,799 | 229,139 | 249,074 |
| R/C | Plus: Increases Due to SB 1066 | | 5,969 | 24,506 | 24,864 | 25,190 | 25,520 | 25,854 | 26,193 | 26,536 |
| C | Subtotal, Recycling Before CT Tonnage | | 144,875 | 175,497 | 188,991 | 203,596 | 219,447 | 236,653 | 255,332 | 275,610 |
| R/C | Plus: Conversion Technology Sorting | | 36,109 | 36,812 | 36,812 | 36,812 | 61,353 | 61,353 | 61,353 | 61,353 |
| C | Total | | 180,984 | 212,309 | 225,803 | 240,408 | 280,800 | 298,006 | 316,685 | 336,963 |
| | Organics | | | | | | | | | |
| C | Projected Growth Rate (2) | | 0.73% | 0.73% | 0.73% | 0.66% | 0.66% | 0.66% | 0.66% | 0.66% |
| C | Projected Growth | | 22,274 | 22,437 | 22,601 | 20,583 | 20,719 | 20,855 | 20,993 | 21,132 |
| I/C | Tonnage (1)(3) | 3,051,292 | 3,073,566 | 3,096,003 | 3,118,604 | 3,139,187 | 3,159,906 | 3,180,761 | 3,201,754 | 3,222,886 |
| R/C | Plus: Increases Due to SB 1066 | | 52,937 | 83,440 | 84,658 | 85,767 | 86,891 | 88,029 | 89,182 | 90,350 |
| C | Subtotal, Recycling Before CT Tonnage | | 3,126,503 | 3,179,443 | 3,203,262 | 3,224,954 | 3,246,797 | 3,268,790 | 3,290,936 | 3,313,236 |
| R/C | Plus: Conversion Technology Sorting | | - | - | - | - | - | - | - | - |
| C | Total | | 3,126,503 | 3,179,443 | 3,203,262 | 3,224,954 | 3,246,797 | 3,268,790 | 3,290,936 | 3,313,236 |

(1) Growth rate assumed to be population growth rate for region.

(2) Projected growth rate is half of population growth rate.

(3) Total feedstock received at regional composting and mulch facilities (including material used for ADC), per 2003 survey by Integrated Waste Management Consulting for the CIWMB.

Appendix F

Calculation of Individual Materials Diverted
San Francisco Bay Area

| I/R/C | | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | <u>Population Growth Rate (1)</u> | | 1.40% | 1.40% | 1.40% | 1.02% | 1.02% | 1.02% | 1.02% | 1.02% |
| | <u>Total of Materials Listed Below</u> | | | | | | | | | |
| C | Tonnage | | 3,675,712 | 3,730,103 | 3,785,807 | 3,835,534 | 3,886,554 | 3,938,931 | 3,992,733 | 4,048,029 |
| C | Plus: Increases Due to SB 1066 | | 160,698 | 314,586 | 318,990 | 322,244 | 325,531 | 328,852 | 332,206 | 335,594 |
| C | Subtotal, Recycling Before CT Tonnage | | 3,836,410 | 4,044,689 | 4,104,797 | 4,157,778 | 4,212,085 | 4,267,783 | 4,324,939 | 4,383,623 |
| C | Plus: Conversion Technology Sorting | | 34,784 | 35,651 | 35,651 | 35,651 | 59,419 | 59,419 | 59,419 | 59,419 |
| C | Total | | 3,871,194 | 4,080,340 | 4,140,448 | 4,193,429 | 4,271,504 | 4,327,202 | 4,384,358 | 4,443,042 |
| | <u>Paper</u> | | | | | | | | | |
| I | Projected Growth Rate | | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| C | Projected Growth | | 22,094 | 22,647 | 23,213 | 23,793 | 24,388 | 24,998 | 25,623 | 26,263 |
| I/C | Tonnage, In-State (1) | 883,767 | 905,861 | 928,508 | 951,721 | 975,514 | 999,902 | 1,024,900 | 1,050,523 | 1,076,786 |
| I/C | Projected Growth Rate | | 13.8% | 13.8% | 13.8% | 13.8% | 13.8% | 13.8% | 13.8% | 13.8% |
| C | Projected Growth | | 146,280 | 148,328 | 150,405 | 152,510 | 154,066 | 155,637 | 157,225 | 158,828 |
| I/C | Tonnage, Export (1) | 1,060,000 | 1,074,840 | 1,089,888 | 1,105,146 | 1,116,418 | 1,127,805 | 1,139,309 | 1,150,930 | 1,162,669 |
| C | Tonnage, In-State and Export | | 1,980,701 | 2,018,396 | 2,056,867 | 2,091,932 | 2,127,707 | 2,164,209 | 2,201,453 | 2,239,455 |
| R/C | Plus: Increases Due to SB 1066 | | 61,354 | 148,951 | 151,036 | 152,577 | 154,133 | 155,705 | 157,293 | 158,897 |
| C | Subtotal, Recycling Before CT Tonnage | | 2,042,055 | 2,167,347 | 2,207,903 | 2,244,509 | 2,281,840 | 2,319,914 | 2,358,746 | 2,398,352 |
| R/C | Plus: Conversion Technology Sorting | | - | - | - | - | - | - | - | - |
| C | Total | | 2,042,055 | 2,167,347 | 2,207,903 | 2,244,509 | 2,281,840 | 2,319,914 | 2,358,746 | 2,398,352 |
| | <u>Plastic</u> | | | | | | | | | |
| I | Projected Growth Rate | | | 8.7% | 8.7% | 8.7% | 8.7% | 8.7% | 8.7% | 8.7% |
| C | Projected Growth | | | 5,254 | 5,711 | 6,208 | 6,748 | 7,335 | 7,974 | 8,667 |
| I/C | Tonnage (1) | | 60,394 | 65,648 | 71,359 | 77,567 | 84,315 | 91,650 | 99,624 | 108,291 |
| R/C | Plus: Increases Due to SB 1066 | | 2,214 | 9,735 | 9,871 | 9,972 | 10,074 | 10,177 | 10,281 | 10,386 |
| C | Subtotal, Recycling Before CT Tonnage | | 62,608 | 75,383 | 81,230 | 87,539 | 94,389 | 101,827 | 109,905 | 118,677 |
| R/C | Plus: Conversion Technology Sorting | | 34,784 | 35,651 | 35,651 | 35,651 | 59,419 | 59,419 | 59,419 | 59,419 |
| C | Total | | 97,392 | 111,034 | 116,881 | 123,190 | 153,808 | 161,246 | 169,324 | 178,096 |
| | <u>Organics</u> | | | | | | | | | |
| C | Projected Growth Rate (2) | | 0.70% | 0.70% | 0.70% | 0.51% | 0.51% | 0.51% | 0.51% | 0.51% |
| C | Projected Growth | | 11,363 | 11,442 | 11,522 | 8,454 | 8,497 | 8,540 | 8,584 | 8,627 |
| I/C | Tonnage (1)(3) | 1,623,254 | 1,634,617 | 1,646,059 | 1,657,581 | 1,666,035 | 1,674,532 | 1,683,072 | 1,691,656 | 1,700,283 |
| R/C | Plus: Increases Due to SB 1066 | | 97,130 | 155,900 | 158,083 | 159,695 | 161,324 | 162,970 | 164,632 | 166,311 |
| C | Subtotal, Recycling Before CT Tonnage | | 1,731,747 | 1,801,959 | 1,815,664 | 1,825,730 | 1,835,856 | 1,846,042 | 1,856,288 | 1,866,594 |
| R/C | Plus: Conversion Technology Sorting | | - | - | - | - | - | - | - | - |
| C | Total | | 1,731,747 | 1,801,959 | 1,815,664 | 1,825,730 | 1,835,856 | 1,846,042 | 1,856,288 | 1,866,594 |

(1) Population growth rate assumed growth rate for SB 1066 program tonnage.

(2) Projected growth rate is half of population growth rate.

(3) Total feedstock received at regional composting and mulch facilities (including material used for ADC), per 2003 survey by Integrated Waste Management Consulting for the CIWMB.

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater Los Angeles Area | 2002 % of Composition | 2002 Disposal Tons | 2003 Disposal Tons | 2003 SB 1066 Tons | 2003 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|--|-----------------------|--------------------|--------------------|-------------------|----------------------------|----------------------------------|
| | Growth Rate Projection | | | 1.46% | | | |
| | Total Tonnage | | 19,067,447 | 19,345,832 | 278,082 | 19,065,816 | |
| C | Total Paper | 27.50% | 5,243,548 | 5,320,104 | 116,415 | 5,203,689 | 27.30% |
| I/C | Uncoated Corrugated Cardboard | 4.69% | 894,263 | 907,320 | 19,854 | 887,466 | 4.65% |
| I/C | Paper Bags | 0.64% | 122,032 | 123,813 | 2,709 | 121,104 | 0.64% |
| I/C | Newspaper | 4.08% | 777,952 | 789,310 | 17,272 | 772,038 | 4.05% |
| I/C | White Ledger | 1.62% | 308,893 | 313,402 | 6,858 | 306,544 | 1.61% |
| I/C | Color Ledger | 0.14% | 26,694 | 27,084 | 593 | 26,491 | 0.14% |
| I/C | Computer Paper | 0.33% | 62,923 | 63,841 | 1,397 | 62,444 | 0.33% |
| I/C | Other Office Paper | 1.35% | 257,411 | 261,169 | 5,715 | 255,454 | 1.34% |
| I/C | Magazines and Catalogs | 1.49% | 284,105 | 288,253 | 6,308 | 281,945 | 1.48% |
| I/C | Phone Books and Directory | 0.38% | 72,456 | 73,514 | 1,609 | 71,905 | 0.38% |
| I/C | Other Miscellaneous Paper | 3.96% | 755,071 | 766,095 | 16,764 | 749,331 | 3.93% |
| I/C | Remainder/Composite Paper | 8.82% | 1,681,749 | 1,706,302 | 37,337 | 1,668,965 | 8.75% |
| C | Total Glass | 3.20% | 610,158 | 619,067 | 12,072 | 606,995 | 3.19% |
| I/C | Clear Glass Bottles and Containers | 1.35% | 257,411 | 261,169 | 5,093 | 256,076 | 1.34% |
| I/C | Green Glass Bottles and Containers | 0.50% | 95,337 | 96,729 | 1,886 | 94,843 | 0.50% |
| I/C | Brown Glass Bottles and Containers | 0.47% | 89,617 | 90,925 | 1,773 | 89,152 | 0.47% |
| I/C | Other Colored Glass Bottles and Containers | 0.01% | 1,907 | 1,935 | 38 | 1,897 | 0.01% |
| I/C | Flat Glass | 0.13% | 24,788 | 25,150 | 490 | 24,660 | 0.13% |
| I/C | Remainder/Composite Glass | 0.74% | 141,099 | 143,159 | 2,792 | 140,367 | 0.74% |
| C | Total Metal | 6.38% | 1,216,503 | 1,234,264 | 24,068 | 1,210,196 | 6.36% |
| I/C | Tin/Steel Cans | 0.92% | 175,421 | 177,982 | 3,471 | 174,511 | 0.92% |
| I/C | Major Appliances | 0.08% | 15,254 | 15,477 | 302 | 15,175 | 0.08% |
| I/C | Other Ferrous | 2.63% | 501,474 | 508,795 | 9,921 | 498,874 | 2.62% |
| I/C | Aluminum Cans | 0.21% | 40,042 | 40,626 | 792 | 39,834 | 0.21% |
| I/C | Other Non-Ferrous | 0.28% | 53,389 | 54,168 | 1,056 | 53,112 | 0.28% |
| I/C | Remainder/Composite Metal | 2.26% | 430,924 | 437,216 | 8,526 | 428,690 | 2.25% |
| C | Total Plastics | 9.53% | 1,817,128 | 1,843,658 | 5,969 | 1,837,689 | 9.63% |
| I/C | HDPE Containers | 0.79% | 150,633 | 152,832 | 495 | 152,337 | 0.80% |
| I/C | PETE Containers | 0.38% | 72,456 | 73,514 | 238 | 73,276 | 0.38% |
| I/C | Miscellaneous Plastic Containers | 0.57% | 108,684 | 110,271 | 357 | 109,914 | 0.58% |
| I/C | Film Plastic | 4.42% | 842,781 | 855,086 | 2,768 | 852,318 | 4.47% |
| I/C | Durable Plastic Items | 2.13% | 406,137 | 412,066 | 1,334 | 410,732 | 2.15% |
| I/C | Remainder/Composite Plastic | 1.24% | 236,436 | 239,888 | 777 | 239,111 | 1.25% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater Los Angeles Area | 2002 % of Composition | 2002 Disposal Tons | 2003 Disposal Tons | 2003 SB 1066 Tons | 2003 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|---|-----------------------|--------------------|--------------------|-------------------|----------------------------|----------------------------------|
| C | <u>Total Organic</u> | 35.72% | 6,810,892 | 6,910,331 | 52,937 | 6,857,394 | 35.97% |
| I/C | Food | 17.26% | 3,291,041 | 3,339,091 | 25,579 | 3,313,512 | 17.38% |
| I/C | Leaves and Grass | 6.61% | 1,260,358 | 1,278,759 | 9,796 | 1,268,963 | 6.66% |
| I/C | Prunings and Trimmings | 1.52% | 289,825 | 294,057 | 2,253 | 291,804 | 1.53% |
| I/C | Branches and Stumps | 0.07% | 13,347 | 13,542 | 104 | 13,438 | 0.07% |
| I/C | Agricultural Crop Residues | 0.00% | - | - | - | - | 0.00% |
| I/C | Manures | 0.26% | 49,575 | 50,299 | 385 | 49,914 | 0.26% |
| I/C | Textiles | 2.51% | 478,593 | 485,580 | 3,720 | 481,860 | 2.53% |
| I/C | Remainder/Composite Organic | 7.49% | 1,428,152 | 1,449,003 | 11,100 | 1,437,903 | 7.54% |
| C | <u>Total Construction and Demolition</u> | 13.17% | 2,511,183 | 2,547,846 | 49,683 | 2,498,163 | 13.10% |
| I/C | Concrete | 0.86% | 163,980 | 166,374 | 3,244 | 163,130 | 0.86% |
| I/C | Asphalt Paving | 0.07% | 13,347 | 13,542 | 264 | 13,278 | 0.07% |
| I/C | Asphalt Roofing | 0.39% | 74,363 | 75,449 | 1,471 | 73,978 | 0.39% |
| I/C | Lumber | 5.05% | 962,906 | 976,965 | 19,051 | 957,914 | 5.02% |
| I/C | Gypsum Board | 1.67% | 318,426 | 323,075 | 6,300 | 316,775 | 1.66% |
| I/C | Rock, Soil and Fines | 1.79% | 341,307 | 346,290 | 6,753 | 339,537 | 1.78% |
| I/C | Remainder/Composite Construction and Demolition | 3.34% | 636,853 | 646,151 | 12,600 | 633,551 | 3.32% |
| C | <u>Total Household Hazardous</u> | 0.22% | 41,948 | 42,561 | 830 | 41,731 | 0.22% |
| I/C | Paint | 0.10% | 19,067 | 19,346 | 377 | 18,969 | 0.10% |
| I/C | Vehicle and Equipment Fluids | 0.01% | 1,907 | 1,935 | 38 | 1,897 | 0.01% |
| I/C | Used Oil | 0.00% | - | - | - | - | 0.00% |
| I/C | Batteries | 0.07% | 13,347 | 13,542 | 264 | 13,278 | 0.07% |
| I/C | Remainder/Composite Household Hazardous | 0.04% | 7,627 | 7,738 | 151 | 7,587 | 0.04% |
| C | <u>Total Special Waste</u> | 2.67% | 509,101 | 516,534 | 10,072 | 506,462 | 2.66% |
| I/C | Ash | 0.04% | 7,627 | 7,738 | 151 | 7,587 | 0.04% |
| I/C | Sewage Solids | 0.00% | - | - | - | - | 0.00% |
| I/C | Industrial Sludge | 0.00% | - | - | - | - | 0.00% |
| I/C | Treated Medical Waste | 0.13% | 24,788 | 25,150 | 490 | 24,660 | 0.13% |
| I/C | Bulky Items | 1.42% | 270,758 | 274,711 | 5,357 | 269,354 | 1.41% |
| I/C | Tires | 0.47% | 89,617 | 90,925 | 1,773 | 89,152 | 0.47% |
| I/C | Remainder/Composite Special Waste | 0.61% | 116,311 | 118,010 | 2,301 | 115,709 | 0.61% |
| C | <u>Total Mixed Residue</u> | 1.60% | 305,079 | 309,533 | 6,036 | 303,497 | 1.59% |
| I/C | Mixed Residue | 1.60% | 305,079 | 309,533 | 6,036 | 303,497 | 1.59% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater Los Angeles Area | 2004 Disposal Tons | 2004 SB 1066 Tons | 2004 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|--|--------------------|-------------------|----------------------------|----------------------------------|
| | Growth Rate Projection | 1.46% | | | |
| | Total Tonnage | 19,344,177 | 677,550 | 18,670,494 | |
| C | Total Paper | 5,280,960 | 312,503 | 4,968,457 | 26.61% |
| I/C | Uncoated Corrugated Cardboard | 899,504 | 53,229 | 846,275 | 4.53% |
| I/C | Paper Bags | 123,803 | 7,326 | 116,477 | 0.62% |
| I/C | Newspaper | 783,439 | 46,360 | 737,079 | 3.95% |
| I/C | White Ledger | 311,441 | 18,430 | 293,011 | 1.57% |
| I/C | Color Ledger | 27,082 | 1,603 | 25,479 | 0.14% |
| I/C | Computer Paper | 63,836 | 3,778 | 60,058 | 0.32% |
| I/C | Other Office Paper | 259,212 | 15,339 | 243,873 | 1.31% |
| I/C | Magazines and Catalogs | 286,294 | 16,942 | 269,352 | 1.44% |
| I/C | Phone Books and Directory | 73,508 | 4,350 | 69,158 | 0.37% |
| I/C | Other Miscellaneous Paper | 760,226 | 44,987 | 715,239 | 3.83% |
| I/C | Remainder/Composite Paper | 1,692,615 | 100,161 | 1,592,454 | 8.53% |
| C | Total Glass | 617,079 | 37,272 | 579,807 | 3.11% |
| I/C | Clear Glass Bottles and Containers | 259,212 | 15,657 | 243,555 | 1.30% |
| I/C | Green Glass Bottles and Containers | 96,721 | 5,842 | 90,879 | 0.49% |
| I/C | Brown Glass Bottles and Containers | 90,918 | 5,491 | 85,427 | 0.46% |
| I/C | Other Colored Glass Bottles and Containers | 1,934 | 117 | 1,817 | 0.01% |
| I/C | Flat Glass | 25,147 | 1,519 | 23,628 | 0.13% |
| I/C | Remainder/Composite Glass | 143,147 | 8,646 | 134,501 | 0.72% |
| C | Total Metal | 1,230,290 | 74,310 | 1,155,980 | 6.19% |
| I/C | Tin/Steel Cans | 177,966 | 10,749 | 167,217 | 0.90% |
| I/C | Major Appliances | 15,475 | 935 | 14,540 | 0.08% |
| I/C | Other Ferrous | 506,817 | 30,612 | 476,205 | 2.55% |
| I/C | Aluminum Cans | 40,623 | 2,454 | 38,169 | 0.20% |
| I/C | Other Non-Ferrous | 54,164 | 3,272 | 50,892 | 0.27% |
| I/C | Remainder/Composite Metal | 435,244 | 26,289 | 408,955 | 2.19% |
| C | Total Plastics | 1,862,844 | 18,450 | 1,844,394 | 9.88% |
| I/C | HDPE Containers | 154,753 | 1,533 | 153,220 | 0.82% |
| I/C | PETE Containers | 73,508 | 728 | 72,780 | 0.39% |
| I/C | Miscellaneous Plastic Containers | 112,196 | 1,111 | 111,085 | 0.59% |
| I/C | Film Plastic | 864,685 | 8,564 | 856,121 | 4.59% |
| I/C | Durable Plastic Items | 415,900 | 4,119 | 411,781 | 2.21% |
| I/C | Remainder/Composite Plastic | 241,802 | 2,395 | 239,407 | 1.28% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater Los Angeles Area | 2004 Disposal Tons | 2004 SB 1066 Tons | 2004 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|---|--------------------|-------------------|----------------------------|----------------------------------|
| C | Total Organic | 6,958,100 | 29,730 | 6,928,370 | 37.11% |
| I/C | Food | 3,362,018 | 14,365 | 3,347,653 | 17.93% |
| I/C | Leaves and Grass | 1,288,322 | 5,505 | 1,282,817 | 6.87% |
| I/C | Prunings and Trimmings | 295,966 | 1,265 | 294,701 | 1.58% |
| I/C | Branches and Stumps | 13,541 | 58 | 13,483 | 0.07% |
| I/C | Agricultural Crop Residues | - | - | - | 0.00% |
| I/C | Manures | 50,295 | 215 | 50,080 | 0.27% |
| I/C | Textiles | 489,408 | 2,091 | 487,317 | 2.61% |
| I/C | Remainder/Composite Organic | 1,458,551 | 6,232 | 1,452,319 | 7.78% |
| C | Total Construction and Demolition | 2,534,087 | 153,059 | 2,381,028 | 12.76% |
| I/C | Concrete | 166,360 | 10,048 | 156,312 | 0.84% |
| I/C | Asphalt Paving | 13,541 | 818 | 12,723 | 0.07% |
| I/C | Asphalt Roofing | 75,442 | 4,557 | 70,885 | 0.38% |
| I/C | Lumber | 971,078 | 58,653 | 912,425 | 4.89% |
| I/C | Gypsum Board | 321,113 | 19,395 | 301,718 | 1.62% |
| I/C | Rock, Soil and Fines | 344,326 | 20,797 | 323,529 | 1.73% |
| I/C | Remainder/Composite Construction and Demolition | 642,227 | 38,791 | 603,436 | 3.23% |
| C | Total Household Hazardous | 42,557 | 2,570 | 39,987 | 0.22% |
| I/C | Paint | 19,344 | 1,168 | 18,176 | 0.10% |
| I/C | Vehicle and Equipment Fluids | 1,934 | 117 | 1,817 | 0.01% |
| I/C | Used Oil | - | - | - | 0.00% |
| I/C | Batteries | 13,541 | 818 | 12,723 | 0.07% |
| I/C | Remainder/Composite Household Hazardous | 7,738 | 467 | 7,271 | 0.04% |
| C | Total Special Waste | 514,555 | 31,079 | 483,476 | 2.59% |
| I/C | Ash | 7,738 | 467 | 7,271 | 0.04% |
| I/C | Sewage Solids | - | - | - | 0.00% |
| I/C | Industrial Sludge | - | - | - | 0.00% |
| I/C | Treated Medical Waste | 25,147 | 1,519 | 23,628 | 0.13% |
| I/C | Bulky Items | 272,753 | 16,474 | 256,279 | 1.37% |
| I/C | Tires | 90,918 | 5,491 | 85,427 | 0.46% |
| I/C | Remainder/Composite Special Waste | 117,999 | 7,127 | 110,872 | 0.59% |
| C | Total Mixed Residue | 307,572 | 18,577 | 288,995 | 1.55% |
| I/C | Mixed Residue | 307,572 | 18,577 | 288,995 | 1.55% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater Los Angeles Area | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| | Growth Rate Projection | 1.46% | 1.31% | 1.31% | 1.31% | 1.31% | 1.31% |
| | Total Tonnage | 18,943,083 | 19,191,237 | 19,442,642 | 19,697,341 | 19,955,376 | 20,216,791 |
| C | Total Paper | 5,040,754 | 5,106,788 | 5,173,687 | 5,241,462 | 5,310,126 | 5,379,688 |
| I/C | Uncoated Corrugated Cardboard | 858,122 | 869,363 | 880,752 | 892,290 | 903,979 | 915,821 |
| I/C | Paper Bags | 117,447 | 118,986 | 120,544 | 122,124 | 123,723 | 125,344 |
| I/C | Newspaper | 748,252 | 758,054 | 767,984 | 778,045 | 788,237 | 798,563 |
| I/C | White Ledger | 297,406 | 301,302 | 305,249 | 309,248 | 313,299 | 317,404 |
| I/C | Color Ledger | 26,520 | 26,868 | 27,220 | 27,576 | 27,938 | 28,304 |
| I/C | Computer Paper | 60,618 | 61,412 | 62,216 | 63,031 | 63,857 | 64,694 |
| I/C | Other Office Paper | 248,154 | 251,405 | 254,699 | 258,035 | 261,415 | 264,840 |
| I/C | Magazines and Catalogs | 272,780 | 276,354 | 279,974 | 283,642 | 287,357 | 291,122 |
| I/C | Phone Books and Directory | 70,089 | 71,008 | 71,938 | 72,880 | 73,835 | 74,802 |
| I/C | Other Miscellaneous Paper | 725,520 | 735,024 | 744,653 | 754,408 | 764,291 | 774,303 |
| I/C | Remainder/Composite Paper | 1,615,845 | 1,637,013 | 1,658,457 | 1,680,183 | 1,702,194 | 1,724,492 |
| C | Total Glass | 589,130 | 596,847 | 604,666 | 612,587 | 620,612 | 628,742 |
| I/C | Clear Glass Bottles and Containers | 246,260 | 249,486 | 252,754 | 256,065 | 259,420 | 262,818 |
| I/C | Green Glass Bottles and Containers | 92,821 | 94,037 | 95,269 | 96,517 | 97,781 | 99,062 |
| I/C | Brown Glass Bottles and Containers | 87,138 | 88,280 | 89,436 | 90,608 | 91,795 | 92,997 |
| I/C | Other Colored Glass Bottles and Containers | 1,894 | 1,919 | 1,944 | 1,970 | 1,996 | 2,022 |
| I/C | Flat Glass | 24,626 | 24,949 | 25,275 | 25,607 | 25,942 | 26,282 |
| I/C | Remainder/Composite Glass | 136,390 | 138,177 | 139,987 | 141,821 | 143,679 | 145,561 |
| C | Total Metal | 1,172,577 | 1,187,938 | 1,203,500 | 1,219,265 | 1,235,238 | 1,251,419 |
| I/C | Tin/Steel Cans | 170,488 | 172,721 | 174,984 | 177,276 | 179,598 | 181,951 |
| I/C | Major Appliances | 15,154 | 15,353 | 15,554 | 15,758 | 15,964 | 16,173 |
| I/C | Other Ferrous | 483,049 | 489,377 | 495,787 | 502,282 | 508,862 | 515,528 |
| I/C | Aluminum Cans | 37,886 | 38,382 | 38,885 | 39,395 | 39,911 | 40,434 |
| I/C | Other Non-Ferrous | 51,146 | 51,816 | 52,495 | 53,183 | 53,880 | 54,585 |
| I/C | Remainder/Composite Metal | 414,854 | 420,288 | 425,794 | 431,372 | 437,023 | 442,748 |
| C | Total Plastics | 1,871,577 | 1,896,094 | 1,920,933 | 1,946,097 | 1,971,591 | 1,997,419 |
| I/C | HDPE Containers | 155,333 | 157,368 | 159,430 | 161,518 | 163,634 | 165,778 |
| I/C | PETE Containers | 73,878 | 74,846 | 75,826 | 76,820 | 77,826 | 78,845 |
| I/C | Miscellaneous Plastic Containers | 111,764 | 113,228 | 114,712 | 116,214 | 117,737 | 119,279 |
| I/C | Film Plastic | 869,488 | 880,878 | 892,417 | 904,108 | 915,952 | 927,951 |
| I/C | Durable Plastic Items | 418,642 | 424,126 | 429,682 | 435,311 | 441,014 | 446,791 |
| I/C | Remainder/Composite Plastic | 242,471 | 245,648 | 248,866 | 252,126 | 255,429 | 258,775 |
| | | | - | - | - | - | - |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater Los Angeles Area | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| C | <u>Total Organic</u> | 7,029,778 | 7,121,868 | 7,215,164 | 7,309,683 | 7,405,440 | 7,502,451 |
| I/C | Food | 3,396,495 | 3,440,989 | 3,486,066 | 3,531,733 | 3,577,999 | 3,624,871 |
| I/C | Leaves and Grass | 1,301,390 | 1,318,438 | 1,335,710 | 1,353,207 | 1,370,934 | 1,388,894 |
| I/C | Prunings and Trimmings | 299,301 | 303,222 | 307,194 | 311,218 | 315,295 | 319,425 |
| I/C | Branches and Stumps | 13,260 | 13,434 | 13,610 | 13,788 | 13,969 | 14,152 |
| I/C | Agricultural Crop Residues | - | - | - | - | - | - |
| I/C | Manures | 51,146 | 51,816 | 52,495 | 53,183 | 53,880 | 54,585 |
| I/C | Textiles | 494,414 | 500,891 | 507,453 | 514,101 | 520,835 | 527,658 |
| I/C | Remainder/Composite Organic | 1,473,772 | 1,493,078 | 1,512,638 | 1,532,453 | 1,552,528 | 1,572,866 |
| C | <u>Total Construction and Demolition</u> | 2,417,137 | 2,448,802 | 2,480,881 | 2,513,381 | 2,546,306 | 2,579,663 |
| I/C | Concrete | 159,122 | 161,206 | 163,318 | 165,458 | 167,625 | 169,821 |
| I/C | Asphalt Paving | 13,260 | 13,434 | 13,610 | 13,788 | 13,969 | 14,152 |
| I/C | Asphalt Roofing | 71,984 | 72,927 | 73,882 | 74,850 | 75,830 | 76,824 |
| I/C | Lumber | 926,317 | 938,451 | 950,745 | 963,200 | 975,818 | 988,601 |
| I/C | Gypsum Board | 306,878 | 310,898 | 314,971 | 319,097 | 323,277 | 327,512 |
| I/C | Rock, Soil and Fines | 327,715 | 332,008 | 336,358 | 340,764 | 345,228 | 349,750 |
| I/C | Remainder/Composite Construction and Demolition | 611,862 | 619,877 | 627,997 | 636,224 | 644,559 | 653,002 |
| C | <u>Total Household Hazardous</u> | 41,675 | 42,221 | 42,774 | 43,334 | 43,902 | 44,477 |
| I/C | Paint | 18,943 | 19,191 | 19,443 | 19,697 | 19,955 | 20,217 |
| I/C | Vehicle and Equipment Fluids | 1,894 | 1,919 | 1,944 | 1,970 | 1,996 | 2,022 |
| I/C | Used Oil | - | - | - | - | - | - |
| I/C | Batteries | 13,260 | 13,434 | 13,610 | 13,788 | 13,969 | 14,152 |
| I/C | Remainder/Composite Household Hazardous | 7,577 | 7,676 | 7,777 | 7,879 | 7,982 | 8,087 |
| C | <u>Total Special Waste</u> | 490,626 | 497,053 | 503,564 | 510,161 | 516,844 | 523,615 |
| I/C | Ash | 7,577 | 7,676 | 7,777 | 7,879 | 7,982 | 8,087 |
| I/C | Sewage Solids | - | - | - | - | - | - |
| I/C | Industrial Sludge | - | - | - | - | - | - |
| I/C | Treated Medical Waste | 24,626 | 24,949 | 25,275 | 25,607 | 25,942 | 26,282 |
| I/C | Bulky Items | 259,520 | 262,920 | 266,364 | 269,854 | 273,389 | 276,970 |
| I/C | Tires | 87,138 | 88,280 | 89,436 | 90,608 | 91,795 | 92,997 |
| I/C | Remainder/Composite Special Waste | 111,764 | 113,228 | 114,712 | 116,214 | 117,737 | 119,279 |
| C | <u>Total Mixed Residue</u> | 293,618 | 297,464 | 301,361 | 305,309 | 309,308 | 313,360 |
| I/C | Mixed Residue | 293,618 | 297,464 | 301,361 | 305,309 | 309,308 | 313,360 |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater San Francisco Area | 2002 % of Composition | 2002 Disposal Tons | 2003 Disposal Tons | 2003 SB 1066 Tons | 2003 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|--|-----------------------|--------------------|--------------------|-------------------|----------------------------|----------------------------------|
| | Growth Rate Projection | | | 1.40% | | | |
| | Total Tonnage | | 6,524,916 | 6,616,265 | 182,490 | 6,433,775 | |
| C | Total Paper | 25.98% | 1,695,173 | 1,718,906 | 61,354 | 1,657,552 | 25.77% |
| I/C | Uncoated Corrugated Cardboard | 4.69% | 306,019 | 310,303 | 11,076 | 299,227 | 4.65% |
| I/C | Paper Bags | 0.77% | 50,242 | 50,945 | 1,818 | 49,127 | 0.76% |
| I/C | Newspaper | 3.92% | 255,777 | 259,358 | 9,257 | 250,101 | 3.89% |
| I/C | White Ledger | 1.33% | 86,781 | 87,996 | 3,141 | 84,855 | 1.32% |
| I/C | Color Ledger | 0.12% | 7,830 | 7,940 | 283 | 7,657 | 0.12% |
| I/C | Computer Paper | 0.21% | 13,702 | 13,894 | 496 | 13,398 | 0.21% |
| I/C | Other Office Paper | 1.06% | 69,164 | 70,132 | 2,503 | 67,629 | 1.05% |
| I/C | Magazines and Catalogs | 1.43% | 93,306 | 94,613 | 3,377 | 91,236 | 1.42% |
| I/C | Phone Books and Directory | 0.28% | 18,270 | 18,526 | 661 | 17,865 | 0.28% |
| I/C | Other Miscellaneous Paper | 3.97% | 259,039 | 262,666 | 9,375 | 253,291 | 3.94% |
| I/C | Remainder/Composite Paper | 8.20% | 535,043 | 542,534 | 19,365 | 523,169 | 8.13% |
| C | Total Glass | 3.04% | 198,357 | 201,134 | 2,092 | 199,042 | 3.10% |
| I/C | Clear Glass Bottles and Containers | 1.49% | 97,221 | 98,582 | 1,025 | 97,557 | 1.52% |
| I/C | Green Glass Bottles and Containers | 0.49% | 31,972 | 32,420 | 337 | 32,083 | 0.50% |
| I/C | Brown Glass Bottles and Containers | 0.40% | 26,100 | 26,465 | 275 | 26,190 | 0.41% |
| I/C | Other Colored Glass Bottles and Containers | 0.02% | 1,305 | 1,323 | 14 | 1,309 | 0.02% |
| I/C | Flat Glass | 0.17% | 11,092 | 11,248 | 117 | 11,131 | 0.17% |
| I/C | Remainder/Composite Glass | 0.47% | 30,667 | 31,096 | 323 | 30,773 | 0.48% |
| C | Total Metal | 7.55% | 492,631 | 499,528 | 5,195 | 494,333 | 7.69% |
| I/C | Tin/Steel Cans | 0.88% | 57,419 | 58,223 | 606 | 57,617 | 0.90% |
| I/C | Major Appliances | 0.13% | 8,482 | 8,601 | 89 | 8,512 | 0.13% |
| I/C | Other Ferrous | 2.86% | 186,613 | 189,225 | 1,968 | 187,257 | 2.91% |
| I/C | Aluminum Cans | 0.20% | 13,050 | 13,233 | 138 | 13,095 | 0.20% |
| I/C | Other Non-Ferrous | 0.30% | 19,575 | 19,849 | 206 | 19,643 | 0.31% |
| I/C | Remainder/Composite Metal | 3.18% | 207,492 | 210,397 | 2,188 | 208,209 | 3.24% |
| C | Total Plastics | 8.48% | 553,313 | 561,059 | 2,214 | 558,845 | 8.69% |
| I/C | HDPE Containers | 0.77% | 50,242 | 50,945 | 201 | 50,744 | 0.79% |
| I/C | PETE Containers | 0.45% | 29,362 | 29,773 | 117 | 29,656 | 0.46% |
| I/C | Miscellaneous Plastic Containers | 0.50% | 32,625 | 33,081 | 131 | 32,950 | 0.51% |
| I/C | Film Plastic | 3.63% | 236,854 | 240,170 | 948 | 239,222 | 3.72% |
| I/C | Durable Plastic Items | 1.67% | 108,966 | 110,492 | 436 | 110,056 | 1.71% |
| I/C | Remainder/Composite Plastic | 1.46% | 95,264 | 96,597 | 381 | 96,216 | 1.50% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater San Francisco Area | 2002 % of Composition | 2002 Disposal Tons | 2003 Disposal Tons | 2003 SB 1066 Tons | 2003 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|---|-----------------------|--------------------|--------------------|-------------------|----------------------------|----------------------------------|
| C | <u>Total Organic</u> | 33.87% | 2,209,989 | 2,240,929 | 97,130 | 2,143,799 | 33.33% |
| I/C | Food | 15.58% | 1,016,582 | 1,030,814 | 44,679 | 986,135 | 15.33% |
| I/C | Leaves and Grass | 6.85% | 446,957 | 453,214 | 19,644 | 433,570 | 6.74% |
| I/C | Prunings and Trimmings | 1.42% | 92,654 | 93,951 | 4,072 | 89,879 | 1.40% |
| I/C | Branches and Stumps | 0.12% | 7,830 | 7,940 | 344 | 7,596 | 0.12% |
| I/C | Agricultural Crop Residues | 0.00% | - | - | - | - | 0.00% |
| I/C | Manures | 0.22% | 14,355 | 14,556 | 631 | 13,925 | 0.22% |
| I/C | Textiles | 2.80% | 182,698 | 185,255 | 8,030 | 177,225 | 2.75% |
| I/C | Remainder/Composite Organic | 6.88% | 448,914 | 455,199 | 19,730 | 435,469 | 6.77% |
| C | <u>Total Construction and Demolition</u> | 16.86% | 1,100,101 | 1,115,502 | 11,601 | 1,103,901 | 17.16% |
| I/C | Concrete | 1.70% | 110,924 | 112,477 | 1,170 | 111,307 | 1.73% |
| I/C | Asphalt Paving | 0.41% | 26,752 | 27,127 | 282 | 26,845 | 0.42% |
| I/C | Asphalt Roofing | 1.60% | 104,399 | 105,860 | 1,101 | 104,759 | 1.63% |
| I/C | Lumber | 8.07% | 526,561 | 533,933 | 5,553 | 528,380 | 8.21% |
| I/C | Gypsum Board | 1.47% | 95,916 | 97,259 | 1,011 | 96,248 | 1.50% |
| I/C | Rock, Soil and Fines | 1.13% | 73,732 | 74,764 | 778 | 73,986 | 1.15% |
| I/C | Remainder/Composite Construction and Demolition | 2.48% | 161,818 | 164,083 | 1,706 | 162,377 | 2.52% |
| C | <u>Total Household Hazardous</u> | 0.20% | 13,050 | 13,233 | 138 | 13,095 | 0.20% |
| I/C | Paint | 0.06% | 3,915 | 3,970 | 41 | 3,929 | 0.06% |
| I/C | Vehicle and Equipment Fluids | 0.01% | 652 | 662 | 7 | 655 | 0.01% |
| I/C | Used Oil | 0.02% | 1,305 | 1,323 | 14 | 1,309 | 0.02% |
| I/C | Batteries | 0.06% | 3,915 | 3,970 | 41 | 3,929 | 0.06% |
| I/C | Remainder/Composite Household Hazardous | 0.05% | 3,262 | 3,308 | 35 | 3,273 | 0.05% |
| C | <u>Total Special Waste</u> | 2.50% | 163,123 | 165,407 | 1,720 | 163,687 | 1.86% |
| I/C | Ash | 0.04% | 2,610 | 2,647 | 28 | 2,619 | 0.04% |
| I/C | Sewage Solids | 0.00% | - | - | - | - | 0.00% |
| I/C | Industrial Sludge | 0.00% | - | - | - | - | 0.00% |
| I/C | Treated Medical Waste | 0.02% | 1,305 | 1,323 | 14 | 1,309 | 0.02% |
| I/C | Bulky Items | 1.77% | 115,491 | 117,108 | 1,218 | 115,890 | 1.80% |
| I/C | Tires | 0.26% | 16,965 | 17,202 | 179 | 17,023 | 0.26% |
| I/C | Remainder/Composite Special Waste | 0.41% | 26,752 | 27,127 | 282 | 26,845 | 0.42% |
| C | <u>Total Mixed Residue</u> | 1.52% | 99,179 | 100,567 | 1,046 | 99,521 | 1.55% |
| I/C | Mixed Residue | 1.52% | 99,179 | 100,567 | 1,046 | 99,521 | 1.55% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater San Francisco Area | 2004 Disposal Tons | 2004 SB 1066 Tons | 2004 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|--|--------------------|-------------------|----------------------------|----------------------------------|
| | Growth Rate Projection | 1.40% | | | |
| | Total Tonnage | 6,523,848 | 220,818 | 6,260,626 | |
| C | Total Paper | 1,681,196 | 86,738 | 1,594,458 | 25.46% |
| I/C | Uncoated Corrugated Cardboard | 303,359 | 15,651 | 287,708 | 4.60% |
| I/C | Paper Bags | 49,581 | 2,558 | 47,023 | 0.75% |
| I/C | Newspaper | 253,778 | 13,093 | 240,685 | 3.84% |
| I/C | White Ledger | 86,115 | 4,443 | 81,672 | 1.30% |
| I/C | Color Ledger | 7,829 | 404 | 7,425 | 0.12% |
| I/C | Computer Paper | 13,700 | 707 | 12,993 | 0.21% |
| I/C | Other Office Paper | 68,500 | 3,534 | 64,966 | 1.04% |
| I/C | Magazines and Catalogs | 92,639 | 4,780 | 87,859 | 1.40% |
| I/C | Phone Books and Directory | 18,267 | 942 | 17,325 | 0.28% |
| I/C | Other Miscellaneous Paper | 257,040 | 13,261 | 243,779 | 3.89% |
| I/C | Remainder/Composite Paper | 530,389 | 27,364 | 503,025 | 8.03% |
| C | Total Glass | 202,239 | 6,795 | 195,444 | 3.11% |
| I/C | Clear Glass Bottles and Containers | 99,162 | 3,330 | 95,832 | 1.53% |
| I/C | Green Glass Bottles and Containers | 32,619 | 1,095 | 31,524 | 0.50% |
| I/C | Brown Glass Bottles and Containers | 26,748 | 894 | 25,854 | 0.41% |
| I/C | Other Colored Glass Bottles and Containers | 1,305 | 45 | 1,260 | 0.02% |
| I/C | Flat Glass | 11,091 | 380 | 10,711 | 0.17% |
| I/C | Remainder/Composite Glass | 31,314 | 1,051 | 30,263 | 0.48% |
| C | Total Metal | 501,684 | 16,857 | 484,827 | 7.74% |
| I/C | Tin/Steel Cans | 58,715 | 1,965 | 56,750 | 0.91% |
| I/C | Major Appliances | 8,481 | 290 | 8,191 | 0.13% |
| I/C | Other Ferrous | 189,844 | 6,386 | 183,458 | 2.93% |
| I/C | Aluminum Cans | 13,048 | 447 | 12,601 | 0.20% |
| I/C | Other Non-Ferrous | 20,224 | 670 | 19,554 | 0.31% |
| I/C | Remainder/Composite Metal | 211,373 | 7,100 | 204,273 | 3.26% |
| C | Total Plastics | 566,922 | 7,490 | 559,432 | 8.93% |
| I/C | HDPE Containers | 51,538 | 681 | 50,857 | 0.81% |
| I/C | PETE Containers | 30,010 | 396 | 29,614 | 0.47% |
| I/C | Miscellaneous Plastic Containers | 33,272 | 440 | 32,832 | 0.52% |
| I/C | Film Plastic | 242,687 | 3,206 | 239,481 | 3.83% |
| I/C | Durable Plastic Items | 111,558 | 1,474 | 110,084 | 1.76% |
| I/C | Remainder/Composite Plastic | 97,858 | 1,293 | 96,565 | 1.54% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater San Francisco Area | 2004 Disposal Tons | 2004 SB 1066 Tons | 2004 Post-SB 1066 Tons End | Redistribute % Waste Composition |
|-------|---|--------------------|-------------------|----------------------------|----------------------------------|
| C | <u>Total Organic</u> | 2,174,399 | 57,410 | 2,116,989 | 33.81% |
| I/C | Food | 1,000,106 | 26,405 | 973,701 | 15.55% |
| I/C | Leaves and Grass | 439,707 | 11,609 | 428,098 | 6.84% |
| I/C | Prunings and Trimmings | 91,334 | 2,411 | 88,923 | 1.42% |
| I/C | Branches and Stumps | 7,829 | 207 | 7,622 | 0.12% |
| I/C | Agricultural Crop Residues | - | - | - | 0.00% |
| I/C | Manures | 14,352 | 379 | 13,973 | 0.22% |
| I/C | Textiles | 179,406 | 4,737 | 174,669 | 2.79% |
| I/C | Remainder/Composite Organic | 441,665 | 11,661 | 430,004 | 6.87% |
| C | <u>Total Construction and Demolition</u> | 1,119,492 | 37,615 | 1,081,877 | 17.28% |
| I/C | Concrete | 112,863 | 3,793 | 109,070 | 1.74% |
| I/C | Asphalt Paving | 27,400 | 915 | 26,485 | 0.42% |
| I/C | Asphalt Roofing | 106,339 | 3,570 | 102,769 | 1.64% |
| I/C | Lumber | 535,608 | 18,004 | 517,604 | 8.27% |
| I/C | Gypsum Board | 97,858 | 3,280 | 94,578 | 1.51% |
| I/C | Rock, Soil and Fines | 75,024 | 2,521 | 72,503 | 1.16% |
| I/C | Remainder/Composite Construction and Demolition | 164,401 | 5,533 | 158,868 | 2.54% |
| C | <u>Total Household Hazardous</u> | 13,048 | 438 | 12,610 | 0.20% |
| I/C | Paint | 3,914 | 131 | 3,783 | 0.06% |
| I/C | Vehicle and Equipment Fluids | 652 | 22 | 630 | 0.01% |
| I/C | Used Oil | 1,305 | 44 | 1,261 | 0.02% |
| I/C | Batteries | 3,914 | 131 | 3,783 | 0.06% |
| I/C | Remainder/Composite Household Hazardous | 3,262 | 109 | 3,153 | 0.05% |
| C | <u>Total Special Waste</u> | 121,344 | 4,077 | 117,267 | 1.89% |
| I/C | Ash | 2,610 | 65 | 2,545 | 0.04% |
| I/C | Sewage Solids | - | - | - | 0.00% |
| I/C | Industrial Sludge | - | - | - | 0.00% |
| I/C | Treated Medical Waste | 1,305 | 33 | 1,272 | 0.02% |
| I/C | Bulky Items | 117,429 | 2,887 | 114,542 | 1.83% |
| I/C | Tires | 16,962 | 424 | 16,538 | 0.26% |
| I/C | Remainder/Composite Special Waste | 27,400 | 669 | 26,731 | 0.43% |
| C | <u>Total Mixed Residue</u> | 101,120 | 3,398 | 97,722 | 1.56% |
| I/C | Mixed Residue | 101,120 | 3,398 | 97,722 | 1.56% |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater San Francisco Area | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| | Growth Rate Projection | 1.40% | 1.02% | 1.02% | 1.02% | 1.02% | 1.02% |
| | Total Tonnage | 6,348,275 | 6,413,027 | 6,478,440 | 6,544,520 | 6,611,274 | 6,678,709 |
| C | Total Paper | 1,616,271 | 1,632,757 | 1,649,411 | 1,666,235 | 1,683,230 | 1,700,399 |
| I/C | Uncoated Corrugated Cardboard | 292,021 | 294,999 | 298,008 | 301,048 | 304,119 | 307,221 |
| I/C | Paper Bags | 47,612 | 48,098 | 48,588 | 49,084 | 49,585 | 50,090 |
| I/C | Newspaper | 243,774 | 246,260 | 248,772 | 251,310 | 253,873 | 256,462 |
| I/C | White Ledger | 82,528 | 83,369 | 84,220 | 85,079 | 85,947 | 86,823 |
| I/C | Color Ledger | 7,618 | 7,696 | 7,774 | 7,853 | 7,934 | 8,014 |
| I/C | Computer Paper | 13,331 | 13,467 | 13,605 | 13,743 | 13,884 | 14,025 |
| I/C | Other Office Paper | 66,022 | 66,695 | 67,376 | 68,063 | 68,757 | 69,459 |
| I/C | Magazines and Catalogs | 88,876 | 89,782 | 90,698 | 91,623 | 92,558 | 93,502 |
| I/C | Phone Books and Directory | 17,775 | 17,956 | 18,140 | 18,325 | 18,512 | 18,700 |
| I/C | Other Miscellaneous Paper | 246,948 | 249,467 | 252,011 | 254,582 | 257,179 | 259,802 |
| I/C | Remainder/Composite Paper | 509,766 | 514,966 | 520,219 | 525,525 | 530,885 | 536,300 |
| C | Total Glass | 197,431 | 199,445 | 201,479 | 203,535 | 205,611 | 207,708 |
| I/C | Clear Glass Bottles and Containers | 97,129 | 98,119 | 99,120 | 100,131 | 101,152 | 102,184 |
| I/C | Green Glass Bottles and Containers | 31,741 | 32,065 | 32,392 | 32,723 | 33,056 | 33,394 |
| I/C | Brown Glass Bottles and Containers | 26,028 | 26,293 | 26,562 | 26,833 | 27,106 | 27,383 |
| I/C | Other Colored Glass Bottles and Containers | 1,270 | 1,283 | 1,296 | 1,309 | 1,322 | 1,336 |
| I/C | Flat Glass | 10,792 | 10,902 | 11,013 | 11,126 | 11,239 | 11,354 |
| I/C | Remainder/Composite Glass | 30,472 | 30,783 | 31,097 | 31,414 | 31,734 | 32,058 |
| C | Total Metal | 491,356 | 496,368 | 501,431 | 506,546 | 511,713 | 516,932 |
| I/C | Tin/Steel Cans | 57,769 | 58,359 | 58,954 | 59,555 | 60,163 | 60,776 |
| I/C | Major Appliances | 8,253 | 8,337 | 8,422 | 8,508 | 8,595 | 8,682 |
| I/C | Other Ferrous | 186,004 | 187,902 | 189,818 | 191,754 | 193,710 | 195,686 |
| I/C | Aluminum Cans | 12,697 | 12,826 | 12,957 | 13,089 | 13,223 | 13,357 |
| I/C | Other Non-Ferrous | 19,680 | 19,880 | 20,083 | 20,288 | 20,495 | 20,704 |
| I/C | Remainder/Composite Metal | 206,954 | 209,065 | 211,197 | 213,351 | 215,528 | 217,726 |
| C | Total Plastics | 566,901 | 572,683 | 578,525 | 584,426 | 590,387 | 596,409 |
| I/C | HDPE Containers | 51,421 | 51,946 | 52,475 | 53,011 | 53,551 | 54,098 |
| I/C | PETE Containers | 29,837 | 30,141 | 30,449 | 30,759 | 31,073 | 31,390 |
| I/C | Miscellaneous Plastic Containers | 33,011 | 33,348 | 33,688 | 34,032 | 34,379 | 34,729 |
| I/C | Film Plastic | 243,139 | 245,619 | 248,124 | 250,655 | 253,212 | 255,795 |
| I/C | Durable Plastic Items | 111,730 | 112,869 | 114,021 | 115,184 | 116,358 | 117,545 |
| I/C | Remainder/Composite Plastic | 97,763 | 98,761 | 99,768 | 100,786 | 101,814 | 102,852 |
| | | | - | - | - | - | - |

Appendix F

Calculation of Individual Materials Disposed

| I/R/C | Greater San Francisco Area | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| C | Total Organic | 2,146,352 | 2,168,244 | 2,190,361 | 2,212,702 | 2,235,272 | 2,258,072 |
| I/C | Food | 987,157 | 997,226 | 1,007,397 | 1,017,673 | 1,028,053 | 1,038,539 |
| I/C | Leaves and Grass | 434,222 | 438,651 | 443,125 | 447,645 | 452,211 | 456,824 |
| I/C | Prunings and Trimmings | 90,146 | 91,065 | 91,994 | 92,932 | 93,880 | 94,838 |
| I/C | Branchs and Stumps | 7,618 | 7,696 | 7,774 | 7,853 | 7,934 | 8,014 |
| I/C | Agricultural Crop Residues | - | - | - | - | - | - |
| I/C | Manures | 13,966 | 14,109 | 14,253 | 14,398 | 14,545 | 14,693 |
| I/C | Textiles | 177,117 | 178,923 | 180,748 | 182,592 | 184,455 | 186,336 |
| I/C | Remainder/Composite Organic | 436,126 | 440,575 | 445,069 | 449,609 | 454,195 | 458,827 |
| C | Total Construction and Demolition | 1,096,982 | 1,108,171 | 1,119,474 | 1,130,893 | 1,142,428 | 1,154,081 |
| I/C | Concrete | 110,460 | 111,587 | 112,725 | 113,875 | 115,036 | 116,210 |
| I/C | Asphalt Paving | 26,663 | 26,935 | 27,209 | 27,487 | 27,767 | 28,051 |
| I/C | Asphalt Roofing | 104,112 | 105,174 | 106,246 | 107,330 | 108,425 | 109,531 |
| I/C | Lumber | 525,002 | 530,357 | 535,767 | 541,232 | 546,752 | 552,329 |
| I/C | Gypsum Board | 95,859 | 96,837 | 97,824 | 98,822 | 99,830 | 100,849 |
| I/C | Rock, Soil and Fines | 73,640 | 74,391 | 75,150 | 75,916 | 76,691 | 77,473 |
| I/C | Remainder/Composite Construction and Demolition | 161,246 | 162,891 | 164,552 | 166,231 | 167,926 | 169,639 |
| C | Total Household Hazardous | 12,697 | 12,826 | 12,957 | 13,089 | 13,223 | 13,357 |
| I/C | Paint | 3,809 | 3,848 | 3,887 | 3,927 | 3,967 | 4,007 |
| I/C | Vehicle and Equipment Fluids | 635 | 641 | 648 | 654 | 661 | 668 |
| I/C | Used Oil | 1,270 | 1,283 | 1,296 | 1,309 | 1,322 | 1,336 |
| I/C | Batteries | 3,809 | 3,848 | 3,887 | 3,927 | 3,967 | 4,007 |
| I/C | Remainder/Composite Household Hazardous | 3,174 | 3,207 | 3,239 | 3,272 | 3,306 | 3,339 |
| C | Total Special Waste | 119,982 | 121,206 | 122,443 | 123,691 | 124,953 | 126,228 |
| I/C | Ash | 2,539 | 2,565 | 2,591 | 2,618 | 2,645 | 2,671 |
| I/C | Sewage Solids | - | - | - | - | - | - |
| I/C | Industrial Sludge | - | - | - | - | - | - |
| I/C | Treated Medical Waste | 1,270 | 1,283 | 1,296 | 1,309 | 1,322 | 1,336 |
| I/C | Bulky Items | 116,173 | 117,358 | 118,555 | 119,765 | 120,986 | 122,220 |
| I/C | Tires | 16,506 | 16,674 | 16,844 | 17,016 | 17,189 | 17,365 |
| I/C | Remainder/Composite Special Waste | 27,298 | 27,576 | 27,857 | 28,141 | 28,428 | 28,718 |
| C | Total Mixed Residue | 99,033 | 100,043 | 101,064 | 102,095 | 103,136 | 104,188 |
| I/C | Mixed Residue | 99,033 | 100,043 | 101,064 | 102,095 | 103,136 | 104,188 |

Appendix F

Conversion Technology - Required Incoming Tonnage, Added Revenue and Jobs

Greater Los Angeles Area

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| R | Acid Hydrolysis | 630,176 | 629,260 | 629,260 | 629,260 | 1,048,766 | 1,048,766 | 1,048,766 | 1,048,766 |
| R | Gasification | 737,681 | 734,863 | 918,579 | 918,579 | 918,579 | 918,579 | 918,579 | 1,102,294 |
| C | Total | 1,367,857 | 1,364,123 | 1,547,839 | 1,547,839 | 1,967,345 | 1,967,345 | 1,967,345 | 2,151,060 |

San Francisco Bay Area

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| R | Acid Hydrolysis | 641,780 | 643,525 | 643,525 | 643,525 | 1,072,542 | 1,072,542 | 1,072,542 | 1,072,542 |
| R | Gasification | 754,643 | 754,475 | 943,093 | 943,093 | 943,093 | 943,093 | 943,093 | 1,131,712 |
| C | Total | 1,396,423 | 1,398,000 | 1,586,618 | 1,586,618 | 2,015,635 | 2,015,635 | 2,015,635 | 2,204,254 |

Additional CT Jobs Generated (based on 0.8 jobs per 1,000 annual ton through-put)

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| R | Greater Los Angeles Area | 1,094 | 1,091 | 1,238 | 1,238 | 1,574 | 1,574 | 1,574 | 1,721 |
| R | San Francisco Bay Area | 1,117 | 1,118 | 1,269 | 1,269 | 1,613 | 1,613 | 1,613 | 1,763 |

CT Revenue Generated (based on CT tip fee assumed in "Inputs" increased estimated change in each areas's CPI)

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| R | Greater Los Angeles Area | \$ 54,714,280 | \$ 55,929,043 | \$ 65,055,673 | \$ 66,680,904 | \$ 86,877,955 | \$ 89,042,035 | \$ 91,265,135 | \$ 102,282,903 |
| R | San Francisco Bay Area | \$ 55,856,920 | \$ 57,877,200 | \$ 67,986,581 | \$ 70,366,508 | \$ 92,517,647 | \$ 95,762,819 | \$ 99,108,773 | \$ 112,174,486 |

Appendix F

Conversion Technology Facility Configurations - Both Areas

Facility Configurations, 2003 to 2010, Tons Per Day - At Full Capacity

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| I | Acid Hydrolysis | 1,500 | 1,500 | 1,500 | 1,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| I | Gasification | 2,000 | 2,000 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 3,000 |
| I | Catalytic Cracking | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| C | Total | 3,550 | 3,550 | 4,050 | 4,050 | 5,050 | 5,050 | 5,050 | 5,550 |

Facility Configurations, 2003 to 2010, Tons Per Year - At Full Capacity (90% capacity, 329 operating days per year*)

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| C | Acid Hydrolysis | 493,500 | 493,500 | 493,500 | 493,500 | 822,500 | 822,500 | 822,500 | 822,500 |
| C | Gasification | 658,000 | 658,000 | 822,500 | 822,500 | 822,500 | 822,500 | 822,500 | 987,000 |
| C | Catalytic Cracking | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 |
| C | Total | 1,167,950 | 1,167,950 | 1,332,450 | 1,332,450 | 1,661,450 | 1,661,450 | 1,661,450 | 1,825,950 |

Facility Configurations, 2003 to 2010, Tons Per Year - At Capacities Assumed for This Model Run (90% capacity, 329 operating days per year*)

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| C | Acid Hydrolysis - LA | 493,500 | 493,500 | 493,500 | 493,500 | 822,500 | 822,500 | 822,500 | 822,500 |
| C | Acid Hydrolysis - SF | 493,500 | 493,500 | 493,500 | 493,500 | 822,500 | 822,500 | 822,500 | 822,500 |
| C | Gasification - LA | 658,000 | 658,000 | 822,500 | 822,500 | 822,500 | 822,500 | 822,500 | 987,000 |
| C | Gasification - SF | 658,000 | 658,000 | 822,500 | 822,500 | 822,500 | 822,500 | 822,500 | 987,000 |
| C | Catalytic Cracking | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 | 16,450 |
| C | Total | 2,319,450 | 2,319,450 | 2,648,450 | 2,648,450 | 3,306,450 | 3,306,450 | 3,306,450 | 3,635,450 |

* In order to represent the greatest likely effect from conversion technologies, tonnage estimates are for maximum capacity with 10% down time.

Appendix F

Additional Diversion From Pre-Sorting Materials For Conversion Technologies Greater Los Angeles Area

| I/R/C | Acid Hydrolysis | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|--------|--------|--------|--------|---------|---------|---------|---------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | 36,109 | 36,812 | 36,812 | 36,812 | 61,353 | 61,353 | 61,353 | 61,353 |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 53,738 | 51,962 | 51,962 | 51,962 | 86,602 | 86,602 | 86,602 | 86,602 |
| C | Total | 89,847 | 88,774 | 88,774 | 88,774 | 147,955 | 147,955 | 147,955 | 147,955 |

| I/R/C | Gasification | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | - | - | - | - | - | - | - | - |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 62,906 | 60,681 | 75,852 | 75,852 | 75,852 | 75,852 | 75,852 | 91,022 |
| C | Total | 62,906 | 60,681 | 75,852 | 75,852 | 75,852 | 75,852 | 75,852 | 91,022 |

San Francisco Bay Area

| I/R/C | Acid Hydrolysis | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|--------|---------|---------|---------|---------|---------|---------|---------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | 34,784 | 35,651 | 35,651 | 35,651 | 59,419 | 59,419 | 59,419 | 59,419 |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 64,836 | 64,964 | 64,964 | 64,964 | 108,273 | 108,273 | 108,273 | 108,273 |
| C | Total | 99,620 | 100,615 | 100,615 | 100,615 | 167,692 | 167,692 | 167,692 | 167,692 |

| I/R/C | Gasification | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|--------------|--------|--------|--------|--------|--------|--------|--------|---------|
| R | Paper | - | - | - | - | - | - | - | - |
| R | Plastics | - | - | - | - | - | - | - | - |
| R | Organics | - | - | - | - | - | - | - | - |
| R | Other | 76,238 | 76,164 | 95,206 | 95,206 | 95,206 | 95,206 | 95,206 | 114,246 |
| C | Total | 76,238 | 76,164 | 95,206 | 95,206 | 95,206 | 95,206 | 95,206 | 114,246 |

Appendix F

Tons Disposed From Tonnage Entering Conversion Technology Facility

Greater Los Angeles Area

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|--------|--------|--------|--------|---------|---------|---------|---------|
| R | Acid Hydrolysis | 54,617 | 54,711 | 54,711 | 54,711 | 91,186 | 91,186 | 91,186 | 91,186 |
| R | Gasification | 21,665 | 20,903 | 26,129 | 26,129 | 26,129 | 26,129 | 26,129 | 31,355 |
| C | Total | 76,282 | 75,614 | 80,840 | 80,840 | 117,315 | 117,315 | 117,315 | 122,541 |

San Francisco Bay Area

| I/R/C | Technology | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|-----------------|--------|--------|--------|--------|---------|---------|---------|---------|
| R | Acid Hydrolysis | 57,015 | 57,930 | 57,930 | 57,930 | 96,550 | 96,550 | 96,550 | 96,550 |
| R | Gasification | 26,140 | 26,120 | 32,650 | 32,650 | 32,650 | 32,650 | 32,650 | 39,180 |
| C | Total | 83,155 | 84,050 | 90,580 | 90,580 | 129,200 | 129,200 | 129,200 | 135,730 |

**Material Processing at Acid Hydrolysis Facility
Greater Los Angeles Area**

| I/R/C | Acid Hydrolysis Process - Greater Los Angeles Area | % of Waste Stream | % of Waste Stream Directed to CT | 2003 Tons | 2004 Tons | 2005 Tons | 2006 Tons | 2007-2010 Tons |
|--|--|-------------------|----------------------------------|-----------|-----------|-----------|-----------|----------------|
| | | | | | | | | |
| C | Total Incoming Tonnage Required | | | 630,176 | 629,260 | 629,260 | 629,260 | 1,048,766 |
| C | Minus Tons Recycled Due to Pre- Processing | | | 89,847 | 88,774 | 88,774 | 88,774 | 147,955 |
| C | Minus Tons Disposed Due to Pre-Processing | | | 46,828 | 46,987 | 46,987 | 46,987 | 78,312 |
| R | Total Incoming Tonnage Through CT Process | | | 493,500 | 493,500 | 493,500 | 493,500 | 822,500 |
| C | Tons Disposed After CT Processing | | | 7,789 | 7,724 | 7,724 | 7,724 | 12,874 |
| C/C | Total Percent Entering CT, 2003 | | 78.31% | 493,500 | | | | |
| C/C | Total Percent Entering CT, 2004-2010 | | 78.43% | 493,500 | 493,500 | 493,500 | 493,500 | 822,500 |
| Paper | | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 27.30% | 32.48% | 204,681 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 26.61% | 31.51% | | 198,280 | 198,280 | 198,280 | 330,466 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 32.48% | 204,681 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 31.51% | | 198,280 | 198,280 | 198,280 | 330,466 |
| Plastic | | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 9.63% | 11.46% | 72,218 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 9.88% | 11.70% | | 73,623 | 73,623 | 73,623 | 122,706 |
| I/C | Portion diverted through sort | | 50.00% | 36,109 | 36,812 | 36,812 | 36,812 | 61,353 |
| I/C | Portion disposed through sort | | 45.00% | 32,498 | 33,131 | 33,131 | 33,131 | 55,218 |
| I/C | Inert residue disposed post-CT | | 5.00% | 3,611 | 3,681 | 3,681 | 3,681 | 6,135 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.57% | 3,611 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.59% | | 3,681 | 3,681 | 3,681 | 6,135 |
| Organics | | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 35.97% | 42.80% | 269,715 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 37.11% | 43.94% | | 276,497 | 276,497 | 276,497 | 460,828 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 42.80% | 269,715 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 43.94% | | 276,497 | 276,497 | 276,497 | 460,828 |
| Mixed Residue | | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 1.59% | 1.89% | 11,910 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 1.55% | 1.84% | | 11,578 | 11,578 | 11,578 | 19,297 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 5.00% | 596 | 579 | 579 | 579 | 965 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 1.89% | 11,910 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 1.84% | | 11,578 | 11,578 | 11,578 | 19,297 |
| Glass | | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 3.19% | 3.80% | 23,947 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 3.11% | 3.68% | | 23,157 | 23,157 | 23,157 | 38,595 |
| I/C | Portion diverted through sort | | 75.00% | 17,960 | 17,368 | 17,368 | 17,368 | 28,946 |
| I/C | Portion disposed through sort | | 20.00% | 4,789 | 4,631 | 4,631 | 4,631 | 7,719 |
| I/C | Inert residue disposed post-CT | | 5.00% | 1,197 | 1,158 | 1,158 | 1,158 | 1,930 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.19% | 1,197 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.18% | | 1,158 | 1,158 | 1,158 | 1,930 |
| Metal | | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 6.36% | 7.57% | 47,704 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 6.19% | 7.33% | | 46,125 | 46,125 | 46,125 | 76,875 |
| I/C | Portion diverted through sort | | 75.00% | 35,778 | 34,594 | 34,594 | 34,594 | 57,656 |
| I/C | Portion disposed through sort | | 20.00% | 9,541 | 9,225 | 9,225 | 9,225 | 15,375 |
| I/C | Inert residue disposed post-CT | | 5.00% | 2,385 | 2,306 | 2,306 | 2,306 | 3,844 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.38% | 2,385 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.37% | | 2,306 | 2,306 | 2,306 | 3,844 |
| C | % of Waste Stream Total - 2003 | 84.04% | 100.00% | | | | | |
| C | % of Waste Stream Total - 2004 to 2010 | 84.45% | 100.00% | | | | | |
| Construction and Demolition (1) | | | | | | | | |
| I | Percent of Waste Stream, 2003 | 13.10% | | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 12.76% | | | | | | |
| | Portion Diverted through sort | 0.00% | | | | | | |
| | Portion disposed through sort | | | | | | | |
| | Portion disposed post-CT | | | | | | | |
| | Percent of Waste Stream Entering CT, 2003 | | | | | | | |
| | Percent of Waste Stream Entering CT, 2004-2010 | | | | | | | |
| Household Hazardous Waste (1) | | | | | | | | |
| I | Percent of Waste Stream, 2003 | 0.22% | | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 0.22% | | | | | | |
| | Portion Diverted through sort | | | | | | | |
| | Portion disposed through sort | | | | | | | |
| | Portion disposed post-CT | | | | | | | |
| | Percent of Waste Stream Entering CT, 2003 | | | | | | | |
| | Percent of Waste Stream Entering CT, 2004-2010 | | | | | | | |
| Special Waste (1) | | | | | | | | |
| I | Percent of Waste Stream, 2003 | 2.66% | | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 2.59% | | | | | | |
| | Portion Diverted through sort | | | | | | | |
| | Portion disposed through sort | | | | | | | |
| | Portion disposed post-CT | | | | | | | |
| | Percent of Waste Stream Entering CT, 2003 | | | | | | | |
| | Percent of Waste Stream Entering CT, 2004-2010 | | | | | | | |

(1) Loads of these materials are not expected to be brought to conversion technology facilities.

Appendix F

Material Processing at Acid Hydrolysis Facility
San Francisco Bay Area

| I/R/C | Acid Hydrolysis Process - San Francisco Bay Area | % of Waste Stream | % of Waste Stream Directed to CT | 2003 Tons | 2004 Tons | 2005 Tons | 2006 Tons | 2007-2010 Tons |
|-------|--|-------------------|----------------------------------|-----------|-----------|-----------|-----------|----------------|
| C | Total Incoming Tonnage Required | | | 641,780 | 643,525 | 643,525 | 643,525 | 1,072,542 |
| C | Minus Tons Recycled Due to Pre- Processing | | | 99,620 | 100,615 | 100,615 | 100,615 | 167,692 |
| C | Minus Tons Disposed Due to Pre-Processing | | | 48,595 | 49,410 | 49,410 | 49,410 | 82,350 |
| R | Total Incoming Tonnage Through CT Process | | | 493,500 | 493,500 | 493,500 | 493,500 | 822,500 |
| C | Tons Disposed After CT Processing | | | 8,420 | 8,520 | 8,520 | 8,520 | 14,200 |
| C/C | Total Percent Entering CT, 2003 | 76.90% | | 493,500 | | | | |
| C/C | Total Percent Entering CT, 2004-2010 | 76.69% | | | 493,500 | 493,500 | 493,500 | 822,500 |
| | Paper | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 25.77% | 32.16% | 206,396 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 25.46% | 31.58% | | 203,225 | 203,225 | 203,225 | 338,709 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | 32.16% | | 206,396 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | 31.58% | | | 203,225 | 203,225 | 203,225 | 338,709 |
| | Plastic | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 8.69% | 10.84% | 69,569 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 8.93% | 11.08% | | 71,303 | 71,303 | 71,303 | 118,838 |
| I/C | Portion diverted through sort | | 50.00% | 34,784 | 35,651 | 35,651 | 35,651 | 59,419 |
| I/C | Portion disposed through sort | | 45.00% | 31,306 | 32,086 | 32,086 | 32,086 | 53,477 |
| I/C | Inert residue disposed post-CT | | 5.00% | 3,478 | 3,565 | 3,565 | 3,565 | 5,942 |
| C/C | Percent of Waste Stream Entering CT, 2003 | 0.54% | | 3,478 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | 0.55% | | | 3,565 | 3,565 | 3,565 | 5,942 |
| | Organics | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 33.33% | 41.59% | 266,916 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 33.81% | 41.94% | | 269,894 | 269,894 | 269,894 | 449,824 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | 41.59% | | 266,916 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | 41.94% | | | 269,894 | 269,894 | 269,894 | 449,824 |
| | Mixed Residue | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 1.55% | 1.93% | 12,386 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 1.56% | 1.94% | | 12,484 | 12,484 | 12,484 | 20,807 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 5.00% | 619 | 624 | 624 | 624 | 1,040 |
| C/C | Percent of Waste Stream Entering CT, 2003 | 1.93% | | 12,386 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | 1.94% | | | 12,484 | 12,484 | 12,484 | 20,807 |
| | Glass | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 3.10% | 3.87% | 24,837 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 3.11% | 3.86% | | 24,840 | 24,840 | 24,840 | 41,400 |
| I/C | Portion diverted through sort | | 75.00% | 18,628 | 18,630 | 18,630 | 18,630 | 31,050 |
| I/C | Portion disposed through sort | | 20.00% | 4,967 | 4,968 | 4,968 | 4,968 | 8,280 |
| I/C | Inert residue disposed post-CT | | 5.00% | 1,242 | 1,242 | 1,242 | 1,242 | 2,070 |
| C/C | Percent of Waste Stream Entering CT, 2003 | 0.19% | | 1,242 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | 0.19% | | | 1,242 | 1,242 | 1,242 | 2,070 |
| | Metal | | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 7.69% | 9.60% | 61,611 | | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 7.74% | 9.60% | | 61,778 | 61,778 | 61,778 | 102,964 |
| I/C | Portion diverted through sort | | 75.00% | 46,208 | 46,334 | 46,334 | 46,334 | 77,223 |
| I/C | Portion disposed through sort | | 20.00% | 12,322 | 12,356 | 12,356 | 12,356 | 20,593 |
| I/C | Inert residue disposed post-CT | | 5.00% | 3,081 | 3,089 | 3,089 | 3,089 | 5,148 |
| C/C | Percent of Waste Stream Entering CT, 2003 | 0.48% | | 3,081 | | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | 0.48% | | | 3,089 | 3,089 | 3,089 | 5,148 |
| C | % of Waste Stream Total - 2003 | 80.13% | 99.99% | | | | | |
| C | % of Waste Stream Total - 2004 to 2010 | 80.61% | 100.00% | | | | | |
| | Construction and Demolition (1) | | | | | | | |
| I | Percent of Waste Stream, 2003 | 17.16% | | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 17.28% | | | | | | |
| | Portion Diverted through sort | | | | | | | |
| | Portion disposed through sort | | | | | | | |
| | Portion disposed post-CT | | | | | | | |
| | Percent of Waste Stream Entering CT, 2003 | | | | | | | |
| | Percent of Waste Stream Entering CT, 2004-2010 | | | | | | | |
| | Household Hazardous Waste (1) | | | | | | | |
| I | Percent of Waste Stream, 2003 | 0.20% | | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 0.20% | | | | | | |
| | Portion Diverted through sort | | | | | | | |
| | Portion disposed through sort | | | | | | | |
| | Portion disposed post-CT | | | | | | | |
| | Percent of Waste Stream Entering CT, 2003 | | | | | | | |
| | Percent of Waste Stream Entering CT, 2004-2010 | | | | | | | |
| | Special Waste (1) | | | | | | | |
| I | Percent of Waste Stream, 2003 | 1.86% | | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 1.89% | | | | | | |
| | Portion Diverted through sort | | | | | | | |
| | Portion disposed through sort | | | | | | | |
| | Portion disposed post-CT | | | | | | | |
| | Percent of Waste Stream Entering CT, 2003 | | | | | | | |
| | Percent of Waste Stream Entering CT, 2004-2010 | | | | | | | |

(1) Loads of these materials are not expected to be brought to conversion technology facilities.

Appendix F

Material Processing at Gasification Facility
Greater Los Angeles Area

| I/R/C | Gasification - Greater Los Angeles Area | % of Waste Stream | % of Waste Stream Directed to CT | 2003 Tons | 2004 Tons | 2005-2009 Tons | 2010 Tons |
|-------|--|-------------------|----------------------------------|-----------|-----------|----------------|-----------|
| C | Total Incoming Tonnage Required | | | 737,681 | 734,863 | 918,579 | 1,102,294 |
| C | Minus Tons Recycled Due to Pre- Processing | | | 62,906 | 60,681 | 75,852 | 91,022 |
| C | Minus Tons Disposed Due to Pre-Processing | | | 16,774 | 16,182 | 20,227 | 24,273 |
| R | Total Incoming Tonnage Through CT Process | | | 658,000 | 658,000 | 822,500 | 987,000 |
| C | Tons Disposed After CT Processing | | | 4,891 | 4,721 | 5,902 | 7,082 |
| C/C | Total Percent Entering CT, 2003 | | 89.20% | 658,000 | | | |
| C/C | Total Percent Entering CT, 2004-2010 | | 89.54% | | 658,000 | 822,500 | 987,000 |
| | Paper | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 27.30% | 32.48% | 239,599 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 26.61% | 31.51% | | 231,555 | 289,444 | 347,333 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 32.48% | 239,599 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 31.51% | | 231,555 | 289,444 | 347,333 |
| | Plastic | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 9.63% | 11.46% | 84,538 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 9.88% | 11.70% | | 85,979 | 107,474 | 128,968 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 11.46% | 84,538 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 11.70% | | 85,979 | 107,474 | 128,968 |
| | Organics | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 35.97% | 42.80% | 315,727 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 37.11% | 43.94% | | 322,899 | 403,624 | 484,348 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 42.80% | 315,727 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 43.94% | | 322,899 | 403,624 | 484,348 |
| | Mixed Residue | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 1.59% | 1.89% | 13,942 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 1.55% | 1.84% | | 13,521 | 16,902 | 20,282 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 5.00% | 697 | 676 | 845 | 1,014 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 1.89% | 13,942 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 1.84% | | 13,521 | 16,902 | 20,282 |
| | Glass | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 3.19% | 3.80% | 28,032 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 3.11% | 3.68% | | 27,043 | 33,804 | 40,564 |
| I/C | Portion diverted through sort | | 75.00% | 21,024 | 20,282 | 25,353 | 30,423 |
| I/C | Portion disposed through sort | | 20.00% | 5,606 | 5,409 | 6,761 | 8,113 |
| I/C | Inert residue disposed post-CT | | 5.00% | 1,402 | 1,352 | 1,690 | 2,028 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.19% | 1,402 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.18% | | 1,352 | 1,690 | 2,028 |
| | Metal | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 6.36% | 7.57% | 55,842 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 6.19% | 7.33% | | 53,865 | 67,332 | 80,798 |
| I/C | Portion diverted through sort | | 75.00% | 41,882 | 40,399 | 50,499 | 60,599 |
| I/C | Portion disposed through sort | | 20.00% | 11,168 | 10,773 | 13,466 | 16,160 |
| I/C | Inert residue disposed post-CT | | 5.00% | 2,792 | 2,693 | 3,367 | 4,040 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.38% | 2,792 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.37% | | 2,693 | 3,367 | 4,040 |
| C | % of Waste Stream Total - 2003 | 84.04% | 100.00% | | | | |
| C | % of Waste Stream Total - 2004 to 2010 | 84.45% | 100.00% | | | | |
| | Construction and Demolition (I) | | | | | | |
| I | Percent of Waste Stream, 2003 | 13.10% | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 12.76% | | | | | |
| | Household Hazardous Waste (I) | | | | | | |
| I | Percent of Waste Stream, 2003 | 0.22% | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 0.22% | | | | | |
| | Special Waste (I) | | | | | | |
| I | Percent of Waste Stream, 2003 | 2.66% | | | | | |
| I | Percent of Waste Stream, 2004-2010 | 2.59% | | | | | |

(I) Loads of these materials are not expected to be brought to conversion technology facilities.

Appendix F

Material Processing at Gasification Facility
San Francisco Bay Area

| I/R/C | Gasification - San Francisco Bay Area | % of Waste Stream | % of Waste Stream Directed to CT | 2003 Tons | 2004 Tons | 2005-2009 Tons | 2010 Tons |
|-------|--|-------------------|----------------------------------|-----------|-----------|----------------|-----------|
| C | Total Incoming Tonnage Required | | | 754,643 | 754,475 | 943,093 | 1,131,712 |
| C | Minus Tons Recycled Due to Pre- Processing | | | 76,238 | 76,164 | 95,206 | 114,246 |
| C | Minus Tons Disposed Due to Pre-Processing | | | 20,330 | 20,311 | 25,388 | 30,466 |
| R | Total Incoming Tonnage Through CT Process | | | 658,000 | 658,000 | 822,500 | 987,000 |
| C | Tons Disposed After CT Processing | | | 5,810 | 5,809 | 7,262 | 8,714 |
| C/C | Total Percent Entering CT, 2003 | | 87.19% | 658,000 | | | |
| C/C | Total Percent Entering CT, 2004-2010 | | 87.21% | | 658,000 | 822,500 | 987,000 |
| | Paper | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 25.77% | 32.16% | 242,693 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 25.46% | 31.58% | | 238,263 | 297,829 | 357,395 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 32.16% | 242,693 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 31.58% | | 238,263 | 297,829 | 357,395 |
| | Plastic | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 8.69% | 10.84% | 81,803 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 8.93% | 11.08% | | 83,596 | 104,495 | 125,394 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 10.84% | 81,803 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 11.08% | | 83,596 | 104,495 | 125,394 |
| | Organics | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 33.33% | 41.59% | 313,856 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 33.81% | 41.94% | | 316,427 | 395,533 | 474,640 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 0.00% | 0 | 0 | 0 | 0 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 41.59% | 313,856 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 41.94% | | 316,427 | 395,533 | 474,640 |
| | Mixed Residue | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 1.55% | 1.93% | 14,565 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 1.56% | 1.94% | | 14,637 | 18,296 | 21,955 |
| I/C | Portion diverted through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Portion disposed through sort | | 0.00% | 0 | 0 | 0 | 0 |
| I/C | Inert residue disposed post-CT | | 5.00% | 728 | 732 | 915 | 1,098 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 1.93% | 14,565 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 1.94% | | 14,637 | 18,296 | 21,955 |
| | Glass | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 3.10% | 3.87% | 29,205 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 3.11% | 3.86% | | 29,123 | 36,403 | 43,684 |
| I/C | Portion diverted through sort | | 75.00% | 21,904 | 21,842 | 27,303 | 32,763 |
| I/C | Portion disposed through sort | | 20.00% | 5,841 | 5,825 | 7,281 | 8,737 |
| I/C | Inert residue disposed post-CT | | 5.00% | 1,460 | 1,456 | 1,820 | 2,184 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.19% | 1,460 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.19% | | 1,456 | 1,820 | 2,184 |
| | Metal | | | | | | |
| I/C/C | Percent of Waste Stream, 2003 | 7.69% | 9.60% | 72,446 | | | |
| I/C/C | Percent of Waste Stream, 2004-2010 | 7.74% | 9.60% | | 72,430 | 90,537 | 108,644 |
| I/C | Portion diverted through sort | | 75.00% | 54,334 | 54,322 | 67,903 | 81,483 |
| I/C | Portion disposed through sort | | 20.00% | 14,489 | 14,486 | 18,107 | 21,729 |
| I/C | Inert residue disposed post-CT | | 5.00% | 3,622 | 3,621 | 4,527 | 5,432 |
| C/C | Percent of Waste Stream Entering CT, 2003 | | 0.48% | 3,622 | | | |
| C/C | Percent of Waste Stream Entering CT, 2004-2010 | | 0.48% | | 3,621 | 4,527 | 5,432 |
| C | % of Waste Stream Total - 2003 | 80.13% | 99.99% | | | | |
| C | % of Waste Stream Total - 2004 to 2010 | 80.61% | 100.00% | | | | |
| | Construction and Demolition (1) | | | | | | |
| I | Percent of Waste Stream, 2003 | | 17.16% | | | | |
| I | Percent of Waste Stream, 2004-2010 | | 17.28% | | | | |
| | Household Hazardous Waste (1) | | | | | | |
| I | Percent of Waste Stream, 2003 | | 0.20% | | | | |
| I | Percent of Waste Stream, 2004-2010 | | 0.20% | | | | |
| | Special Waste (1) | | | | | | |
| I | Percent of Waste Stream, 2003 | | 1.86% | | | | |
| I | Percent of Waste Stream, 2004-2010 | | 1.89% | | | | |

(1) Loads of these materials are not expected to be brought to conversion technology facilities.