



Appendix H

Emission Reduction Credits



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Appendix H: Emission Reduction Credits

H.1 INTRODUCTION

The District requires most new and modified stationary sources that increase emissions in amounts in excess of specific emission offset thresholds to obtain emission reduction credits (ERCs) to offset the growth in emissions. District Rule 2201 (New and Modified Stationary Source Review, or NSR, Rule) contains the offset requirements. Offsets represent either on-site reductions or the use of banked ERCs. The District expects that some pre-baseline credits (pre-2007 for the modeling used in this PM 2.5 Plan) will be used to mitigate growth from permitted stationary sources during the period of this plan. This Appendix discusses the use of such ERCs in the SJVAB.

H.2 PRE-BASELINE EMISSION REDUCTION CREDITS

The General Preamble to the Federal Clean Air Act (57 FR 13498) states that the pre-baseline ERCs must be reflected as growth and included in the attainment demonstration *“to the extent that the State expects that such credits will be used as offsets or netting prior to attainment of the ambient standards.”* The August 26, 1994 memorandum from John Seitz, EPA’s Director of Office of Air Quality Planning and Standards, to David Howekamp of EPA Region IX, provides two ways for inclusion of these ERCs as growth by stating that *“A state may choose to show that the magnitude of the pre-1990 (pre-baseline) ERCs (in absolute tonnage) was included in the growth factor, or the state may choose to show that it was not included in the growth factor, but in addition to anticipated general growth.”*

By including the pre-baseline ERCs in the growth factor, the District has selected the first methodology provided in Seitz’s memorandum. However, in either case, the purpose is to show that this plan, by including pre-baseline ERCs as a part of expected growth, will result in a projected inventory adequate to attain the NAAQS and achieve any applicable rate of progress:

projected inventory = baseline inventory + growth + ERCs(pre-baseline) – offsets – reductions

where: growth = non-permitted growth + permitted growth

offsets = ERCs(post-baseline) + ERCs(pre-baseline)

reductions = reductions required by the measures in the Plan

Growth Estimates: The emissions trends and growth estimates in this plan were generated using the reports from the California Emissions Projection Analysis Model (CEPAM). The emissions inventory and associated emissions projections are based on ARB’s latest PM 2.5 SIP Planning Projections (Norcal 2012 PM2.5 SIP Version 1.03). CEPAM’s computer tools were used to develop projections and emission estimates based on the most current available growth and control data available at the time of the forecast runs. CEPAM was first developed in the 1990s (called CEFS at the time) to

assist in developing air quality plans, determining how and where air pollution can be reduced, tracking progress towards meeting plans goals and mandates, and constructing emission trends, and has been updated regularly since then.

A key component of CEPAM is the growth data. The growth estimates generated by CEPAM include growth in emissions requiring offsets under the New Source Review Rule as well as that which can be accommodated without triggering offsets. Tables H-1 through H-4 show total projected growth from stationary sources of 0.835 tons/day of directly emitted PM 2.5, and, for PM 2.5 precursors, growth of 1.08 tons/day of NOx, 0.264 tons/day of SOx, and 14.8 tons/day of VOC, for the period of 2007 through 2019. The CEPAM inventory shows negative growth for some segments of the economy, representing a shrinking emissions inventory even before considering reductions required by District plans. However, for the purposes of this ERC-use analysis, the District did not include these negative growth numbers (by setting negative growth to zero), as only positive growth requires offsetting with ERCs.

The CEPAM projected inventory for 2019 shown in the table does incorporate the projected growth (both positive and negative) as well as the expected controls from the measures contained in prior plans. Notwithstanding slight rounding errors, the projected 2019 inventory equals the baseline inventory plus the projected growth minus the expected reductions from the controls contained in previously adopted plans. Reductions due to this PM 2.5 plan are not incorporated in these projections, and do not affect the amount of offsets estimated to mitigate the projected growth.

Emissions Offset Requirements: Under District's New Source Review Rule 2201, new sources with emissions exceeding the following level must offset their emissions:

NOx	20,000 lbs/year
VOC.....	20,000 lbs/year
PM10.....	29,200 lbs/year
SOx.....	54,750 lbs/year

Additionally, for existing facilities with emissions meeting or exceeding the above levels, any increase in emissions must be offset.

Also, PM2.5 offsets would be required for any new major PM2.5 source (exceeding 100 tons per year of direct PM2.5 emissions), or for major modifications at existing major PM2.5 sources (emissions increases of 20,000 lbs PM2.5 per year at an existing major PM2.5 source).

Use of Interpollutant Offsets: Under the District's New Source Review Rule 2201, offsetting emissions increases with reductions in precursor pollutants is allowed, within some specified limitations. Interpollutant offsets between PM2.5 and PM2.5 precursors are specifically allowed by Rule 2201 at specific ratios "as established by US EPA, or as approved into the State Implementation Plan by the US EPA." Upon approval of this

attainment plan into the State Implementation Plan by EPA, the following interpollutant trading ratios will be approved for use within the San Joaquin Valley Air District:

NOx:PM2.5	5.3 to 1
SOx:PM2.5	4.1 to 1

In the past, the District has determined interpollutant relationships for PM2.5 and PM10 using a method called “speciated linear rollback” in which a pollutant’s precursor emissions are reduced at the same rate of reduction of the applicable portions of the emissions inventory. However, EPA rejected this method in their 2011 TSD for the District’s Revised 2008 PM2.5 SIP.

The new interpollutant offsetting ratios presented here were developed using EPA’s suggested method of photochemical modeling. The District has enlisted the assistance of the ARB to develop interpollutant relationships based on the same photochemical modeling processes used to develop the PM2.5 attainment approach in this plan. ARB proposed, and then performed the analysis of, an examination of the effect of domain-wide (District-wide) pollutant-by-pollutant emissions reductions on local ambient concentrations for each of the counties in the SJVAB, using that photochemical model. It was determined that the results of this analysis are the best available representation of local effects of emissions reductions generated throughout the Valley, and the District is therefore proposing to use the valley-wide average of those specific site-based interpollutant relationships. See Attachment 1 to this Appendix for ARB’s technical analysis of this approach.

Two other approaches were examined before choosing to go with the Valley-wide approach:

- First, the District examined whether there were significant differences in the results when analyzing the effect of local (county-wide) reductions (rather than domain-wide reductions) on local ambient concentrations, but using the same photochemical modeling discussed above (see Attachment 1). The results were somewhat lower (5.2:1 for NOx and 2.9:1 for SOx), but the use of these ratios would need to be accompanied by an as yet undetermined distance ratio, since the analysis only examined local reductions while the NSR rule allows the use of reductions from anywhere in the San Joaquin Valley to offset local emissions increases. For instance, if a distance ratio of 1.5 was found to be appropriate, the SOx:PM2.5 ratio using this approach would be $2.9 \times 1.5 = 4.3$. Since the resulting offset ratios were similar to the domain-wide analysis, and the domain wide-analysis doesn’t require the further justification of a distance ratio, it was decided to use ARB’s domain-wide analysis.
- Second the District re-examined the speciated linear rollback approach. As seen in Attachment 1 the results of the new speciated linear-rollback modeling effort remain similar to those determined in past District analyses. Specifically, the linear rollback results in a valley average (between Fresno and Bakersfield)

NO_x:PM_{2.5} ratio of about 2.3:1, and a SO_x:PM_{2.5} ratio of 1:1. These ratios would also require a distance ratio for use as NSR offsets. These results are presented here in the interests of full disclosure and to demonstrate that EPA's preferred method is indeed more conservative and will require more precursor reductions to offset a given PM_{2.5} increase.

It should be noted that no interpollutant ratio has been developed for VOC reductions to mitigate PM_{2.5} increases, and therefore no interpollutant trading between VOC and PM_{2.5} will be allowed by District Rule 2201.

Pre-Baseline Offset Usage Estimate: The amount of offsets expected to be consumed during this plan's period was estimated by establishing the percentage of permitting actions for each source category that would be subject to offset requirements under Rule 2201. For each source category, this percentage was established based on past permitting history, the fraction of sources in the category with emissions at or above the offset trigger levels, and any expected changes in permitting activity for the source category. The following factors were used in estimating the potential need for offsets:

- All increases from modifications to existing sources with potential emissions at or above the above offset thresholds would require offsets (District Rule 2201).
- New sources with emissions exceeding the above offset thresholds would require offsets (District Rule 2201).
- The percentage of sources that meet any of the above criteria was estimated by examining past permitting history and by projecting future permitting based on the estimated growth. For instance, the majority of permitting actions with increases in emissions from oil production facilities come from sources with potential emissions in excess of the above offset thresholds. Therefore, for that source category, it was assumed that 80-100% of increases in overall emissions would require offsets.

The quantity of required offsets was then established by multiplying the expected growth in emissions for each source category (from CEPAM) by this percentage and the expected offset ratio. District Rule 2201 establishes offset ratios ranging from 1.0:1 to 1.5:1 based on the distance from the source of ERCs to the source with increase in emissions. An offset ratio of 1.5:1 applies to all transactions where the distance is greater than 15 miles, and to all off-site VOC and NO_x offsetting. For calendar years 2007 and 2012, the average offset ratio for all permitting actions varied from 1.32:1 for NO_x, to 1.36:1 for SO_x and PM₁₀, to 1.37:1 for VOC. The District has therefore used a distance ratio of 1.37 for all pollutants for this analysis. Tables H-1 through H-4 contain the expected growth, percentage of activities subject to offset requirements, and the expected quantity of offsets for each pollutant.

Although some offsets are expected to come from post-baseline reductions, this plan conservatively assumes that all offsets will be pre-baseline. See Table H-5 for a current

list of District-issued ERCs, as of November 2012. These ERCs and future ERCs (and any ERCs generated from them) are available to be used in the District's NSR program. The expected ERC usage after 2007 and through 2019, as shown in Tables H-1 through H-4, has been estimated in this plan as follows:

	Expected ERC Use (tpd)	ERC Use (PM2.5 Equivalents) (tpd)	Growth (tpd)	Growth (PM2.5 Equivalents) (tpd)
PM 2.5	0.64	0.64	0.835	0.084
NOx	0.99	0.19	1.08	0.20
SOx	0.17	0.04	0.264	0.06
VOC	7.50	NA	14.8	NA
Total		0.87		1.10

As shown above, the quantity of pre-baseline offsets (conservatively considering all ERCs used to be pre-baseline ERCs) that are expected to be used between 2007 and 2019 ("Expected ERC Use" column) is less than the plan's estimated growth in emissions for each pollutant ("Growth" column). As can also be seen, the same conclusion is reached after converting the expected ERC use and growth to PM2.5-equivalents. Specifically, total ERC usage, after converting to PM2.5 equivalents using the interpollutant ratios specified above, is less than the total growth after converting growth to PM2.5 equivalents.

Therefore, if growth in new and modified sources occurs at the rate estimated in this plan, the use of offsets as required in Rule 2201 will ensure that permitted increases in emissions will not interfere with progress toward attainment of federal PM 2.5 standards. As discussed in Chapter 9, the District also satisfies the requirement for reasonable further progress with the above-mentioned projected inventories and without taking credit for the ERCs required of and provided by new and modified stationary sources permitted during this period.

Safeguards to assure plan integrity despite the use of pre-baseline credits: In order to assure that the use of pre-baseline ERCs does not interfere with attainment effort and the applicable rate of progress, this plan incorporates the following safeguards:

- The District will place a cap on the amount of PM2.5-equivalent pre-baseline credits that can be used. Although the District has relied on a number of conservative assumptions in estimating the usage quantity of pre-baseline credits, some degree of uncertainty exists. For instance, unexpected growth or irregular permitting activity may occur for one or more source categories. The cap on the use of pre-baseline ERCs will be enforced by tracking the use of such credits and disallowing the use of pre-baseline credits in permitting actions when the above-specified PM2.5-equivalent growth level is reached. The second column of the table above lists expected ERC use for stationary source growth, for each pollutant. The cap on pre-baseline ERC usage is the total PM2.5-equivalent ERCs, in the amount of 0.87 tons per day, with NOx

and SOx usage calculated at the appropriate interpollutant offset ratio specified above. Since there is no interpollutant ratio established for VOC, VOC ERC use will be capped at the expected use of 7.5 tons/day. The appropriate proportion of PM10 credits used as PM 2.5 credits for offsetting purposes will be included in the PM 2.5 cap. These ERC usage caps replace any caps established in prior plans.

- These caps apply to the use of NOx and SOx ERCs in their application as offsets for direct emissions as well as in their use as PM 2.5 precursor interpollutant offsets. Thus, to the extent that precursor ERCs are used to offset direct increases of these respective precursors, these same ERCs will no longer be available to offset PM 2.5 increases. While no VOC:PM2.5 interpollutant ratio has yet been developed by the District or ARB for NSR offsetting purposes, interpollutant trading ratios for NOx:PM2.5 and SOx:PM2.5 have been developed, as discussed in this Appendix above, and approval of this plan will allow NOx and SOx emissions reductions to be used at the approved ratios to offset PM 2.5 increases.
- Although some ERCs will come from post-baseline reductions, this plan conservatively assumes that all offsets will come from pre-baseline reductions. As discussed earlier, federal law only requires the pre-baseline ERCs to be included in the growth and the attainment demonstration. This plan assumes that all ERCs used to offset emission increases will be pre-baseline ERCs and, therefore, includes them all within the projected inventory as growth. Using this higher projected inventory leads to conservative conclusions relating to the attainment and rate of progress demonstrations.
- Although permissible, this plan does not take credit for reductions and mitigations required under the District's New and Modified Stationary Source Review Rule. In particular, this plan does not reduce the future years' emissions by taking credit for the amount of ERCs provided through permitting actions. This conservative approach further assures that the attainment demonstration is not affected by the use of pre-baseline ERCs.

Table H-1
Estimated PM2.5 Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
FUEL COMBUSTION								
ELECTRIC UTILITIES	1.415	-4.81%	0.000	0.00%	0.000	1.347	100	0.000
COGENERATION	0.784	24.62%	0.193	0.00%	0.000	0.977	80	0.154
OIL AND GAS PRODUCTION (COMBUSTION)	1.935	-24.34%	0.000	0.05%	0.001	1.464	80	0.000
PETROLEUM REFINING (COMBUSTION)	0.172	0.00%	0.000	0.00%	0.000	0.172	80	0.000
MANUFACTURING AND INDUSTRIAL	0.205	-5.37%	0.000	0.00%	0.000	0.194	25	0.000
FOOD AND AGRICULTURAL PROCESSING	0.75	-5.46%	0.000	-43.33%	-0.325	0.385	20	0.000
SERVICE AND COMMERCIAL	0.367	5.18%	0.019	0.00%	0.000	0.386	25	0.005
OTHER (FUEL COMBUSTION)	0.015	0.00%	0.000	-33.33%	-0.005	0.01	25	0.000
TOTAL PM2.5: FUEL COMBUSTION	5.641		0.212		-0.329	4.935		0.159
WASTE DISPOSAL								
SEWAGE TREATMENT	0.003	33.33%	0.001	0.00%	0.000	0.004	25	0.000
LANDFILLS	0.075	26.67%	0.020	0.00%	0.000	0.095	50	0.010
INCINERATORS	0.016	25.00%	0.004	0.00%	0.000	0.02	25	0.001
SOIL REMEDIATION	0.002	0.00%	0.000	0.00%	0.000	0.002	25	0.000
OTHER (WASTE DISPOSAL)	0.002	0.00%	0.000	0.00%	0.000	0.002	25	0.000
TOTAL PM2.5: WASTE DISPOSAL	0.097		0.025		0.000	0.123		0.011
CLEANING AND SURFACE COATINGS								
LAUNDRING	0	0.00%	0.000	0.00%	0.000	0	25	0.000
DEGREASING	0.017	23.53%	0.004	0.00%	0.000	0.021	50	0.002
COATINGS AND RELATED PROCESS SOLVENTS	0.068	47.06%	0.032	0.00%	0.000	0.1	25	0.008
PRINTING	0	0.00%	0.000	0.00%	0.000	0	10	0.000
ADHESIVES AND SEALANTS	0	0.00%	0.000	0.00%	0.000	0.001	10	0.000
OTHER (CLEANING/SURFACE CTNGS)	0	0.00%	0.000	0.00%	0.000	0	50	0.000

Table H-1
Estimated PM2.5 Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
TOTAL PM2.5: CLEANING AND SURFACE COATINGS	0.085		0.036		0.000	0.122		0.010
PETROLEUM PRODUCTION AND MARKETING								
OIL AND GAS PRODUCTION	0.017	-23.53%	0.000	0.00%	0.000	0.013	80	0.000
PETROLEUM REFINING	0.123	0.81%	0.001	0.00%	0.000	0.124	80	0.001
PETROLEUM MARKETING	0.005	40.00%	0.002	0.00%	0.000	0.007	80	0.002
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0	0.00%	0.000	0.00%	0.000	0	80	0.000
TOTAL PM2.5: PETROLEUM PRODUCTION AND MARKETING	0.146		0.003		0.000	0.144		0.002
INDUSTRIAL PROCESSES								
CHEMICAL	0.233	-12.45%	0.000	0.00%	0.000	0.204	25	0.000
FOOD AND AGRICULTURE	0.714	25.77%	0.184	-10.50%	-0.075	0.805	50	0.092
MINERAL PROCESSES	1.476	22.15%	0.327	0.00%	0.000	1.803	50	0.164
METAL PROCESSES	0.071	40.85%	0.029	0.00%	0.000	0.1	80	0.023
WOOD AND PAPER	0.213	-7.98%	0.000	0.00%	0.000	0.196	50	0.000
GLASS AND RELATED PRODUCTS	0.601	-6.82%	0.000	-8.99%	-0.054	0.511	100	0.000
ELECTRONICS	0.002	50.00%	0.001	0.00%	0.000	0.003	25	0.000
OTHER (INDUSTRIAL PROCESSES)	0.085	21.18%	0.018	0.00%	0.000	0.103	25	0.005
TOTAL PM2.5: INDUSTRIAL PROCESSES	3.394		0.559		-0.129	3.725		0.283
TOTAL PM2.5: STATIONARY SOURCES	9.364		0.835		-0.458	9.049		0.639*

Table H-2
Estimated NOx Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
FUEL COMBUSTION								
ELECTRIC UTILITIES	7.092	2.33%	0.165	-27.74%	-1.967	5.746	100	0.165
COGENERATION	2.983	16.02%	0.478	-46.26%	-1.380	2.026	90	0.430
OIL AND GAS PRODUCTION (COMBUSTION)	3.488	-24.34%	0.000	-46.42%	-1.619	1.413	80	0.000
PETROLEUM REFINING (COMBUSTION)	0.709	0.00%	0.000	-30.89%	-0.219	0.49	100	0.000
MANUFACTURING AND INDUSTRIAL	5.103	-2.23%	0.000	-4.61%	-0.235	4.747	30	0.000
FOOD AND AGRICULTURAL PROCESSING	12.73	-1.62%	0.000	-74.01%	-9.422	3.21	30	0.000
SERVICE AND COMMERCIAL	3.97	7.03%	0.279	-12.41%	-0.493	3.636	30	0.084
OTHER (FUEL COMBUSTION)	0.575	7.13%	0.041	-24.17%	-0.139	0.437	25	0.010
TOTAL NOx: FUEL COMBUSTION	36.65		0.963		-15.474	21.705		0.689
WASTE DISPOSAL								
SEWAGE TREATMENT	0.033	30.30%	0.010	0.00%	0.000	0.043		0.000
LANDFILLS	0.122	27.87%	0.034	0.00%	0.000	0.156		0.000
INCINERATORS	0.083	21.69%	0.018	0.00%	0.000	0.101	100	0.018
SOIL REMEDIATION	0.021	28.57%	0.006	0.00%	0.000	0.027		0.000
OTHER (WASTE DISPOSAL)	0.001	0.00%	0.000	0.00%	0.000	0.001		0.000
TOTAL NOx: WASTE DISPOSAL	0.26		0.068		0.000	0.327		0.018
CLEANING AND SURFACE COATINGS								
LAUNDERING	0	0.00%	0.000	0.00%	0.000	0		0.000
DEGREASING	0	0.00%	0.000	0.00%	0.000	0		0.000
COATINGS AND RELATED PROCESS SOLVENTS	0	0.00%	0.000	0.00%	0.000	0		0.000
PRINTING	0	0.00%	0.000	0.00%	0.000	0		0.000
ADHESIVES AND SEALANTS	0	0.00%	0.000	0.00%	0.000	0		0.000
OTHER (CLEANING AND SURFACE COATINGS)	0	0.00%	0.000	0.00%	0.000	0		0.000

Table H-2
Estimated NOx Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
TOTAL NOx: CLEANING AND SURFACE COATINGS	0		0.000		0.000	0		0.000
PETROLEUM PRODUCTION AND MARKETING								
OIL AND GAS PRODUCTION	0.19	-24.21%	0.000	0.00%	0.000	0.144	100	0.000
PETROLEUM REFINING	0.064	0.00%	0.000	0.00%	0.000	0.064	80	0.000
PETROLEUM MARKETING	0.03	36.67%	0.011	0.00%	0.000	0.041	80	0.009
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.002	0.00%	0.000	0.00%	0.000	0.002	80	0.000
TOTAL NOx: PETROLEUM PRODUCTION AND MARKETING	0.285		0.011		0.000	0.251		0.009
INDUSTRIAL PROCESSES								
CHEMICAL	0.516	-12.21%	0.000	0.00%	0.000	0.453	25	0.000
FOOD AND AGRICULTURE	0.002	0.00%	0.000	0.00%	0.000	0.002	10	0.000
MINERAL PROCESSES	0.167	21.11%	0.035	-15.25%	-0.025	0.172	25	0.009
METAL PROCESSES	0.002	0.00%	0.000	0.00%	0.000	0.002	10	0.000
WOOD AND PAPER	0	0.00%	0.000	0.00%	0.000	0		0.000
GLASS AND RELATED PRODUCTS	7.751	-8.09%	0.000	-38.89%	-3.014	4.387	100	0.000
ELECTRONICS	0	0.00%	0.000	0.00%	0.000	0		0.000
OTHER (INDUSTRIAL PROCESSES)	0.011	27.27%	0.003	-18.18%	-0.002	0.012	25	0.001
TOTAL NOx: INDUSTRIAL PROCESSES	8.448		0.038		-3.041	5.028		0.010
TOTAL NOx: STATIONARY SOURCES	45.643		1.080		-18.515	27.311		0.994*

Table H-3
Estimated SOx Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
FUEL COMBUSTION								
ELECTRIC UTILITIES	1.437	-0.97%	0.000	-3.41%	-0.049	1.357	100	0.000
COGENERATION	0.112	88.39%	0.099	0.00%	0.000	0.211	80	0.079
OIL AND GAS PRODUCTION (COMBUSTION)	1.999	-24.36%	0.000	-73.34%	-1.466	0.403	80	0.000
PETROLEUM REFINING (COMBUSTION)	0.296	0.00%	0.000	-73.31%	-0.217	0.079	100	0.000
MANUFACTURING AND INDUSTRIAL	1.099	-2.18%	0.000	-7.79%	-0.086	0.994	25	0.000
FOOD AND AGRICULTURAL PROCESSING	0.255	-26.98%	0.000	-52.16%	-0.133	0.066	10	0.000
SERVICE AND COMMERCIAL	0.369	2.44%	0.009	-12.10%	-0.045	0.332	25	0.002
OTHER (FUEL COMBUSTION)	0.005	0.00%	0.000	0.00%	0.000	0.005		0.000
TOTAL SOx: FUEL COMBUSTION	5.571		0.108		-1.995	3.447		0.081
WASTE DISPOSAL								
SEWAGE TREATMENT	0.047	31.91%	0.015	0.00%	0.000	0.062		0.000
LANDFILLS	0.054	25.93%	0.014	0.00%	0.000	0.068		0.000
INCINERATORS	0.009	22.22%	0.002	0.00%	0.000	0.011	25	0.001
SOIL REMEDIATION	0.001	0.00%	0.000	0.00%	0.000	0.001		0.000
OTHER (WASTE DISPOSAL)	0	0.00%	0.000	0.00%	0.000	0		0.000
TOTAL SOx: WASTE DISPOSAL	0.111		0.031		0.000	0.143		0.001
CLEANING AND SURFACE COATINGS								
LAUNDERING	0	0.00%	0.000	0.00%	0.000	0		0.000
DEGREASING	0	0.00%	0.000	0.00%	0.000	0		0.000
COATINGS AND RELATED PROCESS SOLVENTS	0	0.00%	0.000	0.00%	0.000	0		0.000
PRINTING	0	0.00%	0.000	0.00%	0.000	0		0.000
ADHESIVES AND SEALANTS	0	0.00%	0.000	0.00%	0.000	0		0.000
OTHER (CLEANING AND SURFACE COATINGS)	0	0.00%	0.000	0.00%	0.000	0		0.000
TOTAL SOx: CLEANING AND SURFACE COATINGS	0		0.000		0.000	0		0.000
PETROLEUM PRODUCTION AND MARKETING								
OIL AND GAS PRODUCTION	0.028	-25.00%	0.000	0.00%	0.000	0.021	90	0.000

Table H-3
Estimated SOx Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
PETROLEUM REFINING	0.112	0.89%	0.001	0.00%	0.000	0.113	100	0.001
PETROLEUM MARKETING	0.001	0.00%	0.000	0.00%	0.000	0.001		0.000
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0	0.00%	0.000	0.00%	0.000	0	80	0.000
TOTAL SOx: PETROLEUM PRODUCTION AND MARKETING	0.14		0.001		0.000	0.135		0.001
INDUSTRIAL PROCESSES								
CHEMICAL	0.977	-12.28%	0.000	0.00%	0.000	0.857	25	0.000
FOOD AND AGRICULTURE	0.222	22.97%	0.051	0.00%	0.000	0.273	50	0.026
MINERAL PROCESSES	0.29	21.38%	0.062	0.00%	0.000	0.352	25	0.016
METAL PROCESSES	0.014	35.71%	0.005	0.00%	0.000	0.019	25	0.001
WOOD AND PAPER	0.003	0.00%	0.000	0.00%	0.000	0.003		0.000
GLASS AND RELATED PRODUCTS	3.036	-5.47%	0.000	-35.24%	-1.070	1.885	100	0.000
ELECTRONICS	0	0.00%	0.000	0.00%	0.000	0		0.000
OTHER (INDUSTRIAL PROCESSES)	0.028	0.214286	0.006	0.00%	0.000	0.034	25	0.002
TOTAL SOx: INDUSTRIAL PROCESSES	4.57		0.124		-1.070	3.422		0.044
TOTAL SOx: STATIONARY SOURCES	10.392		0.264		-3.065	7.147		0.174*

Table H-4
Estimated VOC Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
FUEL COMBUSTION								
ELECTRIC UTILITIES	0.233	-13.73%	0	0.00%	0	0.201	100	0.000
COGENERATION	0.155	19.35%	0.03	0.65%	0.001	0.185	90	0.027
OIL AND GAS PRODUCTION (COMBUSTION)	1.461	-24.37%	0.000	0.07%	0.001	1.105	95	0.000
PETROLEUM REFINING (COMBUSTION)	0.112	0.00%	0.000	0.00%	0.000	0.112	100	0.000
MANUFACTURING AND INDUSTRIAL	0.249	-5.22%	0.000	0.00%	0.000	0.236	25	0.000
FOOD AND AGRICULTURAL PROCESSING	1.164	-4.31%	0.000	-61.27%	-0.713	0.403	10	0.000
SERVICE AND COMMERCIAL	0.552	3.80%	0.021	0.00%	0.000	0.573	25	0.005
OTHER (FUEL COMBUSTION)	0.07	5.71%	0.004	-18.57%	-0.013	0.057	10	0.000
TOTAL VOC: FUEL COMBUSTION	3.995		0.055		-0.724	2.871		0.033
WASTE DISPOSAL								
SEWAGE TREATMENT	0.033	24.24%	0.008	0.00%	0.000	0.041	25	0.002
LANDFILLS	1.282	19.11%	0.245	0.00%	0.000	1.527	50	0.123
INCINERATORS	0.01	20.00%	0.002	0.00%	0.000	0.012		0.000
SOIL REMEDIATION	0.182	23.63%	0.043	0.00%	0.000	0.225	10	0.004
OTHER (WASTE DISPOSAL)	23.103	23.31%	5.385	-25.01%	-5.778	21.361	25	1.346
TOTAL VOC: WASTE DISPOSAL	24.61		5.683		-5.778	23.165		1.475
CLEANING AND SURFACE COATINGS								
LAUNDERING	0.081	18.52%	0.015	0.00%	0.000	0.096	0	0.000
DEGREASING	1.461	9.65%	0.141	-0.07%	-0.001	1.602	10	0.014
COATINGS AND RELATED PROCESS SOLVENTS	7.337	31.06%	2.279	-7.16%	-0.525	9.066	50	1.140
PRINTING	4.446	25.53%	1.135	0.00%	0.000	5.581	25	0.284
ADHESIVES AND SEALANTS	0.652	-14.57%	0.000	-0.15%	-0.001	0.557	25	0.000
OTHER (CLEANING AND SURFACE COATINGS)	3.647	34.71%	1.266	-0.03%	-0.001	4.913	50	0.633

Table H-4
Estimated VOC Growth, Control, and Estimated Offset Use

SUMMARY CATEGORY NAME	2007 Emissions Tons/day	Growth Factor (%)	Estimated Growth (tons/day)	Control Factor (%)	Reductions (tons/day)	2019 Emissions Tons/day	Percent Requiring Offsets	Estimated Offsets* (tons/day)
TOTAL VOC: CLEANING AND SURFACE COATINGS	17.623		4.836		-0.528	21.814		2.070
PETROLEUM PRODUCTION AND MARKETING								
OIL AND GAS PRODUCTION	28.482	-24.36%	0.000	0.04%	0.012	21.544	80	0.000
PETROLEUM REFINING	1.097	0.82%	0.009	0.00%	0.000	1.106	90	0.008
PETROLEUM MARKETING	6.653	24.52%	1.631	0.02%	0.001	8.284	40	0.652
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.021	19.05%	0.004	0.00%	0.000	0.025	80	0.003
TOTAL VOC: PETROLEUM PRODUCTION AND MARKETING	36.253		1.644		0.013	30.957		0.664
INDUSTRIAL PROCESSES								
CHEMICAL	3.436	-12.28%	0.000	0.03%	0.001	3.014	25	0.000
FOOD AND AGRICULTURE	9.461	25.29%	2.393	-0.01%	-0.001	11.854	50	1.197
MINERAL PROCESSES	0.312	21.47%	0.067	0.00%	0.000	0.379	25	0.017
METAL PROCESSES	0.168	7.14%	0.012	0.00%	0.000	0.18	25	0.003
WOOD AND PAPER	0.005	0.00%	0.000	0.00%	0.000	0.005	25	0.000
GLASS AND RELATED PRODUCTS	0.048	-10.42%	0.000	0.00%	0.000	0.043	100	0.000
ELECTRONICS	0	0.00%	0.000	0.00%	0.000	0		0.000
OTHER (INDUSTRIAL PROCESSES)	0.314	21.97%	0.069	0.00%	0.000	0.383	25	0.017
TOTAL VOC: INDUSTRIAL PROCESSES	13.744		2.541		0.000	15.858		1.234
TOTAL VOC: STATIONARY SOURCES	96.226		14.759		-7.017	94.665		7.501*

*Offset distance ratio of 1.37:1 used for all pollutants, calculated only on the "Total (Pollutant)" lines.

Emissions Inventory used: CEPAM Norcal 2012 PM2.5 SIP Ver 1.03

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
SWANSON HULLING	N	10	4	PM10	0	0	2984	0
WESTERN STONE PRODUCTS, INC.	N	17	4	PM10	513	513	558	558
H. J. HEINZ COMPANY, L.P.	N	21	4	PM10	0	60	180	60
CAMPBELL SOUP SUPPLY CO.	N	31	4	PM10	0	434	1064	0
AERA ENERGY LLC	S	32	4	PM10	0	0	69	120
HOGAN MANUFACTURING, INC	N	34	4	PM10	1972	4031	2344	2712
CALMAT OF FRESNO	C	40	4	PM10	75	359	165	553
SALIDA HULLING ASSOCIATION	N	44	4	PM10	0	0	12246	0
BROWN SAND INC	N	46	4	PM10	1107	1474	840	1099
CLEAN HARBORS BUTTONWILLOW, LLC	S	49	4	PM10	567	573	580	580
CALMAT CO.	C	50	4	PM10	15	16	23	24
WEST ISLAND COTTON GROWERS INC	C	55	4	PM10	0	0	0	4365
DEL MONTE CORPORATION/PLANT #1	N	58	4	PM10	0	0	8410	0
H. J. HEINZ COMPANY	N	60	4	PM10	0	42	226	4
AMERICAN MOULDING & MILLWORK	N	63	4	PM10	1106	701	809	471
CRAYCROFT BRICK COMPANY	C	71	4	PM10	50	40	39	40
CHEVRON USA INC	S	77	4	PM10	3067	2768	2607	3422
CALAVERAS MATERIALS INC	C	89	4	PM10	45	41	47	38
J G BOSWELL COMPANY OIL MILL	C	92	4	PM10	670	460	648	916
J G BOSWELL COMPANY OIL MILL	C	93	4	PM10	2810	2418	2082	4097
THE NESTLE COMPANY INC	N	93	4	PM10	5602	5688	4414	7118
H & H COTTON GINNING COMPANY	C	105	4	PM10	0	0	0	9954
SC JOHNSON HOME STORAGE INC	C	107	4	PM10	326	315	281	269

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CASTLE AIRPORT AVIATION & DEVELOP CENTER	N	109	4	PM10	6262	6332	6402	6402
LOS BANOS GRAVEL GROUP, ASPHLT	N	125	4	PM10	85	162	376	168
P-R FARMS, INC.	C	126	4	PM10	0	0	357	180
CAMPBELL SOUP COMPANY	N	127	4	PM10	416	289	261	308
ECKERT FROZEN FOODS	N	133	4	PM10	5	20	72	14
CHEVRON USA PRODUCTION INC	S	147	4	PM10	50	57	46	46
R M WADE & COMPANY	C	152	4	PM10	14	17	17	16
BRITZ INCORPORATED	C	159	4	PM10	0	0	0	715
GALLO GLASS COMPANY	N	161	4	PM10	23150	22909	24274	22565
AERA ENERGY LLC	S	202	4	PM10	123	100	70	88
PARAMOUNT FARMS	N	206	4	PM10	0	0	65	52685
CALPINE CORPORATION	N	208	4	PM10	715	8177	6581	715
POHL ALMOND HULLING	N	212	4	PM10	0	0	4279	8511
AERA ENERGY LLC	S	215	4	PM10	403	362	361	406
CALAVERAS MATERIALS INC.	C	233	4	PM10	243	652	759	479
RIO BRAVO FRESNO	C	244	4	PM10	1000	0	0	0
AERA ENERGY LLC	S	254	4	PM10	1093	1174	0	913
AERA ENERGY LLC	S	255	4	PM10	4184	1519	0	1074
AERA ENERGY LLC	S	256	4	PM10	10145	5624	0	0
AERA ENERGY LLC	S	259	4	PM10	1483	1747	0	705
AERA ENERGY LLC	S	260	4	PM10	1858	1946	286	633
AERA ENERGY LLC	S	272	4	PM10	806	760	721	693
PARAMOUNT FARMS, INC	N	284	4	PM10	312	1881	275	275

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
PARAMOUNT FARMS, INC.	C	288	4	PM10	1000	1000	36000	12000
CALPINE CORPORATION	N	297	4	PM10	0	0	101	66394
DEL MONTE CORPORATION	N	316	4	PM10	221	189	388	83
AERA ENERGY LLC	S	319	4	PM10	449	650	497	499
NAS LEMOORE	C	330	4	PM10	17	17	17	17
CHEVRON USA INC	C	331	4	PM10	3766	3767	3767	3767
CHEVRON USA INC	C	339	4	PM10	11300	11300	11301	11301
WESTSIDE FARMERS COOP. GIN	C	352	4	PM10	0	0	0	33444
CHEVRON U S A INC	S	357	4	PM10	137	116	114	153
LIDESTRI FOODS, INC	N	391	4	PM10	0	0	1056	0
J D HEISKELL & COMPANY	S	415	4	PM10	643	322	356	1039
MONTEREY RESOURCES, INC.	S	432	4	PM10	906	918	753	837
TURLOCK IRRIGATION DISTRICT	N	433	4	PM10	0	0	0	4720
CALPINE CORPORATION	C	448	4	PM10	1067	1067	1067	1067
CALPINE CORPORATION	C	449	4	PM10	82	28	373	674
LAWRENCE LIVERMORE NATL. LAB	N	464	4	PM10	8	3	0	6
BRITZ GIN PARTNERSHIP	S	475	4	PM10	0	0	0	4259
CALIFORNIA DAIRIES	N	498	4	PM10	273	313	128	186
PARAMOUNT FARMS, INC.	C	499	4	PM10	78	249	393	346
LA PALOMA GENERATING COMPANY	N	500	4	PM10	11695	16203	9929	8254
CANDLEWICK YARNS	C	507	4	PM10	11	9	7	7
TURLOCK IRRIGATION DISTRICT	C	510	4	PM10	0	0	0	6430
OWENS-BROCKWAY GLASS CONTAINER	N	517	4	PM10	0	0	0	490

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
DOLE PACKAGED FOODS LLC	N	520	4	PM10	5	20	72	14
HURON GINNING CO	C	521	4	PM10	8	373	186	631
GENERAL CABLE INDUSTRIES, LLC	C	524	4	PM10	2	1	2	1
BRITZ AG FINANCE CO., INC.	C	558	4	PM10	0	0	0	5780
BRITZ AG FINANCE CO., INC.	C	559	4	PM10	0	0	0	35897
CORCORAN IRRIGATION DISTRICT	C	560	4	PM10	75	77	74	44
SAINT-GOBAIN CONTAINERS, INC	C	572	4	PM10	18	18	18	18
PACIFIC PIPELINE SYSTEM, LLC	S	575	4	PM10	0	0	108	0
PACIFIC PIPELINE SYSTEM, LLC	S	576	4	PM10	0	203	181	0
PACIFIC PIPELINE SYSTEM, LLC	S	577	4	PM10	710	860	899	899
BRITZ INCORPORATED	C	586	4	PM10	0	0	0	19720
MODESTO TALLOW CO INC	N	599	4	PM10	254	228	279	271
OAKWOOD LAKE RESORT	N	601	4	PM10	0	9	15	0
GENERAL MILLS OPERATIONS, INC	N	608	4	PM10	178	0	385	298
OLDUVAI GORGE, LLC	N	611	4	PM10	0	0	3830	1915
OLDUVAI GORGE, LLC	N	619	4	PM10	1138	1137	1084	1053
WESTERN MILLING, LLC	C	621	4	PM10	152	152	152	152
CHEVRON U S A INC	S	629	4	PM10	24	21	21	21
KRAFT FOODS, INC	S	630	4	PM10	8	70	112	71
DIAMOND FOODS INCORPORATED	N	645	4	PM10	49	0	4	0
KINGS RIVER CONSERVATION DISTRICT	C	649	4	PM10	0	0	0	138
UNITED STATES GYPSUM COMPANY	N	659	4	PM10	0	0	0	23209
UNITED STATES GYPSUM COMPANY	N	660	4	PM10	0	0	0	23515

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
WESTERN MILLING, LLC	C	670	4	PM10	0	0	0	10844
CONAGRA CONSUMER FROZEN FOODS	N	672	4	PM10	135	48	91	137
OLDUVAI GORGE, LLC	N	676	4	PM10	51	40	67	47
OLDUVAI GORGE, LLC	N	677	4	PM10	700	928	1057	930
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	N	684	4	PM10	3855	3652	2906	3860
H. J. HEINZ COMPANY	N	694	4	PM10	0	0	1372	0
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	N	695	4	PM10	0	4710	4761	4191
CE2 ENVIRONMENTAL MARKETS LP	N	696	4	PM10	5973	10000	10000	14027
CANANDAIGUA WINE COMPANY INC	C	702	4	PM10	423	422	449	411
CHEVRON USA INC	S	702	4	PM10	1861	1881	1902	1902
AVENAL POWER CENTER, LLC	N	721	4	PM10	0	0	3215	0
AVENAL POWER CENTER, LLC	N	723	4	PM10	0	0	985	0
ANDERSON CLAYTON CORPORATION	N	737	4	PM10	979	0	0	19767
STOCKTON EAST WATER DISTRICT	N	763	4	PM10	214	299	301	271
OLDUVAI GORGE, LLC	N	769	4	PM10	165	153	158	136
BERRY SEED & FEED COMPANY	N	773	4	PM10	17630	15335	16869	18974
OLDUVAI GORGE, LLC	C	789	4	PM10	0	0	0	40000
AERA ENERGY LLC	S	790	4	PM10	153	102	117	167
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	N	795	4	PM10	165	308	333	5030
OLDUVAI GORGE, LLC	C	796	4	PM10	0	0	0	6382
BAR VP DAIRY	C	797	4	PM10	0	0	0	2180
BAR VP DAIRY	C	798	4	PM10	0	0	0	3204

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BAR VP DAIRY	C	799	4	PM10	0	0	0	4111
THE DOW CHEMICAL COMPANY	N	799	4	PM10	73	82	83	72
AERA ENERGY LLC	S	802	4	PM10	734	1218	47	623
OLDUVAI GORGE, LLC	C	809	4	PM10	0	0	0	3785
OLDUVAI GORGE, LLC	C	814	4	PM10	0	0	0	5468
CERTAINTED CORPORATION	C	816	4	PM10	600	600	600	600
RANCHERS COTTON OIL	C	817	4	PM10	1327	1325	1323	1323
UNITED STATES GYPSUM COMPANY	C	818	4	PM10	0	0	0	18935
RIVERSIDE DAIRY	C	819	4	PM10	1225	409	0	3469
RIVERSIDE DAIRY	C	820	4	PM10	4335	0	0	6111
OCCIDENTAL OF ELK HILLS INC	S	826	4	PM10	71	67	60	68
UNITED STATES GYPSUM COMPANY	C	827	4	PM10	0	0	0	4000
UNITED STATES GYPSUM COMPANY	C	828	4	PM10	0	0	0	2848
OCCIDENTAL OF ELK HILLS INC	S	829	4	PM10	68	72	85	69
UNITED STATES GYPSUM COMPANY	C	829	4	PM10	0	0	0	1649
UNITED STATES GYPSUM COMPANY	C	830	4	PM10	0	0	0	5824
UNITED STATES GYPSUM COMPANY	C	831	4	PM10	0	0	0	5395
UNITED STATES GYPSUM COMPANY	C	832	4	PM10	0	0	0	5112
UNITED STATES GYPSUM COMPANY	C	833	4	PM10	1006	44	0	943
UNITED STATES GYPSUM COMPANY	C	834	4	PM10	0	0	0	6788
UNITED STATES GYPSUM COMPANY	C	835	4	PM10	0	0	0	5357
UNITED STATES GYPSUM COMPANY	C	836	4	PM10	0	0	0	6688
BIG WEST OF CA, LLC	N	837	4	PM10	0	0	1322	0

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
UNITED STATES GYPSUM COMPANY	C	837	4	PM10	0	0	0	18959
BIG WEST OF CA, LLC	N	838	4	PM10	0	0	320	0
UNITED STATES GYPSUM COMPANY	C	838	4	PM10	0	0	0	5098
UNITED STATES GYPSUM COMPANY	C	839	4	PM10	0	0	0	5476
UNITED STATES GYPSUM COMPANY	C	840	4	PM10	0	0	0	3470
UNITED STATES GYPSUM COMPANY	C	841	4	PM10	0	0	0	2642
UNITED STATES GYPSUM COMPANY	C	842	4	PM10	0	0	0	3471
UNITED STATES GYPSUM COMPANY	C	843	4	PM10	0	0	0	7953
UNITED STATES GYPSUM COMPANY	C	845	4	PM10	0	0	0	10655
UNITED STATES GYPSUM COMPANY	C	846	4	PM10	0	0	0	11928
EAGLE VALLEY GINNING LLC	N	847	4	PM10	0	0	0	29098
UNITED STATES GYPSUM COMPANY	C	847	4	PM10	0	0	0	26284
BRIAN R. ANDERSON INC.	C	854	4	PM10	0	0	0	20729
KODA FARMS	C	856	4	PM10	0	0	0	1396
AERA ENERGY LLC	S	862	4	PM10	1257	1129	1090	1193
AERA ENERGY LLC	S	863	4	PM10	5	5	10	9
BRITZ GIN PARTNERSHIP II	C	871	4	PM10	0	0	0	10903
PLAINS EXPLORATION & PRODUCTION CO	N	873	4	PM10	0	0	0	510
OLDUVAI GORGE, LLC	C	885	4	PM10	126	325	476	502
OLDUVAI GORGE, LLC	C	886	4	PM10	23	69	108	96
OLDUVAI GORGE, LLC	C	887	4	PM10	0	0	0	29243
FRITO-LAY INC	N	888	4	PM10	0	0	2339	0
FRITO-LAY INC	N	890	4	PM10	61	0	0	0

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
VAN GRONINGEN ORCHARDS	N	894	4	PM10	0	0	2306	1327
AVENAL POWER CENTER, LLC	C	896	4	PM10	80	80	80	80
VARCO PRUDEN BUILDINGS, INC.	N	898	4	PM10	3827	4258	7700	6665
CE2 ENVIRONMENTAL MARKETS LP	C	900	4	PM10	0	0	0	4231
AERA ENERGY LLC	S	913	4	PM10	846	548	530	785
OLAM	N	919	4	PM10	500	1387	1737	15
OLDUVAI GORGE, LLC	N	922	4	PM10	1630	1648	1667	1467
EVOLUTION MARKETS INC.	C	941	4	PM10	0	0	0	41215
CALPINE CORPORATION	C	942	4	PM10	50845	67976	8408	841
ANDERSEN RACK SYSTEMS, INC	N	950	4	PM10	300	303	306	306
PLAINS EXPLORATION & PRODUCTION CO	C	950	4	PM10	127	0	396	350
HERSHEY CHOCOLATE & CONF. CORP	N	952	4	PM10	254	230	240	228
ANDERSON CLAYTON CORP/IDRIA #1	C	959	4	PM10	0	0	0	26896
BERRY PETROLEUM COMPANY	N	961	4	PM10	329	553	326	213
BERRY PETROLEUM COMPANY	N	962	4	PM10	0	8185	13499	5136
BERRY PETROLEUM COMPANY	N	963	4	PM10	0	2870	0	0
CE2 ENVIRONMENTAL MARKETS LP	C	963	4	PM10	0	0	0	5583
CE2 ENVIRONMENTAL MARKETS LP	C	964	4	PM10	1130	1039	1076	1135
CHEVRON USA INC	C	966	4	PM10	144	144	144	144
AERA ENERGY LLC	S	983	4	PM10	503	106	151	756
COUNTY LINE GIN	C	997	4	PM10	0	0	0	8549
KERMAN CO-OP GIN & WAREHOUSE 1	C	1002	4	PM10	0	0	0	8893
AERA ENERGY LLC	S	1006	4	PM10	991	1085	445	696

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
AERA ENERGY LLC	S	1008	4	PM10	80	100	30	21
AERA ENERGY LLC	S	1010	4	PM10	1975	2028	0	2074
CALPINE ENERGY SERVICES, L.P.	C	1010	4	PM10	1029	0	0	13916
AERA ENERGY LLC	S	1012	4	PM10	350	748	479	91
AERA ENERGY LLC	S	1013	4	PM10	269	2280	694	170
THE ENVIRONMENTAL RESOURCES TRUST, INC	C	1013	4	PM10	418	418	418	418
TKV CONTAINERS, INC.	C	1015	4	PM10	0	349	349	0
SAINT-GOBAIN CONTAINERS, INC	N	1017	4	PM10	0	0	0	167
WEST ISLAND COTTON GROWERS INC	C	1017	4	PM10	607	0	1193	1800
LOS GATOS TOMATO PRODUCTS	C	1021	4	PM10	0	24	0	0
AERA ENERGY LLC	S	1026	4	PM10	278	579	252	201
WESTSIDE FARMERS COOP #2 & #3	C	1038	4	PM10	3311	0	0	37809
J R SIMPLOT COMPANY	C	1039	4	PM10	988	1900	877	1470
AERA ENERGY LLC	S	1040	4	PM10	0	961	467	0
KODA FARMS, INC.	N	1042	4	PM10	0	0	0	5180
VALLEY GRAIN/AZTECA MILLING	C	1042	4	PM10	0	0	0	2847
CE2 ENVIRONMENTAL MARKETS LP	N	1043	4	PM10	0	0	0	8300
NAS LEMOORE	C	1050	4	PM10	7799	3198	5638	1626
MARTIN ANDERSON	C	1051	4	PM10	32	48	28	2
LA PALOMA GENERATING CO, LLC	C	1055	4	PM10	0	0	0	360
AERA ENERGY LLC	S	1057	4	PM10	72	81	66	65
FARMERS FIREBAUGH GINNING CO.	C	1061	4	PM10	6374	0	0	9215
GRANITE CONSTRUCTION COMPANY	C	1065	4	PM10	0	0	0	2

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
FRITO-LAY, INC.	C	1068	4	PM10	69	70	67	63
FRITO-LAY, INC.	C	1069	4	PM10	286	280	268	259
AERA ENERGY LLC	S	1091	4	PM10	97	119	120	121
SPRECKELS SUGAR COMPANY	C	1112	4	PM10	0	6074	7699	3185
FRITO-LAY, INC.	C	1136	4	PM10	0	0	0	699
PLAINS EXPLORATION & PRODUCTION CO	C	1151	4	PM10	0	0	0	2
HANFORD L P	C	1164	4	PM10	3365	3665	3359	3120
BERRY PETROLEUM COMPANY	C	1166	4	PM10	0	0	0	2586
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	C	1168	4	PM10	0	0	0	4130
CE2 ENVIRONMENTAL MARKETS LP	C	1170	4	PM10	0	0	0	9298
SC JOHNSON HOME STORAGE INC	C	1173	4	PM10	271	360	355	366
F & T FARMS	C	1177	4	PM10	0	0	0	17034
SAN JOAQUIN FACILITIES MGMT	S	1253	4	PM10	27	30	32	30
PARAMOUNT FARMS	S	1267	4	PM10	350	353	508	387
PARAMOUNT FARMS	S	1349	4	PM10	0	0	0	6679
PARAMOUNT FARMS	S	1350	4	PM10	0	0	0	37321
AERA ENERGY LLC	S	1424	4	PM10	787	1901	1476	380
PARAMOUNT FARMS	S	1446	4	PM10	0	0	1088	18586
AERA ENERGY LLC	S	1476	4	PM10	262	0	0	74
AERA ENERGY LLC	S	1477	4	PM10	455	0	0	128
CHEVRON USA INC	S	1485	4	PM10	1890	1911	1932	1932
SAN JOAQUIN FACILITIES MGMT	S	1509	4	PM10	7	9	9	9

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CALPINE CORPORATION	S	1577	4	PM10	489	0	0	23085
CALPINE CORPORATION	S	1683	4	PM10	0	0	0	1462
CALPINE CORPORATION	S	1689	4	PM10	0	0	0	2604
CALPINE CORPORATION	S	1693	4	PM10	1091	1103	1115	1115
SAN JOAQUIN FACILITIES MGMT	S	1735	4	PM10	23	20	15	12
AERA ENERGY LLC	S	1927	4	PM10	1854	2703	2734	2332
AERA ENERGY LLC	S	2025	4	PM10	1028	714	726	684
CHEVRON USA INC	S	2035	4	PM10	477	1092	1464	1431
CALIFORNIA DAIRIES, INC.	S	2152	4	PM10	0	0	0	99
CRIMSON RESOURCE MANAGEMENT	S	2161	4	PM10	20	17	12	24
CALIFORNIA DAIRIES, INC.	S	2204	4	PM10	0	0	0	405
COUNTY OF SAN JOAQUIN SOLID WASTE DIV	S	2264	4	PM10	0	0	0	471
COUNTY OF SAN JOAQUIN SOLID WASTE DIV	S	2266	4	PM10	0	0	0	1000
COUNTY OF SAN JOAQUIN SOLID WASTE DIV	S	2267	4	PM10	0	0	0	8813
CHEVRON USA INC (REFINERY)	S	2275	4	PM10	490	1911	1932	532
WESTERN MILLING LLC	S	2276	4	PM10	0	0	0	4033
FOSTER FARMS, PORTERVILLE PLANT	S	2337	4	PM10	40	40	40	40
AERA ENERGY LLC	S	2361	4	PM10	4	1	0	2
VANDERHAM WEST	S	2410	4	PM10	0	0	0	5765
VANDERHAM WEST	S	2411	4	PM10	0	0	0	7592
VANDERHAM WEST	S	2412	4	PM10	0	0	7	3945
VANDERHAM WEST	S	2413	4	PM10	9	0	0	4701

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
OLDUVAI GORGE, LLC	S	2461	4	PM10	831	0	415	73
BERRY PETROLEUM COMPANY	S	2480	4	PM10	0	0	0	6000
OLDUVAI GORGE, LLC	S	2482	4	PM10	0	0	0	7471
M CARATAN INC	S	2516	4	PM10	0	0	14	3
UNITED STATES GYPSUM COMPANY	S	2543	4	PM10	0	0	0	8032
AERA ENERGY LLC	S	2575	4	PM10	2301	1770	0	548
UNITED STATES GYPSUM COMPANY	S	2576	4	PM10	0	0	0	5078
UNITED STATES GYPSUM COMPANY	S	2577	4	PM10	0	0	350	17130
UNITED STATES GYPSUM COMPANY	S	2578	4	PM10	0	0	0	14051
UNITED STATES GYPSUM COMPANY	S	2580	4	PM10	1340	0	0	0
UNITED STATES GYPSUM COMPANY	S	2581	4	PM10	2953	0	0	8168
UNITED STATES GYPSUM COMPANY	S	2582	4	PM10	0	0	0	2736
UNITED STATES GYPSUM COMPANY	S	2583	4	PM10	87	0	721	10072
UNITED STATES GYPSUM COMPANY	S	2584	4	PM10	0	0	0	6407
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	S	2591	4	PM10	0	0	0	18971
OLDUVAI GORGE, LLC	S	2603	4	PM10	0	0	0	14789
WESTERN MILLING LLC	S	2634	4	PM10	0	0	0	579
KERN OIL & REFINING CO.	S	2649	4	PM10	3313	3812	3561	5082
OLDUVAI GORGE, LLC	S	2669	4	PM10	1969	1969	1969	1969
TAFT PRODUCTION COMPANY	S	2670	4	PM10	1914	1959	2000	2000
SAINT-GOBAIN CONTAINERS, INC	S	2705	4	PM10	0	0	0	118
E&B NATURAL RESOURCES MGMT	S	2773	4	PM10	90	133	58	96
AERA ENERGY LLC	S	2774	4	PM10	443	368	369	489

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
AERA ENERGY LLC	S	2782	4	PM10	61	60	58	63
EVOLUTION MARKETS INC.	S	2876	4	PM10	0	0	0	46954
CALPINE CORPORATION	S	2877	4	PM10	421	0	176	0
EVOLUTION MARKETS INC.	S	2878	4	PM10	0	0	0	11831
PILKINGTON NORTH AMERICA, INC	S	2912	4	PM10	0	0	0	12000
TULE RIVER CO-OP GIN INC	S	2913	4	PM10	0	0	0	484
BUTTONWILLOW GINNING CO	S	2937	4	PM10	0	0	0	28460
PACTIV, LLC	S	2965	4	PM10	33	29	7	15
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	S	2967	4	PM10	0	0	0	3789
BAKERSFIELD CITY WOOD SITE	S	2969	4	PM10	18	24	26	22
KERN DELTA-WEEDPATCH COTTON GINNING CO	S	2971	4	PM10	4439	67	0	1328
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	S	2974	4	PM10	0	0	0	1956
VINTAGE PRODUCTION CALIFORNIA LLC	S	3036	4	PM10	29	29	29	29
VINTAGE PRODUCTION CALIFORNIA LLC	S	3061	4	PM10	102	52	74	78
PLAINS EXPLORATION & PRODUCTION CO	S	3070	4	PM10	0	0	0	8500
ELBOW ENTERPRISES INC	S	3071	4	PM10	0	0	0	19406
SOC RESOURCES INC	S	3089	4	PM10	5	4	4	4
CALPINE ENERGY SERVICES, L.P.	S	3090	4	PM10	751	812	634	694
CALPINE ENERGY SERVICES, L.P.	S	3091	4	PM10	0	0	0	7210
KODA FARMS MILLING, INC.	S	3196	4	PM10	0	0	0	856

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
KODA FARMS MILLING, INC.	S	3197	4	PM10	0	0	0	3144
CALPINE CORPORATION	S	3198	4	PM10	0	0	0	8699
KERN DELTA WEEDPATCH GINNING	S	3199	4	PM10	0	0	0	26563
GENERAL MILLS, INC	S	3218	4	PM10	0	0	0	4525
CHEVRON USA PRODUCTION INC	S	3228	4	PM10	74	85	147	56
AERA ENERGY LLC	S	3265	4	PM10	1591	0	0	0
SHAFTER-WASCO GINNING COMPANY	S	3268	4	PM10	0	0	0	4695
CALPINE CORPORATION	S	3288	4	PM10	0	0	987	8059
CRIMSON RESOURCE MANAGEMENT	S	3392	4	PM10	1745	1292	1258	941
FRITO-LAY, INC.	S	3412	4	PM10	7136	7320	7507	7506
FRITO-LAY, INC.	S	3414	4	PM10	0	0	0	6935
FRITO-LAY, INC.	S	3416	4	PM10	0	8	306	310
FRITO-LAY, INC.	S	3417	4	PM10	0	0	0	2531
FRITO-LAY, INC.	S	3418	4	PM10	5000	5000	5000	5000
FRITO-LAY, INC.	S	3419	4	PM10	132	132	133	134
FRITO-LAY, INC.	S	3437	4	PM10	210	288	195	174
FRITO-LAY, INC.	S	3453	4	PM10	17	68	208	207
ALON BAKERSFIELD REFINING	S	3462	4	PM10	1584	1877	1791	1974
ALON BAKERSFIELD REFINING	S	3463	4	PM10	2445	2476	2506	2506
ALON BAKERSFIELD REFINING	S	3464	4	PM10	2500	2500	2500	2500
CHEVRON USA PRODUCTION INC	S	3533	4	PM10	101	106	124	122
MOLYCORP MINERALS, LLC	S	3539	4	PM10	373	329	313	238
CHEVRON USA INC	S	3544	4	PM10	1086	1185	913	966

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
SOUTH VALLEY GINS INC	S	3554	4	PM10	0	0	0	8671
CHEVRON USA INC	S	3562	4	PM10	3378	3428	3478	3478
CHEVRON USA INC	S	3598	4	PM10	23958	18336	24959	21380
CHEVRON USA INC	S	3604	4	PM10	699	1081	1219	805
BERRY PETROLEUM COMPANY	S	3624	4	PM10	0	0	789	0
LAND O' LAKES, INC.	S	3625	4	PM10	711	455	821	719
VECTOR ENVIRONMENTAL, INC.	S	3630	4	PM10	72	88	82	10
AGRI-CEL INC	S	3631	4	PM10	31	38	35	4
INERGY PROPANE LLC	S	3677	4	PM10	16	48	30	8
CHEVRON USA INC	S	3679	4	PM10	5317	2839	3598	5227
KODA FARMS MILLING, INC.	S	3796	4	PM10	0	0	0	4820
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	S	3797	4	PM10	0	0	0	4466
MID-VALLEY COTTON GROWERS INC	S	3803	4	PM10	0	0	0	2128
SHAFTER HAY & CUBE LLC	S	3804	4	PM10	0	691	1099	154
TEXACO EXPLOR & PROD INC	S	20250361	4	PM10	41	43	37	40
E & J GALLO WINERY	N	2	2	NOx	2587	2434	7175	7642
WESTERN STONE PRODUCTS, INC.	N	17	2	NOx	543	543	619	619
TRIANGLE PACIFIC CORPORATION	N	18	2	NOx	187	54	54	161
H. J. HEINZ COMPANY, L.P.	N	21	2	NOx	0	1026	3112	1060
COTTON ASSOCIATES, INC	S	25	2	NOx	0	0	0	157
CALMAT OF FRESNO	C	40	2	NOx	74	355	163	547
BROWN SAND INC	N	46	2	NOx	90	98	46	83
CALMAT CO.	C	50	2	NOx	104	111	154	159

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
LEPRINO FOODS COMPANY	C	60	2	NOx	7878	7985	7810	7898
CRAYCROFT BRICK COMPANY	C	71	2	NOx	417	336	328	332
CHEVRON USA INC	S	77	2	NOx	2038	1840	1733	2274
EXXON MOBIL CORPORATION	S	84	2	NOx	1648	1666	1685	1685
GROWERS COOP	S	88	2	NOx	0	0	22	406
CALAVERAS MATERIALS INC	C	89	2	NOx	284	257	294	236
THE BEVERAGE SOURCE	N	92	2	NOx	220	800	520	900
LEPRINO FOODS	N	108	2	NOx	2335	2529	2412	2143
CASTLE AIRPORT AVIATION & DEVELOP CENTER	N	109	2	NOx	38954	39386	39819	39819
KRAFT FOODS, INC	S	119	2	NOx	0	0	3425	1107
LOS BANOS GRAVEL GROUP, ASPHLT	N	125	2	NOx	23	113	359	120
CAMPBELL SOUP COMPANY	N	127	2	NOx	1515	454	409	924
KRAFT FOODS, INC	S	131	2	NOx	2070	0	0	94
AERA ENERGY LLC	S	133	2	NOx	3203	0	0	0
ECKERT FROZEN FOODS	N	133	2	NOx	146	545	2047	395
AERA ENERGY LLC	S	135	2	NOx	5032	1152	0	0
J.G. BOSWELL CO. (EL RICO)	C	135	2	NOx	14	4	0	40
AERA ENERGY LLC	S	137	2	NOx	5115	6792	5437	9206
AERA ENERGY LLC	S	139	2	NOx	11686	11816	11946	11946
AERA ENERGY LLC	S	140	2	NOx	36695	46397	47292	36806
KRAFT FOODS INC	C	149	2	NOx	284	284	284	284
R M WADE & COMPANY	C	152	2	NOx	326	373	379	370
AERA ENERGY LLC	S	158	2	NOx	38057	29690	32405	43791

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
AERA ENERGY LLC	S	162	2	NOx	128454	152970	128743	130786
AERA ENERGY LLC	S	163	2	NOx	96698	107197	101158	78678
EXXON MOBIL CORPORATION	S	188	2	NOx	5175	5197	5494	4871
AERA ENERGY LLC	C	219	2	NOx	1738	1923	2100	1931
CHEVRON USA INC	C	221	2	NOx	2311	2557	2792	2567
SUN GARDEN-GANGI CANNING CO LL	N	222	2	NOx	0	0	12886	540
CALAVERAS MATERIALS INC.	C	233	2	NOx	1265	3371	3913	2469
HANSEN BROTHERS	C	249	2	NOx	0	0	0	256
PARAMOUNT FARMS, INC	N	284	2	NOx	3670	3580	3488	3488
SOUTHERN CALIFORNIA GAS CORPORATION	N	299	2	NOx	0	1311	1415	0
EXXON MOBIL CORPORATION	S	301	2	NOx	3010	2818	2052	3565
CITY OF VISALIA	N	317	2	NOx	0	0	7160	0
CHEVRON USA INC	C	331	2	NOx	23739	23739	23740	23740
VINTAGE PETROLEUM	N	346	2	NOx	0	165	1432	14
CHEVRON USA INC	C	364	2	NOx	30130	29673	29217	29217
KRAFT FOODS INC	C	386	2	NOx	9774	9883	9992	9992
KRAFT FOODS INC	C	387	2	NOx	5	5	4	4
LIDESTRI FOODS, INC	N	391	2	NOx	0	0	1527	0
PILKINGTON NORTH AMERICA, INC	N	410	2	NOx	272	4	43	275
MODESTO IRRIGATION DISTRICT	N	430	2	NOx	0	0	273	0
MONTEREY RESOURCES, INC.	S	432	2	NOx	2053	2081	1707	1898
CHEVRON USA INC	S	436	2	NOx	12891	9861	9530	10101
LAWRENCE LIVERMORE NATL. LAB	N	464	2	NOx	83	31	0	61

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number		Pollutant	Reductions (lb/qtr)				
				1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr	
AERA ENERGY LLC	S	470	2	NOx	3478	4930	5390	5212
BAKER COMMODITIES INC	N	482	2	NOx	1194	1194	1196	1194
CONAGRA CONSUMER FROZEN FOODS	N	487	2	NOx	356	163	243	300
CHEVRON USA INC	S	496	2	NOx	5160	233	1734	4212
PARAMOUNT FARMS, INC.	C	497	2	NOx	1000	2000	4000	3000
CANDLEWICK YARNS	C	507	2	NOx	90	77	63	58
THE NESTLE COMPANY INC	N	508	2	NOx	2975	2444	1853	3352
CLARK BROTHERS-DERRICK GIN	C	511	2	NOx	0	0	0	43
LA PALOMA GENERATING COMPANY	N	514	2	NOx	0	9612	22455	0
H. J. HEINZ COMPANY	N	534	2	NOx	0	360	3207	0
BRITZ AG FINANCE CO., INC.	C	557	2	NOx	0	0	0	232
CORCORAN IRRIGATION DISTRICT	C	560	2	NOx	352	356	321	209
DIAMOND FOODS INCORPORATED	N	573	2	NOx	1	1	0	0
PACIFIC PIPELINE SYSTEM, LLC	S	575	2	NOx	0	4693	10418	3569
R F MACDONALD	C	579	2	NOx	0	8	0	0
BRITZ INCORPORATED	C	586	2	NOx	0	0	0	381
MODESTO TALLOW CO INC	N	599	2	NOx	364	328	400	391
OAKWOOD LAKE RESORT	N	601	2	NOx	0	117	188	0
GENERAL MILLS OPERATIONS, INC	N	610	2	NOx	52	3	0	100
CHEVRON U S A INC	S	629	2	NOx	2316	2041	2088	1975
CALIFORNIA DAIRIES, INC.	C	635	2	NOx	22	22	22	22
WESTLAKE FARMS INC	C	645	2	NOx	0	0	0	498
KINGS RIVER CONSERVATION DISTRICT	C	647	2	NOx	0	0	1029	0

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CALIFORNIA DAIRIES, INC.	C	658	2	NOx	0	0	102	75
AERA ENERGY LLC	S	662	2	NOx	9433	18919	3766	817
UNITED STATES GYPSUM COMPANY	N	662	2	NOx	308	36838	15649	308
CHEVRON USA PRODUCTION INC	S	674	2	NOx	507	781	226	485
DARLING INTERNATIONAL INC.	N	674	2	NOx	0	51	107	0
CALIFORNIA DAIRIES, INC.	C	677	2	NOx	450	126	472	315
AERA ENERGY LLC	C	681	2	NOx	26900	26900	26900	26900
CHEMICAL WASTE MANAGEMENT, INC	N	687	2	NOx	7	7	6	6
DAIRY FARMERS OF AMERICA, INC.	C	689	2	NOx	0	0	253	0
VALLEY AIR CONDITIONING & REPAIR INC	C	693	2	NOx	0	0	108	0
H. J. HEINZ COMPANY	N	694	2	NOx	0	43	2570	0
CANANDAIGUA WINE COMPANY INC	C	702	2	NOx	423	427	449	403
CHEVRON USA INC LOST HILLS GP	S	704	2	NOx	5564	5626	5687	5687
CALIFORNIA DAIRIES, INC.	N	707	2	NOx	0	1270	1363	226
JOHN T HOPPER	C	712	2	NOx	0	55	295	56
PLAINS LPG SERVICES, L.P.	C	717	2	NOx	1024	1024	1023	1023
AVENAL POWER CENTER, LLC	N	720	2	NOx	0	9	1255	437
AVENAL POWER CENTER, LLC	N	722	2	NOx	0	1166	88317	1422
AVENAL POWER CENTER, LLC	N	726	2	NOx	0	0	4728	0
AVENAL POWER CENTER, LLC	N	728	2	NOx	10542	3731	2487	5171
NORTHERN CALIFORNIA POWER AGENCY	N	751	2	NOx	0	0	10015	0
NORTHERN CALIFORNIA POWER AGENCY	N	752	2	NOx	0	791	835	0

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
PACIFIC COAST PRODUCERS	N	753	2	NOx	195	605	3088	312
PASTORIA ENERGY LLC	C	755	2	NOx	2525	1011	0	2038
STOCKTON EAST WATER DISTRICT	N	763	2	NOx	2654	3705	3750	3359
GALLO GLASS COMPANY	N	768	2	NOx	14634	12268	15814	10504
OLDUVAI GORGE, LLC	N	769	2	NOx	2154	2045	2093	1783
EVOLUTION MARKETS INC.	N	776	2	NOx	875	927	771	876
OLDUVAI GORGE, LLC	N	782	2	NOx	1085	1097	1109	1109
OLDUVAI GORGE, LLC	N	783	2	NOx	7792	7878	7965	7965
AERA ENERGY LLC	S	784	2	NOx	7140	3993	228	0
OLDUVAI GORGE, LLC	N	805	2	NOx	14	0	0	296
LOVELACE & SONS FARMING	C	807	2	NOx	0	0	0	257
UNITED STATES GYPSUM COMPANY	C	818	2	NOx	0	0	0	734
OLDUVAI GORGE, LLC	N	824	2	NOx	0	0	0	396
DIAMOND FOODS INCORPORATED	N	826	2	NOx	4443	2607	2618	0
OCCIDENTAL OF ELK HILLS INC	S	826	2	NOx	6684	6259	5625	6369
VINTAGE PRODUCTION CALIFORNIA LLC	N	831	2	NOx	173	0	3	0
SAPUTO CHEESE USA INC.	N	834	2	NOx	1810	1810	1810	1810
CALIFORNIA DAIRIES	N	836	2	NOx	2298	1078	961	841
AERA ENERGY LLC	S	838	2	NOx	442	218	338	338
CALPINE ENERGY SERVICES, L.P.	N	845	2	NOx	4089	4089	4089	3093
CALPINE ENERGY SERVICES, L.P.	N	846	2	NOx	4429	4429	4429	3353
EAGLE VALLEY GINNING LLC	N	847	2	NOx	0	0	0	427
E & J GALLO WINERY	N	849	2	NOx	0	14	111	0

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number		Pollutant	Reductions (lb/qtr)				
				1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr	
CONAGRA CONSUMER FROZEN FOODS	N	856	2	NOx	0	0	1749	0
DARLING INTERNATIONAL INC.	C	859	2	NOx	0	0	0	270
AERA ENERGY LLC	S	865	2	NOx	6713	6788	6863	6863
PACIFIC GAS & ELECTRIC CO.	N	868	2	NOx	556	3428	2975	355
BRITZ GIN PARTNERSHIP II	C	871	2	NOx	0	0	0	585
WELLHEAD POWER PANOCHE, LLC.	C	874	2	NOx	0	3	3	0
KERN OIL & REFINING COMPANY	N	878	2	NOx	24	19	32	24
KERN OIL & REFINING COMPANY	N	879	2	NOx	156	188	224	202
AERA ENERGY LLC	S	883	2	NOx	632	160	2073	2061
AVENAL POWER CENTER, LLC	C	899	2	NOx	2243	2243	2243	2243
GALLO GLASS COMPANY	N	900	2	NOx	63691	64821	66246	61340
AVENAL POWER CENTER, LLC	C	902	2	NOx	13879	6131	1086	8539
CITY OF TULARE	N	902	2	NOx	0	436	436	471
CALPINE ENERGY SERVICES, L.P.	N	903	2	NOx	5833	5834	5834	5833
SENECA RESOURCES	N	906	2	NOx	183	517	517	517
CHEVRON USA INC	S	909	2	NOx	3990	3412	3474	3072
EVOLUTION MARKETS INC.	C	944	2	NOx	0	298	1590	300
EVOLUTION MARKETS INC.	C	945	2	NOx	0	286	1530	289
VINTAGE PRODUCTION CALIFORNIA LLC	N	945	2	NOx	2384	0	0	0
VINTAGE PRODUCTION CALIFORNIA LLC	N	946	2	NOx	4686	0	0	0
VINTAGE PRODUCTION CALIFORNIA LLC	N	947	2	NOx	1825	0	0	0
VINTAGE PRODUCTION CALIFORNIA	N	948	2	NOx	1532	1530	1530	1530

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
LLC								
HERSHEY CHOCOLATE & CONF. CORP	N	952	2	NOx	114	106	125	125
ANDERSON CLAYTON CORP/IDRIA #1	C	959	2	NOx	0	0	0	2122
CHEVRON USA INC	C	966	2	NOx	2	2	2	2
GALLO GLASS COMPANY	N	966	2	NOx	63525	46849	57176	61929
BERRY PETROLEUM COMPANY	N	980	2	NOx	0	0	5529	581
BERRY PETROLEUM COMPANY	N	981	2	NOx	177	172	1273	128
NORTHROP GRUMMAN CORPORATION	N	992	2	NOx	2000	2000	2000	2000
OLDUVAI GORGE, LLC	C	998	2	NOx	0	0	0	815
OLAM WEST COAST, INC	C	1006	2	NOx	1188	1163	1138	1137
E & J GALLO WINERY	N	1010	2	NOx	2500	2500	2500	2500
E & J GALLO WINERY	N	1011	2	NOx	625	625	625	625
E & J GALLO WINERY	N	1012	2	NOx	545	545	545	545
OLDUVAI GORGE, LLC	C	1012	2	NOx	0	0	0	242
CALPINE ENERGY SERVICES, L.P.	C	1014	2	NOx	302	0	0	852
TKV CONTAINERS, INC.	C	1015	2	NOx	0	13	14	0
SOUTHERN CALIF GAS CO	S	1016	2	NOx	283	288	289	289
STRATAS FOODS LLC	C	1020	2	NOx	0	0	0	108
LOS GATOS TOMATO PRODUCTS	C	1021	2	NOx	0	4	0	0
NORTHERN CALIFORNIA POWER AGENCY	N	1028	2	NOx	0	274	790	147
AERA ENERGY LLC	S	1030	2	NOx	93295	83665	32600	77083
PARAMOUNT FARMS, INC.	C	1035	2	NOx	0	0	155	334
PLAINS EXPLORATION & PRODUCTION	N	1035	2	NOx	2379	2379	2379	2379

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CO								
WESTSIDE FARMERS COOP #2 & #3	C	1038	2	NOx	109	0	0	1122
CALPINE ENERGY SERVICES, L.P.	C	1040	2	NOx	0	0	0	684
BGC ENVIRONMENTAL BROKERAGE SERVICES	N	1045	2	NOx	66981	66981	66981	66981
NAS LEMOORE	C	1048	2	NOx	26	26	25	25
VINTAGE PRODUCTION CALIFORNIA LLC	N	1048	2	NOx	2750	2750	2750	2750
CHEVRON U.S.A. INC.	N	1051	2	NOx	15566	8173	19366	19259
MARTIN ANDERSON	C	1051	2	NOx	52	77	45	3
CHEVRON U.S.A. INC.	N	1052	2	NOx	0	0	8139	0
CHEVRON U.S.A. INC.	N	1053	2	NOx	0	0	9120	180
CHEVRON U.S.A. INC.	N	1054	2	NOx	500	500	500	500
HYDROGEN ENERGY CA LLC	C	1058	2	NOx	10100	10100	10100	10100
G.I.C. FINANCIAL SERVICES, INC.	C	1059	2	NOx	21900	21900	21900	21900
AERA ENERGY LLC	S	1061	2	NOx	8071	8777	10695	9555
E & J GALLO WINERY	N	1061	2	NOx	9980	9980	10939	9979
AERA ENERGY LLC	S	1062	2	NOx	8530	9784	10046	9903
AERA ENERGY LLC	S	1063	2	NOx	9423	10057	12159	9776
AERA ENERGY LLC	S	1064	2	NOx	5126	5705	5881	6709
AERA ENERGY LLC	S	1065	2	NOx	10366	10483	11017	8841
AERA ENERGY LLC	S	1066	2	NOx	5542	7367	5038	6117
AERA ENERGY LLC	S	1067	2	NOx	1255	893	2650	4592
AERA ENERGY LLC	S	1068	2	NOx	7648	9620	6968	8415

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
AERA ENERGY LLC	S	1069	2	NOx	4713	5029	4352	2082
AERA ENERGY LLC	S	1070	2	NOx	495	4228	2744	99
VINTAGE PRODUCTION CALIFORNIA LLC	C	1087	2	NOx	753	0	0	310
AERA ENERGY LLC	S	1092	2	NOx	348	242	246	236
PACIFIC PIPELINE SYSTEM, LLC	S	1099	2	NOx	0	13703	12649	0
CHEVRON USA INC	S	1100	2	NOx	62167	62857	63548	63548
CHEVRON USA INC	S	1102	2	NOx	57160	57795	58430	58430
CHEVRON USA INC	S	1106	2	NOx	11814	11942	12075	12075
MODESTO IRRIGATION DISTRICT	C	1111	2	NOx	0	0	74	5923
SPRECKELS SUGAR COMPANY	C	1112	2	NOx	0	3701	5023	2200
NORTHERN CALIFORNIA POWER AGENCY	C	1129	2	NOx	0	6728	3983	1831
NORTHERN CALIFORNIA POWER AGENCY	C	1132	2	NOx	0	137	122	117
PARAMOUNT FARMS INTERNATIONAL LLC	C	1133	2	NOx	36000	36000	36000	36000
GUARDIAN INDUSTRIES CORP	C	1134	2	NOx	39346	39346	39346	39346
KRAFT FOODS INC	C	1138	2	NOx	0	0	0	1632
E&B NATURAL RESOURCES MANAGEMENT	C	1141	2	NOx	1632	1632	1632	0
CHEVRON USA INC	C	1158	2	NOx	0	0	0	132
CHEVRON USA INC	C	1159	2	NOx	0	0	0	137
CHEVRON USA INC	C	1160	2	NOx	175	0	0	1230
CHEVRON USA INC	C	1161	2	NOx	0	0	0	846

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
PHILLIPS 66 PIPELINE LLC	C	1163	2	NOx	0	0	17	0
BERRY PETROLEUM COMPANY	C	1187	2	NOx	0	342	4623	2234
VINTAGE PRODUCTION CALIFORNIA LLC	C	1190	2	NOx	13750	13750	13750	13750
HANFORD L P	C	1191	2	NOx	3081	4129	2703	716
MACPHERSON OIL COMPANY	C	1195	2	NOx	73	73	73	73
SAN JOAQUIN FACILITIES MGMT	S	1253	2	NOx	459	509	544	481
CHEVRON USA INC	S	1256	2	NOx	45238	45741	46244	46244
AERA ENERGY LLC	S	1270	2	NOx	4586	4637	4688	4688
CHEVRON U S A INC	S	1325	2	NOx	260	118	276	211
CHEVRON USA INC	S	1419	2	NOx	4875	4928	4983	4983
SENECA RESOURCES	S	1427	2	NOx	88	57	76	98
CHEVRON U S A INC	S	1428	2	NOx	1968	1990	2011	2011
AERA ENERGY LLC	S	1437	2	NOx	42372	49588	46800	43954
CHEVRON USA INC	S	1445	2	NOx	17602	20114	20328	15867
CHEVRON USA INC LOST HILLS GP	S	1470	2	NOx	780	789	797	797
AERA ENERGY LLC	S	1476	2	NOx	1242	0	0	350
AERA ENERGY LLC	S	1477	2	NOx	2153	0	0	607
CHEVRON USA INC	S	1487	2	NOx	11663	11793	11923	11923
SAN JOAQUIN FACILITIES MGMT	S	1509	2	NOx	34	45	45	45
PASTORIA ENERGY FACILITY, LLC	S	1543	2	NOx	10354	8381	11018	11467
CHEVRON USA INC	S	1605	2	NOx	5672	7143	7028	6447
ELK HILLS POWER LLC	S	1622	2	NOx	1373	1389	1404	1404
BUILDING MATERIALS MFG. CORP. (DBA	S	1662	2	NOx	5832	5840	5848	5848

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
GAF)								
SAN JOAQUIN FACILITIES MGMT	S	1735	2	NOx	9	8	6	4
AERA ENERGY LLC	S	1821	2	NOx	5974	7291	7466	4158
AERA ENERGY LLC	S	1851	2	NOx	914	455	0	1154
AERA ENERGY LLC	S	1935	2	NOx	474	508	543	543
CHEVRON USA INC	S	1967	2	NOx	973	955	855	984
ELK HILLS POWER LLC	S	1994	2	NOx	12485	12624	12762	12762
AERA ENERGY LLC	S	2023	2	NOx	1108	636	737	993
CHEVRON USA INC	S	2031	2	NOx	5694	4723	4406	0
KERN LAKE COOP GIN	S	2074	2	NOx	0	0	0	309
PLAINS EXPLORATION & PRODUCTION CO	S	2092	2	NOx	10010	10691	10155	6716
PLAINS EXPLORATION & PRODUCTION CO	S	2093	2	NOx	13229	10050	6765	15163
CHEVRON USA INC	S	2111	2	NOx	7823	15506	21032	12182
HILMAR CHEESE COMPANY	S	2138	2	NOx	0	0	0	1070
INERGY PROPANE LLC	S	2193	2	NOx	125	125	125	125
CON AGRA FOOD INGREDIENTS, CO	S	2201	2	NOx	6	6	5	5
CRIMSON RESOURCE MANAGEMENT	S	2251	2	NOx	316	272	186	375
MEMORIAL MEDICAL CENTER	S	2268	2	NOx	2550	2550	2550	2550
PACIFIC PIPELINE SYSTEM, LLC	S	2286	2	NOx	1278	2194	2438	2438
CALIFORNIA DAIRIES, INC.	S	2293	2	NOx	32	33	32	32
AMERICAN ENERGY OPERATIONS INC	S	2295	2	NOx	7	9	7	6
AERA ENERGY LLC	S	2361	2	NOx	30	4	0	12

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CHEVRON USA INC	S	2456	2	NOx	32003	32799	31884	32561
M CARATAN INC	S	2516	2	NOx	0	0	189	46
FARMERS COOPERATIVE GIN INC	S	2533	2	NOx	0	0	0	598
ELBOW ENTERPRISES INC	S	2535	2	NOx	0	0	0	1168
SAN JOAQUIN FACILITIES MGMT	S	2537	2	NOx	71	0	0	0
SAN JOAQUIN FACILITIES MGMT	S	2539	2	NOx	597	0	0	307
UNITED STATES GYPSUM COMPANY	S	2543	2	NOx	0	0	0	311
CALNEV PIPE LINE LLC	S	2553	2	NOx	1886	1886	1886	1886
OCCIDENTAL OF ELK HILLS INC	S	2629	2	NOx	1735	1846	2330	1762
DARLING INTERNATIONAL INC.	S	2635	2	NOx	911	860	804	641
KERN OIL & REFINING CO.	S	2653	2	NOx	94	277	91	215
KAWEAH DELTA DISTRICT HOSPITAL	S	2657	2	NOx	100	441	536	667
CALIFORNIA DAIRIES, INC	S	2731	2	NOx	50	0	24	1282
EVOLUTION MARKETS INC.	S	2738	2	NOx	1696	3526	1536	1221
EVOLUTION MARKETS INC.	S	2740	2	NOx	0	27355	0	0
E&B NATURAL RESOURCES MGMT	S	2773	2	NOx	454	689	275	487
AERA ENERGY LLC	S	2774	2	NOx	5817	4899	4757	8181
AERA ENERGY LLC	S	2782	2	NOx	329	323	318	341
OLDUVAI GORGE, LLC	S	2802	2	NOx	3233	0	0	5000
OLDUVAI GORGE, LLC	S	2806	2	NOx	2306	290	2534	2070
AVENAL POWER CENTER, LLC	S	2814	2	NOx	6121	13869	18914	11461
UNITED STATES GYPSUM COMPANY	S	2815	2	NOx	39560	6703	27282	33352
NORTHERN CALIFORNIA POWER AGENCY	S	2854	2	NOx	0	1437	0	0

**Table H-5 – List of Emission Reduction Credits
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Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
NORTHERN CALIFORNIA POWER AGENCY	S	2857	2	NOx	0	0	0	1031
OLDUVAI GORGE, LLC	S	2865	2	NOx	1126	0	0	0
NORTHERN CALIFORNIA POWER AGENCY	S	2895	2	NOx	0	0	0	3406
EVOLUTION MARKETS INC.	S	2896	2	NOx	130	131	132	132
EVOLUTION MARKETS INC.	S	2899	2	NOx	1313	1378	1443	1443
BERRY PETROLEUM COMPANY	S	2903	2	NOx	824	0	0	109
EVOLUTION MARKETS INC.	S	2908	2	NOx	1500	1500	1500	1500
AVENAL POWER CENTER, LLC	S	2955	2	NOx	51000	51000	51000	51000
PACTIV, LLC	S	2965	2	NOx	233	199	51	109
BAKERSFIELD CITY WOOD SITE	S	2969	2	NOx	1564	2135	2265	1857
PILKINGTON NORTH AMERICA, INC	S	2970	2	NOx	1500	1500	1500	1500
GLOBAL AMPERSAND LLC	S	2976	2	NOx	239	239	239	239
LOCKHEED MARTIN	S	2990	2	NOx	3000	3000	3000	3000
OLDUVAI GORGE, LLC	S	3032	2	NOx	0	0	0	296
OLDUVAI GORGE, LLC	S	3034	2	NOx	0	0	0	321
VINTAGE PRODUCTION CALIFORNIA LLC	S	3038	2	NOx	417	345	508	572
VINTAGE PRODUCTION CALIFORNIA LLC	S	3054	2	NOx	22	0	0	0
LOCKHEED MARTIN	S	3079	2	NOx	1160	1840	1500	1500
CALIFORNIA STATE PRISON - CORCORAN	S	3112	2	NOx	135	137	137	138
PASTORIA ENERGY FACILITY, LLC	S	3114	2	NOx	178929	181004	183080	184561

**Table H-5 – List of Emission Reduction Credits
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Current ERC Certificate Holder	ERC Number		Pollutant	Reductions (lb/qr)				
				1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr	
CALPINE ENERGY SERVICES, L.P.	S	3138	2	NOx	0	0	0	760
OLDUVAI GORGE, LLC	S	3139	2	NOx	0	0	0	290
CHEVRON USA INC	S	3156	2	NOx	12415	12563	12710	12710
KERN DELTA WEEDPATCH GINNING	S	3199	2	NOx	0	0	0	622
CHEVRON USA INC (REFINERY)	S	3208	2	NOx	28667	29255	29842	29842
GENERAL MILLS, INC	S	3217	2	NOx	0	0	0	30
PLAINS EXPLORATION & PRODUCTION CO	S	3227	2	NOx	4812	4814	4815	4815
CHEVRON USA PRODUCTION INC	S	3228	2	NOx	139	161	275	104
OCCIDENTAL OF ELK HILLS INC	S	3249	2	NOx	89	208	73	157
BERRY PETROLEUM COMPANY	S	3256	2	NOx	239	239	239	239
AERA ENERGY LLC	S	3267	2	NOx	5519	3439	0	2156
SHAFTER-WASCO GINNING COMPANY	S	3268	2	NOx	0	0	0	232
HYDROGEN ENERGY CALIFORNIA, LLC	S	3273	2	NOx	120500	120500	120500	120500
CALPINE ENERGY SERVICES, L.P.	S	3277	2	NOx	6400	0	3870	1876
CALPINE CORPORATION	S	3298	2	NOx	2103	9681	19140	9076
AERA ENERGY LLC	S	3312	2	NOx	2432	4568	1346	162
LAND O' LAKES, INC.	S	3326	2	NOx	214	166	214	214
HOLMES WESTERN OIL CORPORATION	S	3377	2	NOx	1633	1632	1632	1632
CRIMSON RESOURCE MANAGEMENT	S	3388	2	NOx	4704	3393	3449	2696
CRIMSON RESOURCE MANAGEMENT	S	3389	2	NOx	95	299	319	166
CITY OF TULARE	S	3398	2	NOx	501	0	0	0
CRIMSON RESOURCE MANAGEMENT	S	3441	2	NOx	5	4	4	5
ALON BAKERSFIELD REFINING	S	3459	2	NOx	99200	101589	104030	104030

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
ALON BAKERSFIELD REFINING	S	3460	2	NOx	4645	5658	5190	4325
ALON BAKERSFIELD REFINING	S	3461	2	NOx	1425	1689	1612	1776
GWF ERC LLC	S	3529	2	NOx	0	0	3	0
CHEVRON USA PRODUCTION INC	S	3533	2	NOx	181	188	224	219
CALPINE CORPORATION	S	3541	2	NOx	0	242	0	0
CHEVRON USA INC	S	3544	2	NOx	3027	3303	2542	2691
SAN JOAQUIN REFINING COMPANY	S	3549	2	NOx	201	202	202	201
SOUTH VALLEY GINS INC	S	3554	2	NOx	0	0	0	192
VINTAGE PRODUCTION CALIFORNIA LLC	S	3585	2	NOx	0	9294	4654	9859
VINTAGE PRODUCTION CALIFORNIA LLC	S	3586	2	NOx	0	1512	6228	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	3587	2	NOx	758	694	618	1641
VINTAGE PRODUCTION CALIFORNIA LLC	S	3588	2	NOx	1847	0	0	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	3589	2	NOx	1837	0	0	598
VINTAGE PRODUCTION CALIFORNIA LLC	S	3590	2	NOx	0	434	0	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	3591	2	NOx	508	498	408	379
VINTAGE PRODUCTION CALIFORNIA LLC	S	3592	2	NOx	1283	275	1967	1412
CHEVRON USA INC	S	3604	2	NOx	1948	3037	3398	2243
PLAINS EXPLORATION & PRODUCTION CO	S	3613	2	NOx	1411	73	1449	2071

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number		Pollutant	Reductions (lb/qr)				
				1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr	
LAND O' LAKES, INC.	S	3625	2	NOx	618	473	646	602
VECTOR ENVIRONMENTAL, INC.	S	3630	2	NOx	127	156	146	19
AGRI-CEL INC	S	3631	2	NOx	54	67	63	8
BERRY PETROLEUM COMPANY	S	3636	2	NOx	3538	3339	0	3431
BERRY PETROLEUM COMPANY	S	3656	2	NOx	12976	0	0	0
STARWOOD POWER-MIDWAY, LLC	S	3676	2	NOx	283	283	496	354
INERGY PROPANE LLC	S	3677	2	NOx	47	137	86	23
AERA ENERGY LLC	S	3689	2	NOx	76465	88497	87135	83102
TURLOCK IRRIGATION DISTRICT	S	3707	2	NOx	3442	2862	2277	2277
SENECA RESOURCES	S	3718	2	NOx	0	118	0	0
CHEVRON USA INC	S	3735	2	NOx	43881	44422	44964	44964
NORTHERN CALIFORNIA POWER AGENCY	S	3746	2	NOx	0	1432	15919	10487
FRITO-LAY, INC.	S	3763	2	NOx	287	442	182	53
FRITO-LAY, INC.	S	3765	2	NOx	7432	7619	7790	7789
KRAFT FOODS, INC	S	3769	2	NOx	0	0	0	24
KRAFT FOODS, INC	S	3773	2	NOx	0	0	165	0
KRAFT FOODS, INC	S	3776	2	NOx	1227	3443	0	733
CHEVRON USA INC	S	3782	2	NOx	139808	139808	139808	139808
CHEVRON USA INC	S	3784	2	NOx	47002	47880	48758	48758
E&B NATURAL RESOURCES MGMT	S	3785	2	NOx	0	3296	538	2636
E&B NATURAL RESOURCES MGMT	S	3786	2	NOx	0	2971	2714	2156
E&B NATURAL RESOURCES MGMT	S	3787	2	NOx	0	3374	5552	6708
E&B NATURAL RESOURCES MGMT	S	3788	2	NOx	0	0	1064	0

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
E&B NATURAL RESOURCES MGMT	S	3789	2	NOx	7208	0	0	0
E&B NATURAL RESOURCES MGMT	S	3790	2	NOx	2660	227	0	0
CHEVRON USA INC	S	3817	2	NOx	0	0	9568	154
CHEVRON USA INC	S	3818	2	NOx	0	6312	0	5064
CHEVRON USA INC	S	3819	2	NOx	6000	6000	6000	6000
BERRY PETROLEUM COMPANY	S	3820	2	NOx	31140	31140	31140	31140
ELEMENT MARKETS LLC	S	3821	2	NOx	830	830	830	830
OCCIDENTAL OF ELK HILLS INC	S	3825	2	NOx	24912	25457	26004	26005
AERA ENERGY LLC	S	3831	2	NOx	8498	5583	30	1326
BERRY PETROLEUM COMPANY	S	3837	2	NOx	0	0	1804	0
OLDUVAI GORGE, LLC	S	3854	2	NOx	19313	5679	7230	8820
LIBERTY COMPOSTING INC	S	3855	2	NOx	925	925	925	925
BERRY PETROLEUM COMPANY	S	3871	2	NOx	0	0	0	1047
BERRY PETROLEUM COMPANY	S	3873	2	NOx	227	1250	0	0
INERGY WEST COAST LLC	S	3893	2	NOx	14	14	14	14
BERRY PETROLEUM COMPANY	S	3913	2	NOx	416	833	0	417
BERRY PETROLEUM COMPANY	S	3915	2	NOx	1751	0	0	0
BERRY PETROLEUM COMPANY	S	3925	2	NOx	2234	1892	396	0
AERA ENERGY LLC	S	3933	2	NOx	12023	9838	10685	14104
MACPHERSON OIL COMPANY	S	3940	2	NOx	4055	4055	4055	4055
ELEMENT MARKETS LLC	S	3941	2	NOx	3548	3548	3548	3548
OCCIDENTAL OF ELK HILLS INC	S	3949	2	NOx	25773	26509	27248	27246
SIERRA POWER CORPORATION	S	2910001	2	NOx	2115	2138	2162	2162

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
TEXACO EXPLOR & PROD INC	S	20250361	2	NOx	7037	7356	6314	6778
CHEVRON USA INC	S	20410281	2	NOx	3806	3765	3765	3848
CHEVRON USA INC	S	40410441	2	NOx	20385	20612	20838	20838
WESTERN STONE PRODUCTS, INC.	N	17	5	SOx	636	636	725	725
CALIFORNIA OLIVE GROWERS	C	21	5	SOx	10	10	10	10
COTTON ASSOCIATES, INC	S	25	5	SOx	0	0	0	1
CAMPBELL SOUP SUPPLY CO.	N	31	5	SOx	0	52	128	0
DUNCAN ENTERPRISES	C	33	5	SOx	3	3	3	2
CALMAT OF FRESNO	C	40	5	SOx	25	120	55	185
BUILDERS CONCRETE, INC.	C	41	5	SOx	8	8	8	8
BROWN SAND INC	N	46	5	SOx	3	3	2	3
J G BOSWELL CO. (SEED STORAGE)	C	47	5	SOx	2	1	2	2
CALMAT CO.	C	50	5	SOx	39	41	58	59
H. J. HEINZ COMPANY	N	60	5	SOx	0	0	32	0
CRAYCROFT BRICK COMPANY	C	71	5	SOx	2	2	2	2
ANDERSON CLAYTON CORP/KEARNY	C	75	5	SOx	0	0	0	28
ANDERSON CLAYTON CORP/SETTER	C	76	5	SOx	0	0	0	3
ANDERSON CLAYTON CORP/FIVE PTS	C	78	5	SOx	0	0	0	31
ANDERSON CLAYTON CORP/SAN JOAQ	C	79	5	SOx	0	0	0	22
ANDERSON CLAYTON CORP/TRANQLTY	C	80	5	SOx	0	0	0	2
ANDERSON CLAYTON CORP/CORCORAN	C	81	5	SOx	0	0	0	2
GROWERS COOP	S	88	5	SOx	0	0	0	3
THE NESTLE COMPANY INC	N	93	5	SOx	2491	39	48	6273

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
WESTERN COTTON SERVICES	S	98	5	SOx	0	0	0	27
SUN GARDEN-GANGI CANNING CO LL	N	100	5	SOx	0	0	23440	4
CASTLE AIRPORT AVIATION & DEVELOP CENTER	N	109	5	SOx	3179	3214	3249	3249
LOS BANOS GRAVEL GROUP, ASPHLT	N	125	5	SOx	4	22	72	24
CAMPBELL SOUP COMPANY	N	127	5	SOx	18	13	11	13
SAN JOAQUIN VALLEY ENERGY	N	129	5	SOx	391	555	565	244
ECKERT FROZEN FOODS	N	133	5	SOx	1	3	9	8
ANDERSON CLAYTON CORPORATION	N	135	5	SOx	0	0	0	1
J.G. BOSWELL CO. (EL RICO)	C	135	5	SOx	2	1	0	5
SJVEP I, L.P. (CHOW II)	C	137	5	SOx	298	263	274	342
NAS LEMOORE	C	138	5	SOx	16	6	13	4
GENERAL MILLS OPERATIONS, INC	N	139	5	SOx	2	2	2	2
CRANBROOK ASSOCIATES LLC	N	140	5	SOx	24	24	391	31
CHEVRON USA PRODUCTION INC	S	147	5	SOx	3	3	2	3
R M WADE & COMPANY	C	152	5	SOx	2	2	2	2
WESTSIDE FARMERS COOP. GIN	C	164	5	SOx	0	0	0	37
CHEVRON USA INC	S	171	5	SOx	17	17	16	17
ANDERSON CLAYTON CORP.	N	181	5	SOx	0	0	0	1
PG & E ENERGY TRADING POWER LP	N	200	5	SOx	8	999	321	8
FIBREBOARD CORP.	N	209	5	SOx	9	7	4	10
CALAVERAS MATERIALS INC.	C	233	5	SOx	998	2716	3181	1989
ANDERSON CLAYTON CORP/MURRAY	C	234	5	SOx	0	0	0	6
HANSEN BROTHERS	C	249	5	SOx	0	0	0	2

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qrtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
ANDERSON CLAYTON CORP/IDRIA #2	C	250	5	SOx	0	0	0	42
AERA ENERGY LLC	S	260	5	SOx	19004	28541	13717	8240
INGREDION INCORPORATED	N	264	5	SOx	39050	39050	39050	39050
AERA ENERGY LLC	S	272	5	SOx	1735	2907	1810	2494
AERA ENERGY LLC	S	284	5	SOx	19831	12103	6514	16106
PARAMOUNT FARMS, INC.	C	291	5	SOx	0	0	8	1
DUNAVANT OF CALIFORNIA	C	297	5	SOx	22	29	19	25
ANDERSON CLAYTON CORP	S	314	5	SOx	0	0	0	2
DEL MONTE CORPORATION	N	316	5	SOx	17	15	43	8
ANDERSON CLAYTON CORP/PLSNT VA	C	326	5	SOx	0	0	0	22
NAS LEMOORE	C	330	5	SOx	1	1	1	1
CHEVRON USA INC	C	331	5	SOx	1576	1577	1577	1577
ANDERSON CLAYTON CORP/DAIRYLAN	C	332	5	SOx	0	0	0	9
ANDERSON CLAYTON CORP/SUNSET	C	333	5	SOx	0	0	0	6
ANDERSON CLAYTON CORP/MURIT #1	C	334	5	SOx	0	0	0	9
ANDERSON CLAYTON CORP/NAPA GIN	C	335	5	SOx	0	0	0	6
ANDERSON CLAYTON CORP/MURIT #2	C	336	5	SOx	0	0	0	9
CHEVRON USA INC	C	339	5	SOx	4730	4730	4731	4731
CHEVRON U S A INC	S	357	5	SOx	6	5	5	7
HERSHEY CHOCOLATE & CONF. CORP	N	373	5	SOx	2	2	2	2
LIDESTRI FOODS, INC	N	391	5	SOx	0	0	84	0
AERA ENERGY LLC	S	395	5	SOx	4836	5200	5928	5651
INTERLAKE MATERIAL HANDLING	N	414	5	SOx	8	8	7	8

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
NRG POWER MARKETING INC	C	426	5	SOx	16	13	5	15
SEMI TROPIC COOP GIN	S	426	5	SOx	0	0	0	2
ANDERSON CLAYTON CORP/EL DORAD	C	427	5	SOx	0	0	0	3
ANDERSON CLAYTON CORP/KERMAN	C	428	5	SOx	0	0	0	48
MONTEREY RESOURCES, INC.	S	432	5	SOx	32	32	26	29
CHEVRON USA INC	S	436	5	SOx	79	72	66	66
VALLEY AIR CONDITIONING & REPAIR INC	C	438	5	SOx	41	105	154	162
MINTURN CO-OP GIN	N	441	5	SOx	0	0	0	31
HOLLY SUGAR CORPORATION	N	451	5	SOx	0	2146	1749	1492
ANDERSON CLAYTON CORP/KINGSRIV	C	460	5	SOx	0	0	0	4
LAWRENCE LIVERMORE NATL. LAB	N	464	5	SOx	30	11	0	22
ANDERSON CLAYTON CORP	S	471	5	SOx	0	0	0	1
ANDERSON CLAYTON CORP/DAIRYLND	C	472	5	SOx	0	0	0	21
CONAGRA CONSUMER FROZEN FOODS	N	489	5	SOx	7	4	5	6
ANDERSON CLAYTON CORP.	N	499	5	SOx	0	0	0	24
PARAMOUNT FARMS, INC.	C	501	5	SOx	26	81	126	112
VALLEY AIR CONDITIONING & REPAIR INC	C	502	5	SOx	7	22	36	30
CANDLEWICK YARNS	C	507	5	SOx	5	5	4	4
CLARK BROTHERS-DERRICK GIN	C	511	5	SOx	0	0	0	3
LODI GAS STORAGE LLC	N	515	5	SOx	5	5	5	5
DOLE PACKAGED FOODS LLC	N	520	5	SOx	1	3	9	8
NAVERUS INC	N	526	5	SOx	1	1	1	1

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
COIT RANCH	C	532	5	SOx	0	0	0	4
COALINGA FARMERS CO-OP GIN	C	537	5	SOx	0	0	0	14
AERA ENERGY LLC	S	548	5	SOx	2803	26	0	0
AERA ENERGY LLC	S	556	5	SOx	1379	869	781	989
BRITZ AG FINANCE CO., INC.	C	557	5	SOx	0	0	0	33
CORCORAN IRRIGATION DISTRICT	C	560	5	SOx	4	5	4	3
UNIVERSITY ENERGY SERVICES	S	561	5	SOx	63	54	59	61
PACIFIC PIPELINE SYSTEM, LLC	S	575	5	SOx	1	39	115	24
PACIFIC PIPELINE SYSTEM, LLC	S	576	5	SOx	0	175	161	0
PACIFIC PIPELINE SYSTEM, LLC	S	577	5	SOx	42	57	61	61
BRITZ INCORPORATED	C	586	5	SOx	0	0	0	11
WESTSIDE FARMERS COOP GIN #6	C	592	5	SOx	10	0	0	71
MODESTO IRRIGATION DISTRICT	C	599	5	SOx	2078	1671	0	0
MODESTO TALLOW CO INC	N	599	5	SOx	20	18	22	22
OAKWOOD LAKE RESORT	N	601	5	SOx	0	0	1	0
BAR 20 PARTNERS LTD	N	612	5	SOx	0	0	79	0
BAR 20 PARTNERS LTD	N	617	5	SOx	0	0	304	0
VANDER WOUDE DAIRY	N	620	5	SOx	878	308	202	427
VANDER WOUDE DAIRY	N	621	5	SOx	0	0	13785	0
RON AND ROSALINDA VANDER WEERD	N	629	5	SOx	0	0	19437	0
RON AND ROSALINDA VANDER WEERD	N	630	5	SOx	0	0	20653	0
GRIMMIUS CATTLE COMPANY	N	636	5	SOx	21307	28000	6627	20577
BAR VP DAIRY	N	638	5	SOx	0	0	0	32

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BAR VP DAIRY	N	639	5	SOx	10	10	0	7
BAR VP DAIRY	N	640	5	SOx	0	0	16147	0
DIAMOND FOODS INCORPORATED	N	645	5	SOx	2699	2294	2340	1357
WESTLAKE FARMS INC	C	645	5	SOx	0	0	0	29
DANELL BROTHERS INC	N	682	5	SOx	10000	10000	10000	10000
H. J. HEINZ COMPANY	N	694	5	SOx	0	0	117	0
ANDERSON CLAYTON-MARICOPA GIN	S	697	5	SOx	0	0	0	3
EVOLUTION MARKETS INC.	N	698	5	SOx	55742	2294	0	0
SUNLAND REFINING CORPORATION	S	698	5	SOx	1293	1123	1211	1241
ANDERSON CLAYTON CORP/BUTTE	C	699	5	SOx	0	0	0	31
EVOLUTION MARKETS INC.	N	700	5	SOx	762	72578	0	0
CANANDAIGUA WINE COMPANY INC	C	702	5	SOx	33	34	35	32
EVOLUTION MARKETS INC.	N	711	5	SOx	0	0	4595	4591
EVOLUTION MARKETS INC.	N	713	5	SOx	19238	23422	0	0
ANDERSON CLAYTON CORPORATION	N	737	5	SOx	0	0	0	3
LATON CO-OP GIN, INC.	C	746	5	SOx	0	0	0	3
CANTUA COOPERATIVE GIN, INC.	C	760	5	SOx	0	0	0	4
AVENAL POWER CENTER, LLC	N	762	5	SOx	21000	21000	21000	21000
STOCKTON EAST WATER DISTRICT	N	763	5	SOx	8	10	11	9
OLDUVAI GORGE, LLC	N	769	5	SOx	13	12	12	12
BAR 20 PARTNERS LTD	N	778	5	SOx	0	0	1	0
PILKINGTON NORTH AMERICA, INC	N	785	5	SOx	90	90	90	90
OLDUVAI GORGE, LLC	N	786	5	SOx	46	46	40	36

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number		Pollutant	Reductions (lb/qtr)				
				1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr	
AERA ENERGY LLC	S	790	5	SOx	2	1	1	2
ANDERSON CLAYTON CORP/BURREL	C	806	5	SOx	3	0	0	7
BAR VP DAIRY	C	810	5	SOx	250	1096	0	682
BAR VP DAIRY	C	811	5	SOx	919	0	117	80
UNITED STATES GYPSUM COMPANY	C	818	5	SOx	0	0	0	5
OCCIDENTAL OF ELK HILLS INC	S	826	5	SOx	5	5	4	5
AERA ENERGY LLC	S	841	5	SOx	26339	26631	26924	26924
CALPINE ENERGY SERVICES, L.P.	N	841	5	SOx	3041	1167	5891	3122
CALPINE CORPORATION	N	844	5	SOx	6925	7045	7164	7164
AERA ENERGY LLC	S	847	5	SOx	153	227	173	72
EAGLE VALLEY GINNING LLC	N	847	5	SOx	0	0	0	3
PANOCHÉ ENERGY CENTER LLC	N	852	5	SOx	2	302	0	0
AERA ENERGY LLC	S	863	5	SOx	6	7	13	12
ANDERSON CLAYTON CORP/HANFORD	C	863	5	SOx	0	0	0	4
BRITZ GIN PARTNERSHIP II	C	871	5	SOx	0	0	0	4
PLAINS EXPLORATION & PRODUCTION CO	N	871	5	SOx	35	35	33	33
EVOLUTION MARKETS INC.	C	882	5	SOx	0	0	0	23
RON/ROSALINDA VANDER WEERD	C	883	5	SOx	0	3800	3800	0
RON/ROSALINDA VANDER WEERD	C	884	5	SOx	3750	0	66	3751
CHEVRON USA INC	S	891	5	SOx	2712	2742	2773	2773
CALPINE ENERGY SERVICES, L.P.	N	893	5	SOx	0	0	0	52748
PANOCHÉ GINNING CO	C	904	5	SOx	0	0	0	5
CHEVRON USA INC	S	906	5	SOx	2470	2498	2526	2526

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CHEVRON USA INC	S	907	5	SOx	1527	1306	1330	1176
OLAM	N	917	5	SOx	7118	18526	23007	910
OCCIDENTAL OF ELK HILLS INC	N	928	5	SOx	7500	7500	7500	7500
MOLYCORP MINERALS, LLC	N	938	5	SOx	8250	8250	8250	8250
MOLYCORP MINERALS, LLC	N	939	5	SOx	21899	23000	0	14704
OCCIDENTAL OF ELK HILLS INC	N	940	5	SOx	2000	2000	2000	2000
MADERA CO-OP GIN, INC.	C	943	5	SOx	0	0	0	2
PLAINS EXPLORATION & PRODUCTION CO	C	948	5	SOx	22	22	22	22
PLAINS EXPLORATION & PRODUCTION CO	C	949	5	SOx	6	0	16	17
VINTAGE PRODUCTION CALIFORNIA LLC	N	949	5	SOx	4000	4000	4000	4000
HERSHEY CHOCOLATE & CONF. CORP	N	952	5	SOx	3	3	3	3
FARMERS FIREBAUGH GINNING CO.	C	956	5	SOx	2	0	0	6
ANDERSON CLAYTON CORP/IDRIA #1	C	959	5	SOx	0	0	0	53
CHEVRON USA INC	C	966	5	SOx	2	2	2	2
CALIFORNIA DAIRIES, INC.	N	986	5	SOx	9000	9000	9000	9000
AERA ENERGY LLC	S	989	5	SOx	0	2808	0	0
MODESTO IRRIGATION DISTRICT	N	989	5	SOx	23945	25082	12500	0
AERA ENERGY LLC	S	998	5	SOx	735	0	0	0
AERA ENERGY LLC	S	1000	5	SOx	138	2811	489	10
AERA ENERGY LLC	S	1001	5	SOx	275	583	0	0
KERMAN CO-OP GIN & WAREHOUSE 1	C	1002	5	SOx	0	0	0	2
BULLARD ENERGY CENTER, LLC	N	1003	5	SOx	5384	0	0	4390

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
DTE STOCKTON, LLC	N	1007	5	SOx	0	0	27720	0
BULLARD ENERGY CENTER, LLC	N	1008	5	SOx	0	0	27306	0
OXY USA, INC	N	1013	5	SOx	0	0	0	936
THE ENVIRONMENTAL RESOURCES TRUST, INC	C	1013	5	SOx	9823	9823	9823	9823
OXY USA, INC	N	1014	5	SOx	0	0	9774	0
OXY USA, INC	N	1015	5	SOx	34014	32292	24951	35007
TKV CONTAINERS, INC.	C	1015	5	SOx	0	0	1	0
LOS GATOS TOMATO PRODUCTS	C	1021	5	SOx	0	1	0	0
NORTHERN CALIFORNIA POWER AGENCY	N	1022	5	SOx	0	0	5751	0
PLAINS EXPLORATION & PRODUCTION CO	N	1031	5	SOx	2472	2472	2472	2472
AERA ENERGY LLC	S	1032	5	SOx	28371	72172	48856	9900
WESTSIDE FARMERS COOP #2 & #3	C	1038	5	SOx	1	0	0	10
ANDERSON CLAYTON CORP	S	1045	5	SOx	0	0	0	3
VINTAGE PRODUCTION CALIFORNIA LLC	N	1049	5	SOx	5000	5000	5000	5000
GREY K FUND LP	N	1050	5	SOx	70590	70467	20344	20344
MARTIN ANDERSON	C	1051	5	SOx	18	27	16	1
AERA ENERGY LLC	S	1057	5	SOx	4	5	4	3
HYDROGEN ENERGY CA LLC	C	1058	5	SOx	24500	24500	24500	24500
G.I.C. FINANCIAL SERVICES, INC.	C	1059	5	SOx	70500	70500	70500	70500
AERA ENERGY LLC	S	1071	5	SOx	10682	10682	10682	10682
AERA ENERGY LLC	S	1072	5	SOx	5	4	4	4

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
AERA ENERGY LLC	S	1073	5	SOx	2	2	2	2
AERA ENERGY LLC	S	1075	5	SOx	0	1	0	0
AERA ENERGY LLC	S	1076	5	SOx	12	11	13	11
AERA ENERGY LLC	S	1077	5	SOx	79	176	164	173
AERA ENERGY LLC	S	1091	5	SOx	57	70	71	71
GUARDIAN INDUSTRIES CORP	C	1103	5	SOx	16966	16966	16966	16966
SPRECKELS SUGAR COMPANY	C	1112	5	SOx	0	26875	37739	16268
OXY USA, INC	C	1123	5	SOx	1598	0	0	0
AERA ENERGY LLC	S	1133	5	SOx	436	877	687	281
TAUBER OIL COMPANY	C	1139	5	SOx	3103	3103	3103	3103
TAUBER OIL COMPANY	C	1140	5	SOx	20	20	21	21
PLAINS EXPLORATION & PRODUCTION CO	C	1150	5	SOx	61	55	49	49
ANDERSON CLAYTON CORP	S	1171	5	SOx	0	0	0	3
VINTAGE PRODUCTION CALIFORNIA LLC	C	1190	5	SOx	10250	10250	10250	10250
HANFORD L P	C	1191	5	SOx	11597	13898	11341	13511
ANDERSON CLAYTON CORP	S	1262	5	SOx	0	0	0	2
ANDERSON CLAYTON CORP	S	1263	5	SOx	1	0	0	3
AERA ENERGY LLC	S	1295	5	SOx	1289	2983	696	488
AERA ENERGY LLC	S	1339	5	SOx	102863	63756	0	10468
AERA ENERGY LLC	S	1476	5	SOx	21	0	0	6
AERA ENERGY LLC	S	1477	5	SOx	36	0	0	10
CHEVRON USA INC	S	1485	5	SOx	1890	1911	1931	1931

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CHEVRON USA INC	S	1542	5	SOx	25189	21032	18790	30130
AERA ENERGY LLC	S	1865	5	SOx	5592	4295	5749	5942
ELK HILLS POWER LLC	S	1950	5	SOx	496	306	118	118
AERA ENERGY LLC	S	2008	5	SOx	85594	40615	57148	91993
AERA ENERGY LLC	S	2010	5	SOx	0	3320	0	0
AERA ENERGY LLC	S	2019	5	SOx	582	589	597	597
KERN DELTA WEEDPATCH GINNING	S	2062	5	SOx	0	0	0	15
KERN LAKE COOP GIN	S	2074	5	SOx	0	0	0	14
CHEVRON U S A INC	S	2080	5	SOx	35848	36301	36756	36756
AMERICAN ENERGY OPERATIONS INC	S	2297	5	SOx	16	20	16	13
AERA ENERGY LLC	S	2361	5	SOx	542	71	2	215
KERN OIL & REFINING CO.	S	2387	5	SOx	7500	7500	7500	7500
CHEVRON USA INC	S	2454	5	SOx	9938	15295	38474	24993
OLDUVAI GORGE, LLC	S	2483	5	SOx	0	0	1600	0
VANDER WOUDE DAIRY	S	2485	5	SOx	3800	0	3800	3800
GRIMMIUS CATTLE COMPANY	S	2504	5	SOx	6693	0	21373	7423
M CARATAN INC	S	2516	5	SOx	0	0	2	0
FARMERS COOPERATIVE GIN INC	S	2533	5	SOx	0	0	0	4
BAR VP DAIRY	S	2534	5	SOx	0	1	49	50
ELBOW ENTERPRISES INC	S	2535	5	SOx	0	0	0	33
UNITED STATES GYPSUM COMPANY	S	2543	5	SOx	0	0	0	9
OLDUVAI GORGE, LLC	S	2604	5	SOx	0	0	0	6
RICHARD OPPEDYK	S	2620	5	SOx	2750	2750	2750	2750

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
EVOLUTION MARKETS INC.	S	2632	5	SOx	11102	11225	11348	11348
SOUTH LAKES DAIRY	S	2638	5	SOx	300	300	300	300
OLDUVAI GORGE, LLC	S	2671	5	SOx	1744	1744	1744	1744
TAFT PRODUCTION COMPANY	S	2672	5	SOx	1695	1733	1771	1771
TULE RIVER CO-OP GIN INC	S	2682	5	SOx	0	0	0	3
MODESTO IRRIGATION DISTRICT	S	2686	5	SOx	25188	2688	78	8578
OLDUVAI GORGE, LLC	S	2692	5	SOx	22146	30918	8240	22190
COVANTA DELANO INC	S	2721	5	SOx	890	916	941	941
EVOLUTION MARKETS INC.	S	2741	5	SOx	0	0	8706	0
EVOLUTION MARKETS INC.	S	2742	5	SOx	5836	1652	9106	19927
EVOLUTION MARKETS INC.	S	2743	5	SOx	0	0	2666	551
PASTORIA ENERGY FACILITY, LLC	S	2744	5	SOx	11324	11450	11576	11576
EVOLUTION MARKETS INC.	S	2750	5	SOx	0	0	0	28
RON/ROSALINDA VANDER WEERD	S	2751	5	SOx	6250	6200	6134	6249
E&B NATURAL RESOURCES MGMT	S	2773	5	SOx	1954	2649	1427	2052
AVENAL POWER CENTER, LLC	S	2788	5	SOx	5	7	3	6
AVENAL POWER CENTER, LLC	S	2789	5	SOx	6	14	12	8
AVENAL POWER CENTER, LLC	S	2790	5	SOx	12862	491	0	8499
AVENAL POWER CENTER, LLC	S	2791	5	SOx	92179	23666	69157	96288
PLAINS EXPLORATION & PRODUCTION CO	S	2800	5	SOx	840	516	192	192
RIVER RANCH FARMS	S	2930	5	SOx	4702	0	0	11853
CHEVRON USA INC	S	2934	5	SOx	11539	16868	23727	33544
BUTTONWILLOW GINNING CO	S	2937	5	SOx	0	0	0	4

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BAKERSFIELD CITY WOOD SITE	S	2969	5	SOx	3	5	5	4
GLOBAL AMPERSAND LLC	S	2978	5	SOx	29	0	0	0
MID-VALLEY COTTON GROWERS INC	S	2989	5	SOx	0	0	0	4
VINTAGE PRODUCTION CALIFORNIA LLC	S	3035	5	SOx	2	2	4	4
CALIFORNIA DAIRIES, INC	S	3058	5	SOx	1401	1401	1399	1399
OLDUVAI GORGE, LLC	S	3069	5	SOx	2062	2222	2381	2381
CALPINE ENERGY SERVICES, L.P.	S	3075	5	SOx	5080	12043	7319	15177
CHEVRON USA INC	S	3082	5	SOx	15520	13060	10088	5442
SOC RESOURCES INC	S	3089	5	SOx	94	89	87	90
KERN OIL & REFINING CO.	S	3106	5	SOx	78598	78599	51520	78598
R W MARTELLA	S	3108	5	SOx	0	351	351	922
CHEVRON USA INC	S	3154	5	SOx	22988	23243	23499	23499
PLAINS EXPLORATION & PRODUCTION CO	S	3165	5	SOx	779	779	781	781
KERN DELTA WEEDPATCH GINNING	S	3199	5	SOx	0	0	0	4
CHEVRON USA PRODUCTION INC	S	3228	5	SOx	11	13	22	8
VANDERHAM WEST	S	3233	5	SOx	1453	1452	1452	1452
SHAFTER-WASCO GINNING COMPANY	S	3268	5	SOx	0	0	0	19
HYDROGEN ENERGY CALIFORNIA, LLC	S	3275	5	SOx	42000	42000	42000	42000
CALPINE ENERGY SERVICES, L.P.	S	3279	5	SOx	1625	0	0	1339
CALPINE ENERGY SERVICES, L.P.	S	3281	5	SOx	3875	5500	5500	4161
CALPINE ENERGY SERVICES, L.P.	S	3294	5	SOx	4000	4000	4000	4000
AERA ENERGY LLC	S	3310	5	SOx	281	227	223	281

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number		Pollutant	Reductions (lb/qr)				
				1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr	
CALPINE ENERGY SERVICES, L.P.	S	3348	5	SOx	9536	6336	6163	6545
LAND O' LAKES, INC.	S	3352	5	SOx	158	835	687	274
CALPINE ENERGY SERVICES, L.P.	S	3356	5	SOx	24000	24000	24000	24000
AERA ENERGY LLC	S	3363	5	SOx	21065	27266	29310	28564
ELEMENT MARKETS LLC	S	3370	5	SOx	3	2	2	2
CITY OF TULARE	S	3396	5	SOx	26	26	26	26
INERGY PROPANE LLC	S	3406	5	SOx	290	290	290	290
FRITO-LAY, INC.	S	3423	5	SOx	137	176	113	64
FRITO-LAY, INC.	S	3427	5	SOx	8	8	9	9
ALON BAKERSFIELD REFINING	S	3465	5	SOx	5548	5771	4951	5990
ALON BAKERSFIELD REFINING	S	3466	5	SOx	13479	23755	20724	27141
CALPINE ENERGY SERVICES, L.P.	S	3483	5	SOx	10832	8062	7209	10281
AERA ENERGY LLC	S	3525	5	SOx	1902	1902	1902	1902
CHEVRON USA PRODUCTION INC	S	3533	5	SOx	1	1	1	1
CHEVRON USA INC	S	3544	5	SOx	33	36	29	30
SAN JOAQUIN REFINING COMPANY	S	3547	5	SOx	40	39	39	39
SOUTH VALLEY GINS INC	S	3554	5	SOx	0	0	0	5
JR SIMPLOT COMPANY	S	3570	5	SOx	688	715	742	742
VINTAGE PRODUCTION CALIFORNIA LLC	S	3593	5	SOx	494	494	492	492
CHEVRON USA INC	S	3595	5	SOx	8675	18997	25244	24674
CHEVRON USA INC	S	3604	5	SOx	22	33	37	24
PLAINS EXPLORATION & PRODUCTION CO	S	3611	5	SOx	5	5	3	3

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
LAND O' LAKES, INC.	S	3625	5	SOx	5	5	6	5
VECTOR ENVIRONMENTAL, INC.	S	3630	5	SOx	27	34	31	4
AGRI-CEL INC	S	3631	5	SOx	12	14	13	1
EVOLUTION MARKETS INC.	S	3669	5	SOx	13197	17604	0	0
3H CATTLE COMPANY	S	3672	5	SOx	0	14	0	0
AERA ENERGY LLC	S	3685	5	SOx	52466	53256	54044	54044
TURLOCK IRRIGATION DISTRICT	S	3709	5	SOx	29865	14110	0	32286
SENECA RESOURCES	S	3720	5	SOx	0	0	0	20
OXY USA, INC	S	3724	5	SOx	325	0	0	0
OXY USA, INC	S	3725	5	SOx	5	0	0	0
NORTHERN CALIFORNIA POWER AGENCY	S	3742	5	SOx	4638	3076	12619	13130
FRITO-LAY, INC.	S	3767	5	SOx	5203	5000	8796	8796
FOSTER FARMS, SPERRY RANCH	S	3795	5	SOx	175	175	0	0
OCCIDENTAL OF ELK HILLS INC	S	3823	5	SOx	4956	4956	4954	4954
AERA ENERGY LLC	S	3833	5	SOx	16508	18345	2147	8994
VINTAGE PRODUCTION CALIFORNIA LLC	S	3850	5	SOx	753	0	319	419
BERRY PETROLEUM COMPANY	S	3879	5	SOx	2331	2330	2330	2330
BERRY PETROLEUM COMPANY	S	3881	5	SOx	1396	1396	1396	1396
BERRY PETROLEUM COMPANY	S	3917	5	SOx	51750	52166	51970	53291
MACPHERSON OIL COMPANY	S	3927	5	SOx	0	3	13	4
AERA ENERGY LLC	S	3937	5	SOx	119859	82532	14195	40870
MACPHERSON OIL COMPANY	S	3938	5	SOx	1675	1675	1675	1675

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
ELEMENT MARKETS LLC	S	3939	5	SOx	2325	2325	2325	2325
E & J GALLO WINERY	N	2	1	VOC	9	9	26	28
LIVE OAK LIMITED	S	3	1	VOC	198	200	202	202
WESTERN STONE PRODUCTS, INC.	N	17	1	VOC	6	6	7	7
H. J. HEINZ COMPANY, L.P.	N	21	1	VOC	0	60	180	60
COTTON ASSOCIATES, INC	S	25	1	VOC	0	0	0	8
DUNCAN ENTERPRISES	C	33	1	VOC	26	26	27	18
CALMAT OF FRESNO	C	40	1	VOC	2	11	5	17
BUILDERS CONCRETE, INC.	C	41	1	VOC	35	35	35	35
HERSHEY CHOCOLATE & CONF. CORP	N	42	1	VOC	1	1	1	1
BROWN SAND INC	N	46	1	VOC	2	2	1	2
CALMAT CO.	C	50	1	VOC	2	2	3	3
ANDERSON CLAYTON CORP/STRATFOR	C	56	1	VOC	0	0	0	4
H. J. HEINZ COMPANY	N	60	1	VOC	0	23	129	0
LEPRINO FOODS COMPANY	C	60	1	VOC	137	139	136	138
SEQUOIA FOREST INDUSTRIES	C	67	1	VOC	2	9	0	6
CRAYCROFT BRICK COMPANY	C	71	1	VOC	24	20	19	19
SEQUOIA FOREST INDUSTRIES	C	72	1	VOC	7	0	1	1
ANDERSON CLAYTON CORP/HANFORD	C	74	1	VOC	0	0	0	5
ANDERSON CLAYTON CORP/KEARNY	C	75	1	VOC	0	0	0	7
ANDERSON CLAYTON CORP/SETTER	C	76	1	VOC	0	0	0	7
CALIFORNIA-WASHINGTON CAN CO.	N	77	1	VOC	2664	0	0	1583
CHEVRON USA INC	S	77	1	VOC	42	38	36	47

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
ANDERSON CLAYTON CORP/FIVE PTS	C	78	1	VOC	0	0	0	8
ANDERSON CLAYTON CORP/SAN JOAQ	C	79	1	VOC	0	0	0	5
ANDERSON CLAYTON CORP/TRANQLTY	C	80	1	VOC	0	0	0	12
ANDERSON CLAYTON CORP/CORCORAN	C	81	1	VOC	0	0	0	15
GROWERS COOP	S	88	1	VOC	0	0	1	15
CALAVERAS MATERIALS INC	C	89	1	VOC	92	83	95	76
THE NESTLE COMPANY INC	N	93	1	VOC	997	1820	1874	1007
LOS BANOS GRAVEL GROUP, ASPHLT	N	125	1	VOC	16	81	258	86
CAMPBELL SOUP COMPANY	N	127	1	VOC	84	58	52	61
ECKERT FROZEN FOODS	N	133	1	VOC	3	11	41	8
ANDERSON CLAYTON CORPORATION	N	135	1	VOC	0	0	0	5
J.G. BOSWELL CO. (EL RICO)	C	135	1	VOC	1	0	0	1
GENERAL MILLS OPERATIONS, INC	N	139	1	VOC	16	13	13	19
WESTSIDE FARMERS COOP. GIN	C	164	1	VOC	0	0	0	31
CHEVRON USA INC	S	165	1	VOC	2970	3003	3036	3036
ANDERSON CLAYTON CORP.	N	181	1	VOC	0	0	0	6
FIBREBOARD CORP.	N	209	1	VOC	41	34	16	45
AERA ENERGY LLC	C	219	1	VOC	268	297	324	298
CHEVRON USA INC	C	221	1	VOC	357	395	431	396
CALAVERAS MATERIALS INC.	C	233	1	VOC	148	410	483	300
ANDERSON CLAYTON CORP/MURRAY	C	234	1	VOC	0	0	0	12
HANSEN BROTHERS	C	249	1	VOC	0	0	0	13
ANDERSON CLAYTON CORP/IDRIA #2	C	250	1	VOC	0	0	0	9

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
ARCO PIPELINE FACILITY	C	271	1	VOC	419	417	417	417
CHEVRON USA INC	C	277	1	VOC	2209	2209	2209	2209
PACIFIC GAS & ELECTRIC CO.	C	280	1	VOC	21981	68020	71348	53244
PARAMOUNT FARMS, INC.	C	291	1	VOC	0	0	63	12
ANDERSON CLAYTON CORP	S	314	1	VOC	0	0	1	18
DEL MONTE CORPORATION	N	316	1	VOC	82	71	116	28
MID-VALLEY COTTON GROWERS INC	S	317	1	VOC	0	0	0	6
ANDERSON CLAYTON CORP/PLSNT VA	C	326	1	VOC	0	0	0	18
CHEVRON USA INC	C	331	1	VOC	1220	1220	1221	1221
ANDERSON CLAYTON CORP/DAIRYLAN	C	332	1	VOC	0	0	0	7
ANDERSON CLAYTON CORP/SUNSET	C	333	1	VOC	0	0	0	5
ANDERSON CLAYTON CORP/MURIT #1	C	334	1	VOC	0	0	0	7
ANDERSON CLAYTON CORP/NAPA GIN	C	335	1	VOC	0	0	0	5
ANDERSON CLAYTON CORP/MURIT #2	C	336	1	VOC	0	0	0	7
HERSHEY CHOCOLATE & CONF. CORP	N	373	1	VOC	9	11	13	11
APTCO LLC	N	390	1	VOC	1370	1266	1618	948
LIDESTRI FOODS, INC	N	391	1	VOC	0	0	389	0
APTCO LLC	N	397	1	VOC	12104	11748	9416	0
CHEVRON USA INC	S	410	1	VOC	5	7	11	15
SEMI TROPIC COOP GIN	S	426	1	VOC	1	0	1	28
ANDERSON CLAYTON CORP/EL DORAD	C	427	1	VOC	1	0	0	17
ANDERSON CLAYTON CORP/KERMAN	C	428	1	VOC	0	0	0	11
SILGAN CONTAINERS LODI MFG CORP	N	431	1	VOC	5103	3464	3573	3865

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
HOLMES WESTERN OIL CORPORATION	S	439	1	VOC	281	595	667	265
MINTURN CO-OP GIN	N	441	1	VOC	0	0	0	20
HOLMES WESTERN OIL CORPORATION	S	458	1	VOC	31	63	70	31
ANDERSON CLAYTON CORP/KINGSRIV	C	460	1	VOC	2	0	0	31
LAWRENCE LIVERMORE NATL. LAB	N	464	1	VOC	2	1	0	1
SHELL CALIFORNIA PIPELINE COMPANY LLC	C	467	1	VOC	185	0	0	0
ANDERSON CLAYTON CORP	S	471	1	VOC	0	0	0	9
ANDERSON CLAYTON CORP/DAIRYLND	C	472	1	VOC	0	0	0	13
LOS ANGELES CNTY SANITATION DIST NO.2	N	472	1	VOC	5953	6019	6086	6086
SHELL PIPELINE COMPANY LP	N	474	1	VOC	400	400	400	400
MODESTO IRRIGATION DISTRICT	N	479	1	VOC	0	0	305	0
CALIFORNIA DAIRIES	N	497	1	VOC	33	33	33	33
ANDERSON CLAYTON CORP.	N	499	1	VOC	0	0	0	15
CANDLEWICK YARNS	C	507	1	VOC	23	20	16	14
CLARK BROTHERS-DERRICK GIN	C	511	1	VOC	0	0	0	2
DOLE PACKAGED FOODS LLC	N	520	1	VOC	3	11	41	8
CASTLE AIRPORT AVIATION & DEVELOP CENTER	N	523	1	VOC	31801	32175	32549	32549
COIT RANCH	C	532	1	VOC	0	0	0	8
COALINGA FARMERS CO-OP GIN	C	537	1	VOC	0	0	0	8
APTCO LLC	N	540	1	VOC	5000	5000	5000	5000
DART CONTAINER CORPORATION	C	555	1	VOC	30481	26626	14213	50680
BRITZ AG FINANCE CO., INC.	C	557	1	VOC	0	0	0	8

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CORCORAN IRRIGATION DISTRICT	C	560	1	VOC	154	163	159	90
UNIVERSITY ENERGY SERVICES	S	561	1	VOC	63	54	59	61
DIAMOND FOODS INCORPORATED	N	572	1	VOC	126	45	138	120
VALERO LP	N	578	1	VOC	2372	2372	2372	2371
BRITZ INCORPORATED	C	586	1	VOC	0	0	0	21
WESTSIDE FARMERS COOP GIN #6	C	592	1	VOC	6	0	0	44
MODESTO TALLOW CO INC	N	599	1	VOC	184	165	202	196
OAKWOOD LAKE RESORT	N	601	1	VOC	0	72	115	0
WESTERN COTTON SERVICES	S	606	1	VOC	0	0	0	9
TURLOCK IRRIGATION DISTRICT	C	607	1	VOC	297	297	297	297
CHEVRON U S A INC	S	629	1	VOC	48	42	43	41
DIAMOND FOODS INCORPORATED	N	645	1	VOC	1695	1419	1451	783
EXXON MOBIL CORPORATION	S	645	1	VOC	128	130	131	131
WESTLAKE FARMS INC	C	645	1	VOC	0	0	0	18
CHEVRON USA INC	S	647	1	VOC	235	699	540	95
SAN JOAQUIN FACILITIES MGMT	S	648	1	VOC	116	93	118	120
HOLMES WESTERN OIL CORPORATION	N	652	1	VOC	324	326	311	301
HOLMES WESTERN OIL CORPORATION	N	653	1	VOC	30	30	25	24
CHEVRON USA INC (REFINERY)	S	657	1	VOC	35011	35399	35788	35788
UNITED STATES GYPSUM COMPANY	N	661	1	VOC	15000	16335	16334	12331
AERA ENERGY LLC	S	663	1	VOC	544	495	483	454
APTCO LLC	C	663	1	VOC	0	147	788	148
CHEMICAL WASTE MANAGEMENT, INC	N	663	1	VOC	7000	0	0	14000

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
APTCO LLC	C	664	1	VOC	0	149	796	150
PWP INDUSTRIES, INC. DBA PACTIV LLC	N	664	1	VOC	23529	14812	15264	14520
APTCO LLC	C	665	1	VOC	0	141	758	143
SOUTHERN CALIF GAS CO	S	671	1	VOC	570	576	583	583
CHEVRON USA PRODUCTION INC	S	674	1	VOC	5779	5851	5903	5902
AERA ENERGY LLC	C	679	1	VOC	11014	11468	11508	11211
CALIFORNIA DAIRIES, INC.	C	683	1	VOC	0	0	454	0
APTCO LLC	C	684	1	VOC	0	138	241	139
CLEAN HARBORS BUTTONWILLOW, LLC	S	685	1	VOC	31195	31541	31888	31888
H. J. HEINZ COMPANY	N	694	1	VOC	0	0	701	0
ANDERSON CLAYTON-MARICOPA GIN	S	697	1	VOC	0	0	0	25
ANDERSON CLAYTON CORP/BUTTE	C	699	1	VOC	0	0	0	19
CHEVRON USA INC	S	703	1	VOC	2084	2107	2130	2130
AVENAL POWER CENTER, LLC	N	724	1	VOC	0	0	241	0
AVENAL POWER CENTER, LLC	N	725	1	VOC	0	0	709	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	730	1	VOC	69	97	110	67
VINTAGE PRODUCTION CALIFORNIA LLC	S	734	1	VOC	4	8	8	4
VINTAGE PRODUCTION CALIFORNIA LLC	S	735	1	VOC	7	11	13	8
VINTAGE PRODUCTION CALIFORNIA LLC	S	736	1	VOC	80	157	165	81
ANDERSON CLAYTON CORPORATION	N	737	1	VOC	1	0	0	16
VINTAGE PRODUCTION CALIFORNIA	S	737	1	VOC	310	575	603	317

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
LLC								
VINTAGE PRODUCTION CALIFORNIA LLC	S	738	1	VOC	192	375	395	198
MODESTO IRRIGATION DISTRICT	N	739	1	VOC	0	0	27	0
LATON CO-OP GIN, INC.	C	746	1	VOC	0	0	0	8
CANTUA COOPERATIVE GIN, INC.	C	760	1	VOC	0	0	0	38
STOCKTON EAST WATER DISTRICT	N	763	1	VOC	1627	2271	2299	2059
TRC OPERATION COMPANY, INC.	S	767	1	VOC	394	399	403	403
PACIFIC PIPELINE SYSTEM, LLC	S	776	1	VOC	28	67	77	34
OLDUVAI GORGE, LLC	N	794	1	VOC	14089	2531	5512	1043
THE DOW CHEMICAL COMPANY	N	799	1	VOC	218	212	236	224
ANDERSON CLAYTON CORP/BURREL	C	806	1	VOC	14	0	0	42
UNITED STATES GYPSUM COMPANY	C	818	1	VOC	0	0	0	40
HOLMES WESTERN OIL CORPORATION	C	823	1	VOC	0	0	0	10
PHOENIX BIO INDUSTRIES LLC	C	824	1	VOC	500	500	500	500
DIAMOND FOODS INCORPORATED	N	828	1	VOC	1495	671	1063	1914
OCCIDENTAL OF ELK HILLS INC	S	829	1	VOC	57	60	72	58
VINTAGE PRODUCTION CALIFORNIA LLC	N	832	1	VOC	30	30	32	30
VINTAGE PRODUCTION CALIFORNIA LLC	N	833	1	VOC	16	16	14	14
EAGLE VALLEY GINNING LLC	N	847	1	VOC	0	0	0	23
SEALED AIR CORPORATION	C	851	1	VOC	19000	19000	19000	19000
APTCO LLC	N	854	1	VOC	3141	4397	2894	0
CONAGRA CONSUMER FROZEN FOODS	N	858	1	VOC	5	0	0	8

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
ANDERSON CLAYTON CORP/HANFORD	C	863	1	VOC	0	0	0	36
AERA ENERGY LLC	S	868	1	VOC	724	735	729	672
PACIFIC GAS & ELECTRIC CO.	N	868	1	VOC	926	5826	5035	615
BRITZ GIN PARTNERSHIP II	C	871	1	VOC	0	0	0	32
APTCO LLC	S	872	1	VOC	9	8	9	9
ASV WINES, INC.	N	892	1	VOC	0	0	189	0
AVENAL POWER CENTER, LLC	C	897	1	VOC	45	45	45	45
AVENAL POWER CENTER, LLC	C	898	1	VOC	5480	6496	4696	6616
VARCO PRUDEN BUILDINGS, INC.	N	898	1	VOC	5404	6473	10921	8632
ANDERSON CLAYTON CORP	C	903	1	VOC	0	0	0	4
PANOCHÉ GINNING CO	C	904	1	VOC	0	0	0	49
TEXACO EXPLOR & PROD INC	S	904	1	VOC	492	551	403	459
OLAM	N	920	1	VOC	0	0	3	0
CALPINE ENERGY SERVICES, L.P.	N	927	1	VOC	10503	10981	11573	11536
MADERA CO-OP GIN, INC.	C	943	1	VOC	0	0	0	11
ANDERSEN RACK SYSTEMS, INC	N	950	1	VOC	7335	7335	7335	7335
HERSHEY CHOCOLATE & CONF. CORP	N	952	1	VOC	5	5	6	6
FARMERS FIREBAUGH GINNING CO.	C	956	1	VOC	16	0	0	47
ANDERSON CLAYTON CORP/IDRIA #1	C	959	1	VOC	0	0	0	76
CHEVRON USA INC	C	966	1	VOC	6	6	6	6
BERRY PETROLEUM COMPANY	N	974	1	VOC	0	1027	0	0
BERRY PETROLEUM COMPANY	N	976	1	VOC	0	0	20	0
BERRY PETROLEUM COMPANY	N	978	1	VOC	157	144	137	134

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BERRY PETROLEUM COMPANY	N	979	1	VOC	6210	6210	6210	6210
TESORO LOGISTICS OPERATIONS LLC	N	997	1	VOC	2415	2415	2415	2415
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	N	998	1	VOC	2385	2385	2385	2385
TESORO LOGISTICS OPERATIONS LLC	N	999	1	VOC	2625	2625	2625	2625
CE2 ENVIRONMENTAL MARKETS LP	N	1000	1	VOC	2575	2575	2575	2575
KERMAN CO-OP GIN & WAREHOUSE 1	C	1002	1	VOC	0	0	0	13
TKV CONTAINERS, INC.	C	1015	1	VOC	0	83	83	0
SAINT-GOBAIN CONTAINERS, INC	N	1019	1	VOC	0	0	0	135
LOS GATOS TOMATO PRODUCTS	C	1021	1	VOC	0	3	0	0
PLAINS EXPLORATION & PRODUCTION CO	N	1036	1	VOC	1536	1536	1536	1536
WESTSIDE FARMERS COOP #2 & #3	C	1038	1	VOC	5	0	0	57
ENRON OIL & GAS COMPANY	S	1044	1	VOC	5516	5576	5638	5638
LAND O' LAKES, INC.	C	1044	1	VOC	258	0	0	683
ANDERSON CLAYTON CORP	S	1045	1	VOC	0	0	0	22
NAS LEMOORE	C	1046	1	VOC	1607	453	1066	59
VINTAGE PRODUCTION CALIFORNIA LLC	N	1046	1	VOC	2000	2000	2000	2000
OLDUVAI GORGE, LLC	N	1047	1	VOC	5673	4370	6597	5580
CHEVRON USA INC	S	1049	1	VOC	3461	0	0	0
MARTIN ANDERSON	C	1051	1	VOC	8699	12348	6585	90
AERA ENERGY LLC	S	1058	1	VOC	8179	8280	8354	8353
CONOCOPHILLIPS COMPANY	N	1058	1	VOC	1624	1124	246	0
PACTIV CORPORATION	N	1062	1	VOC	27192	27192	27192	27192

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CITY OF TULARE	C	1063	1	VOC	0	107	678	109
MACPHERSON OIL COMPANY	N	1065	1	VOC	0	0	123	0
VINTAGE PRODUCTION CALIFORNIA LLC	N	1066	1	VOC	40	184	131	98
LOS ANGELES CNTY SANITATION DIST NO.2	N	1068	1	VOC	269	1452	271	426
CALPINE CORPORATION	C	1080	1	VOC	2235	2037	1988	2251
SAINT-GOBAIN CONTAINERS, INC	C	1082	1	VOC	0	0	0	7
CANANDAIGUA WINE COMPANY INC	C	1085	1	VOC	21	17	30	15
OILDALE ENERGY LLC	S	1096	1	VOC	100	100	100	100
MODESTO IRRIGATION DISTRICT	C	1109	1	VOC	4342	4331	4373	4371
SPRECKELS SUGAR COMPANY	C	1112	1	VOC	0	767	1032	454
PLAINS EXPLORATION & PRODUCTION CO	C	1114	1	VOC	2467	2439	2410	2411
TURLOCK IRRIGATION DISTRICT	C	1116	1	VOC	1080	1080	1079	1079
ASV WINES	C	1120	1	VOC	0	20	551	21
PELCO INC A DELAWARE CORPORATION	C	1121	1	VOC	374	374	349	349
PELCO INC A DELAWARE CORPORATION	C	1122	1	VOC	1842	2601	2219	1756
AERA ENERGY LLC	S	1138	1	VOC	162	233	2	25
AERA ENERGY LLC	S	1142	1	VOC	39631	39976	40411	40489
PLAINS EXPLORATION & PRODUCTION CO	C	1157	1	VOC	892	0	1736	2684
AERA ENERGY LLC	S	1162	1	VOC	713	719	730	730
ANDERSON CLAYTON CORP	S	1171	1	VOC	3	0	0	24

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
SC JOHNSON HOME STORAGE INC	C	1173	1	VOC	1055	1415	1403	1447
E & J GALLO WINERY	C	1181	1	VOC	10197	10197	10163	10163
PACTIV, LLC	C	1182	1	VOC	9986	9206	9494	9041
PACTIV, LLC	C	1183	1	VOC	2001	1688	2462	1110
PACTIV, LLC	C	1184	1	VOC	47518	2227	0	17129
PACTIV, LLC	C	1185	1	VOC	51342	0	0	0
VINTAGE PRODUCTION CALIFORNIA LLC	C	1190	1	VOC	202	211	201	184
SAN JOAQUIN FACILITIES MGMT	S	1253	1	VOC	41	46	50	44
ANDERSON CLAYTON CORP	S	1262	1	VOC	1	0	0	19
ANDERSON CLAYTON CORP	S	1263	1	VOC	9	0	0	24
AERA ENERGY LLC	S	1476	1	VOC	190	0	0	54
AERA ENERGY LLC	S	1477	1	VOC	329	0	0	93
FOSTER FOOD PRODUCTS	S	1501	1	VOC	432	437	442	442
FOSTER FOOD PRODUCTS	S	1502	1	VOC	68	63	58	58
SAN JOAQUIN FACILITIES MGMT	S	1509	1	VOC	11	14	14	14
AERA ENERGY LLC	S	1587	1	VOC	26	28	26	26
OCCIDENTAL OF ELK HILLS INC	S	1593	1	VOC	3128	3163	3197	3197
CALPINE CORPORATION	S	1666	1	VOC	0	0	0	9
AERA ENERGY LLC	S	1681	1	VOC	10	10	10	10
OCCIDENTAL OF ELK HILLS INC	S	1703	1	VOC	394	1333	1998	1038
OCCIDENTAL OF ELK HILLS INC	S	1704	1	VOC	1695	3741	4523	1688
OCCIDENTAL OF ELK HILLS INC	S	1706	1	VOC	2314	5505	6449	2760
OCCIDENTAL OF ELK HILLS INC	S	1708	1	VOC	1664	3970	4474	1890

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
OCCIDENTAL OF ELK HILLS INC	S	1710	1	VOC	1655	4021	5103	2114
OCCIDENTAL OF ELK HILLS INC	S	1713	1	VOC	1093	2620	3078	1181
OCCIDENTAL OF ELK HILLS INC	S	1714	1	VOC	1290	3038	3527	1472
OCCIDENTAL OF ELK HILLS INC	S	1717	1	VOC	1239	3804	4274	1639
OCCIDENTAL OF ELK HILLS INC	S	1719	1	VOC	928	1948	2037	1118
OCCIDENTAL OF ELK HILLS INC	S	1722	1	VOC	1132	2723	3230	1359
OCCIDENTAL OF ELK HILLS INC	S	1723	1	VOC	1723	4185	4934	2003
OCCIDENTAL OF ELK HILLS INC	S	1725	1	VOC	1169	2764	3251	1348
OCCIDENTAL OF ELK HILLS INC	S	1726	1	VOC	1603	3911	4662	1932
OCCIDENTAL OF ELK HILLS INC	S	1727	1	VOC	1061	2580	3064	1240
OCCIDENTAL OF ELK HILLS INC	S	1728	1	VOC	1692	4025	4596	2098
SOUTHERN CALIF GAS CO	S	1739	1	VOC	1322	1337	1354	1352
OCCIDENTAL OF ELK HILLS INC	S	1754	1	VOC	0	653	619	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	1755	1	VOC	53	109	120	52
VINTAGE PRODUCTION CALIFORNIA LLC	S	1756	1	VOC	360	778	883	372
VINTAGE PRODUCTION CALIFORNIA LLC	S	1757	1	VOC	2	7	9	4
VINTAGE PRODUCTION CALIFORNIA LLC	S	1758	1	VOC	88	193	195	93
VINTAGE PRODUCTION CALIFORNIA LLC	S	1759	1	VOC	137	267	382	193
OCCIDENTAL OF ELK HILLS INC	S	1773	1	VOC	379	0	0	468
OCCIDENTAL OF ELK HILLS INC	S	1775	1	VOC	604	591	0	577

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
OCCIDENTAL OF ELK HILLS INC	S	1776	1	VOC	594	607	467	614
OCCIDENTAL OF ELK HILLS INC	S	1777	1	VOC	419	454	0	0
OCCIDENTAL OF ELK HILLS INC	S	1778	1	VOC	0	1021	0	0
OCCIDENTAL OF ELK HILLS INC	S	1779	1	VOC	0	656	559	0
OCCIDENTAL OF ELK HILLS INC	S	1780	1	VOC	0	1678	0	0
OCCIDENTAL OF ELK HILLS INC	S	1782	1	VOC	454	464	398	0
OCCIDENTAL OF ELK HILLS INC	S	1783	1	VOC	587	2	35	4
CHEVRON USA INC	S	1793	1	VOC	1420	1443	1335	1334
SHELL PIPELINE COMPANY LP	S	1807	1	VOC	86	58	26	26
VISALIA WASTEWATER TREATMENT	S	1837	1	VOC	5067	2634	4107	4614
CHEVRON USA INC LOST HILLS GP	S	1847	1	VOC	2764	2793	2825	2825
AERA ENERGY LLC	S	1874	1	VOC	40	10	1	22
CHEVRON USA INC	S	1878	1	VOC	230	136	143	82
AERA ENERGY LLC	S	1880	1	VOC	360	591	251	0
CHEVRON USA INC	S	1912	1	VOC	225	238	250	250
MONTEREY RESOURCES, INC.	S	1983	1	VOC	708	720	557	640
CHEVRON USA INC	S	1987	1	VOC	473	479	484	484
APTCO LLC	S	1990	1	VOC	1306	1709	1829	1157
KERN DELTA WEEDPATCH GINNING	S	2062	1	VOC	0	0	0	17
KERN LAKE COOP GIN	S	2074	1	VOC	0	0	0	134
CHEVRON USA INC	S	2107	1	VOC	651	638	666	666
OCCIDENTAL OF ELK HILLS INC	S	2120	1	VOC	55	794	1411	55
AERA ENERGY LLC	S	2136	1	VOC	3772	3393	3836	3913

**Table H-5 – List of Emission Reduction Credits
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Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
LOS ANGELES COUNTY SANITATION DISTRICT 2	S	2147	1	VOC	12500	12500	12500	12500
CRIMSON RESOURCE MANAGEMENT	S	2161	1	VOC	54	49	31	63
AERA ENERGY LLC	S	2237	1	VOC	5394	5463	5539	5539
TRC CYPRESS GROUP LLC	S	2292	1	VOC	1412	1412	1412	1412
AMERICAN ENERGY OPERATIONS INC	S	2294	1	VOC	15	19	16	13
OCCIDENTAL OF ELK HILLS INC	S	2301	1	VOC	55	1046	1416	172
SHELL PIPELINE COMPANY LP	S	2303	1	VOC	0	658	431	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	2310	1	VOC	1121	1723	2077	1280
VINTAGE PRODUCTION CALIFORNIA LLC	S	2342	1	VOC	1264	2028	3015	1713
AERA ENERGY LLC	S	2361	1	VOC	27	4	0	11
CHEVRON USA INC	S	2373	1	VOC	11698	11110	8970	9796
CHEVRON USA INC	S	2430	1	VOC	2459	2142	1336	1543
CHEVRON USA INC	S	2458	1	VOC	267	270	260	243
SFPP, L.P.	S	2464	1	VOC	2625	2625	2625	2625
OCCIDENTAL OF ELK HILLS INC	S	2488	1	VOC	9	4650	5387	2519
OCCIDENTAL OF ELK HILLS INC	S	2490	1	VOC	0	2806	3570	1534
M CARATAN INC	S	2516	1	VOC	0	0	26	6
FARMERS COOPERATIVE GIN INC	S	2533	1	VOC	0	0	0	39
ELBOW ENTERPRISES INC	S	2535	1	VOC	0	0	0	70
UNITED STATES GYPSUM COMPANY	S	2543	1	VOC	0	0	0	17
MALIBU BOATS LLC	S	2555	1	VOC	5000	5000	5000	5000
BAR 20 PARTNERS LTD	S	2593	1	VOC	0	9	345	350

**Table H-5 – List of Emission Reduction Credits
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Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BAR 20 PARTNERS LTD	S	2594	1	VOC	7	15	38	38
BAR 20 PARTNERS LTD	S	2595	1	VOC	873	882	892	892
OCCIDENTAL OF ELK HILLS INC	S	2623	1	VOC	0	895	988	68
OCCIDENTAL OF ELK HILLS INC	S	2625	1	VOC	22	110	96	68
OCCIDENTAL OF ELK HILLS INC	S	2627	1	VOC	52	52	52	52
BERRY PETROLEUM COMPANY	S	2642	1	VOC	284	0	0	0
CHEMICAL WASTE MANAGEMENT, INC.	S	2645	1	VOC	1513	2602	2033	2038
KAWEAH DELTA DISTRICT HOSPITAL	S	2656	1	VOC	460	738	828	938
CHEVRON USA INC	S	2674	1	VOC	1848	1848	1848	1848
CHEVRON USA INC	S	2675	1	VOC	1835	1835	1835	1835
TULE RIVER CO-OP GIN INC	S	2682	1	VOC	0	0	0	13
TULARE CITY WASTEWATER PLANT	S	2697	1	VOC	60	60	60	87
CHEVRON USA INC	S	2708	1	VOC	1605	1634	1664	1664
AERA ENERGY LLC	S	2725	1	VOC	65082	65830	66578	66578
E&B NATURAL RESOURCES MGMT	S	2773	1	VOC	7	12	5	9
AERA ENERGY LLC	S	2774	1	VOC	8176	5745	5185	3973
AERA ENERGY LLC	S	2782	1	VOC	44	43	42	46
UNITED STATES GYPSUM COMPANY	S	2816	1	VOC	20000	20000	20000	20000
BAR 20 PARTNERS LTD	S	2915	1	VOC	445	419	50	45
BUTTONWILLOW GINNING CO	S	2937	1	VOC	0	0	0	40
AERA ENERGY LLC	S	2939	1	VOC	6264	3536	3647	6483
AVENAL POWER CENTER, LLC	S	2951	1	VOC	12500	12500	12500	12500
PACTIV, LLC	S	2965	1	VOC	1513	1972	1571	1510

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BAKERSFIELD CITY WOOD SITE	S	2969	1	VOC	46	59	61	52
KERN DELTA-WEEDPATCH COTTON GINNING	S	2971	1	VOC	4	0	0	1
AVENAL POWER CENTER, LLC	S	2988	1	VOC	0	69	0	0
MID-VALLEY COTTON GROWERS INC	S	2989	1	VOC	0	0	0	16
INTERNATIONAL PAPER COMPANY	S	2995	1	VOC	875	875	875	875
SOUTH KERN INDUSTRIAL CENTER LLC	S	3006	1	VOC	0	190	382	0
OCCIDENTAL OF ELK HILLS INC	S	3053	1	VOC	137	139	140	140
PLAINS EXPLORATION & PRODUCTION CO	S	3066	1	VOC	840	840	840	840
OCCIDENTAL OF ELK HILLS INC	S	3077	1	VOC	121	123	124	124
OCCIDENTAL OF ELK HILLS INC	S	3078	1	VOC	81	82	83	83
STARWOOD POWER-MIDWAY, LLC	S	3095	1	VOC	0	0	0	10
AERA ENERGY LLC	S	3110	1	VOC	21914	22310	22708	22708
CALPINE CORPORATION	S	3116	1	VOC	1440	1546	1621	1621
PANOCHÉ ENERGY CENTER, LLC	S	3128	1	VOC	9877	9878	3774	8656
CILION, INC.	S	3132	1	VOC	13000	13000	13000	13000
CHEVRON USA INC	S	3148	1	VOC	181	163	274	216
SHELL PIPELINE COMPANY LP	S	3158	1	VOC	98	98	97	97
PLAINS EXPLORATION & PRODUCTION CO	S	3164	1	VOC	821	821	822	822
OCCIDENTAL OF ELK HILLS INC	S	3166	1	VOC	842	2545	2372	659
OCCIDENTAL OF ELK HILLS INC	S	3169	1	VOC	193	2665	3573	520
SAN JOAQUIN FACILITIES MGMT	S	3180	1	VOC	34	23	34	39
KERN DELTA WEEDPATCH GINNING	S	3199	1	VOC	0	0	0	38

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qtr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
SAN JOAQUIN FACILITIES MGMT	S	3210	1	VOC	33767	28482	32565	37850
AERA ENERGY LLC	S	3223	1	VOC	16	16	16	17
OCCIDENTAL OF ELK HILLS INC	S	3225	1	VOC	648	1755	1926	805
VANDERHAM WEST	S	3235	1	VOC	240	240	240	240
INERGY PROPANE LLC	S	3247	1	VOC	197	24	0	1
CALPINE ENERGY SERVICES, L.P.	S	3261	1	VOC	4454	4972	3890	4155
SHAFTER-WASCO GINNING COMPANY	S	3268	1	VOC	0	0	0	13
AERA ENERGY LLC	S	3272	1	VOC	2642	2701	2759	2759
CALPINE ENERGY SERVICES, L.P.	S	3283	1	VOC	0	150	171	0
LAND O' LAKES, INC.	S	3284	1	VOC	527	893	642	0
CALPINE ENERGY SERVICES, L.P.	S	3292	1	VOC	4804	6146	6632	3338
NUSTAR ENERGY LP	S	3299	1	VOC	1000	1000	1000	1000
CALPINE ENERGY SERVICES, L.P.	S	3300	1	VOC	4636	4705	4774	4771
HYDROGEN ENERGY CALIFORNIA, LLC	S	3305	1	VOC	14625	14625	14625	14625
AERA ENERGY LLC	S	3308	1	VOC	2266	1066	1090	2320
OCCIDENTAL OF ELK HILLS INC	S	3327	1	VOC	24	24	24	24
BREA OIL COMPANY, INC.	S	3355	1	VOC	149	391	193	112
CHEVRON USA INC	S	3365	1	VOC	5542	5627	5713	5055
PLAINS LPG SERVICES, L.P.	S	3367	1	VOC	356	2023	2767	1433
CALPINE ENERGY SERVICES, L.P.	S	3368	1	VOC	1500	1500	1500	1500
ELEMENT MARKETS LLC	S	3370	1	VOC	5	4	4	4
CILION INC.	S	3373	1	VOC	2978	2979	2979	2978
CHEVRON USA INC	S	3375	1	VOC	4698	4894	5090	5090

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
OCCIDENTAL OF ELK HILLS INC	S	3379	1	VOC	386	6020	8655	1509
CRIMSON RESOURCE MANAGEMENT	S	3386	1	VOC	67	138	142	94
CRIMSON RESOURCE MANAGEMENT	S	3387	1	VOC	23009	20107	19072	13925
INERGY PROPANE LLC	S	3394	1	VOC	1131	1160	1191	1189
CHEVRON USA INC	S	3400	1	VOC	1903	2425	2836	2947
CHEVRON U S A INC	S	3404	1	VOC	171	202	232	232
FRITO-LAY, INC.	S	3411	1	VOC	4018	6573	9128	9128
FRITO-LAY, INC.	S	3426	1	VOC	380	474	377	337
FRITO-LAY, INC.	S	3429	1	VOC	55	57	58	58
FRITO-LAY, INC.	S	3430	1	VOC	76	96	74	72
AERA ENERGY LLC	S	3434	1	VOC	10466	11528	13111	10396
SENECA RESOURCES	S	3440	1	VOC	0	0	0	339
CRIMSON RESOURCE MANAGEMENT	S	3441	1	VOC	13	4	13	22
HECK CELLARS	S	3442	1	VOC	10000	10000	10000	10000
CHEVRON USA INC	S	3449	1	VOC	578	601	626	626
AERA ENERGY LLC	S	3451	1	VOC	20480	438	2608	1572
SAINT-GOBAIN CONTAINERS, INC	S	3498	1	VOC	0	0	0	34
CALPINE ENERGY SERVICES, L.P.	S	3503	1	VOC	5500	5500	5500	5500
CALPINE ENERGY SERVICES, L.P.	S	3504	1	VOC	1000	1000	1000	1000
CHEVRON USA INC	S	3518	1	VOC	1780	1780	1780	1780
CHEVRON USA PRODUCTION INC	S	3533	1	VOC	6	4	9	8
OCCIDENTAL OF ELK HILLS INC	S	3536	1	VOC	44	2319	3256	356
OCCIDENTAL OF ELK HILLS INC	S	3538	1	VOC	0	2333	3325	626

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
CHEVRON USA INC	S	3544	1	VOC	346	378	292	308
SAN JOAQUIN REFINING COMPANY	S	3551	1	VOC	193	193	193	192
SOUTH VALLEY GINS INC	S	3554	1	VOC	0	0	0	10
CALPINE ENERGY SERVICES, L.P.	S	3555	1	VOC	5000	5000	5000	5000
HYDROGEN ENERGY CALIFORNIA, LLC	S	3557	1	VOC	11437	11438	11438	11437
VINTAGE PRODUCTION CALIFORNIA LLC	S	3573	1	VOC	45	45	45	45
VINTAGE PRODUCTION CALIFORNIA LLC	S	3574	1	VOC	145	2915	4020	260
VINTAGE PRODUCTION CALIFORNIA LLC	S	3575	1	VOC	0	0	10	0
VINTAGE PRODUCTION CALIFORNIA LLC	S	3576	1	VOC	96	221	235	98
VINTAGE PRODUCTION CALIFORNIA LLC	S	3577	1	VOC	203	463	491	214
VINTAGE PRODUCTION CALIFORNIA LLC	S	3578	1	VOC	1178	4452	6003	1377
VINTAGE PRODUCTION CALIFORNIA LLC	S	3579	1	VOC	1190	4465	5981	1360
VINTAGE PRODUCTION CALIFORNIA LLC	S	3580	1	VOC	540	2873	3896	660
VINTAGE PRODUCTION CALIFORNIA LLC	S	3581	1	VOC	105	1473	2033	152
VINTAGE PRODUCTION CALIFORNIA LLC	S	3582	1	VOC	123	1513	2068	162
VINTAGE PRODUCTION CALIFORNIA LLC	S	3583	1	VOC	653	2997	4027	763
VINTAGE PRODUCTION CALIFORNIA	S	3584	1	VOC	362	290	454	518

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
LLC								
CHEVRON USA INC	S	3601	1	VOC	40533	41484	42396	42430
CHEVRON USA INC	S	3604	1	VOC	223	345	388	256
HYDROGEN ENERGY CALIFORNIA, LLC	S	3605	1	VOC	7937	7938	7938	7937
LAND O' LAKES, INC.	S	3625	1	VOC	57	43	59	55
OCCIDENTAL OF ELK HILLS INC	S	3627	1	VOC	3730	3448	3015	3510
VECTOR ENVIRONMENTAL, INC.	S	3630	1	VOC	50158	60848	56284	6770
AGRI-CEL INC	S	3631	1	VOC	21495	26078	24122	2902
BERRY PETROLEUM COMPANY	S	3649	1	VOC	1427	6355	4508	738
BERRY PETROLEUM COMPANY	S	3650	1	VOC	12500	12500	12500	12500
BERRY PETROLEUM COMPANY	S	3653	1	VOC	1307	1307	1307	1308
ALON BAKERSFIELD REFINING	S	3663	1	VOC	38947	38947	38947	38948
INERGY PROPANE LLC	S	3677	1	VOC	7	22	14	4
CHEVRON USA INC	S	3683	1	VOC	4149	4194	4242	4242
AERA ENERGY LLC	S	3687	1	VOC	17245	18573	17870	17768
KERN OIL & REFINING CO.	S	3693	1	VOC	952	966	951	1099
BERRY PETROLEUM COMPANY	S	3695	1	VOC	21	1445	21	21
CHEVRON USA INC	S	3701	1	VOC	25142	25559	25976	25976
DELTA TRADING L P	S	3711	1	VOC	8361	8458	8552	8556
DTE STOCKTON, LLC	S	3715	1	VOC	1450	1450	1450	1450
CHEVRON USA INC	S	3722	1	VOC	127895	129399	130902	130902
HUNTER EDISON OIL DEVELOPMENT	S	3723	1	VOC	2186	2256	2234	2282
BIG WEST OF CALIFORNIA LLC	S	3727	1	VOC	758779	751001	781428	781430

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
BRONCO WINE COMPANY	S	3732	1	VOC	125	125	125	125
CHEVRON USA INC	S	3737	1	VOC	104915	106191	107557	107578
NORTHERN CALIFORNIA POWER AGENCY	S	3744	1	VOC	240	103	0	0
TAUBER OIL COMPANY	S	3777	1	VOC	383	508	489	663
TAUBER OIL COMPANY	S	3778	1	VOC	123	57	121	0
TAUBER OIL COMPANY	S	3779	1	VOC	82	82	82	82
TAUBER OIL COMPANY	S	3780	1	VOC	330	398	459	413
E&B NATURAL RESOURCES MGMT	S	3791	1	VOC	7500	7500	7500	7500
PLAINS LPG SERVICES, L.P.	S	3793	1	VOC	583	583	583	583
SAN JOAQUIN FACILITIES MGMT	S	3801	1	VOC	228	225	223	223
E & J GALLO WINERY	S	3805	1	VOC	18000	18000	18000	18000
CE2 ENVIRONMENTAL OPPORTUNITIES I LP	S	3806	1	VOC	2500	2500	2500	2500
E & J GALLO WINERY	S	3807	1	VOC	11431	11424	11417	11417
E & J GALLO WINERY	S	3808	1	VOC	8098	8041	8086	8086
CE2 ENVIRONMENTAL MARKETS LP	S	3809	1	VOC	2834	2814	2831	2831
CHEVRON USA INC	S	3811	1	VOC	3947	4032	4121	4125
OCCIDENTAL OF ELK HILLS INC	S	3827	1	VOC	80295	81477	82660	82659
THE WINE GROUP LLC	S	3842	1	VOC	500	500	500	500
ALON BAKERSFIELD REFINING	S	3846	1	VOC	52595	53394	53803	53711
OCCIDENTAL OF ELK HILLS INC	S	3848	1	VOC	64149	72828	75404	70717
KERN OIL & REFINING CO.	S	3866	1	VOC	1000	1000	1000	1000
CHEVRON USA INC	S	3869	1	VOC	40200	41125	42051	42047

**Table H-5 – List of Emission Reduction Credits
PM10 and PM2.5 Precursors**

Current ERC Certificate Holder	ERC Number			Pollutant	Reductions (lb/qr)			
					1st Qtr	2nd Qtr	3rd Qtr	4rd Qtr
O'NEILL VINTNERS & DISTILLERS	S	3886	1	VOC	404	404	404	404
G3 ENTERPRISES	S	3887	1	VOC	13000	13000	13000	13000
CHEVRON USA INC	S	3905	1	VOC	5284	5380	5476	5475
AERA ENERGY LLC	S	3919	1	VOC	178503	181091	183734	183787
PACIFIC ETHANOL VISALIA	S	3921	1	VOC	3147	3147	3146	3140
AERA ENERGY LLC	S	3923	1	VOC	123511	124964	126418	126418
VINTAGE PRODUCTION CALIFORNIA LLC	S	3929	1	VOC	7000	7000	7000	7000
BULLARD ENERGY CENTER, LLC	S	3931	1	VOC	8302	8303	8426	8302
AERA ENERGY LLC	S	3935	1	VOC	54219	54648	55792	56759
MACPHERSON OIL COMPANY	S	3942	1	VOC	3075	3075	2952	3075
VINTAGE PRODUCTION CALIFORNIA LLC	S	3943	1	VOC	2000	1999	1999	2000
KERN OIL & REFINING CO.	S	3944	1	VOC	2500	2500	2500	2500
AER GLAN ENERGY LLC	S	3945	1	VOC	2251	2249	2249	2251
OCCIDENTAL OF ELK HILLS INC	S	3947	1	VOC	83	2429	3196	464
E & J GALLO WINERY	S	3955	1	VOC	46813	46812	46811	46752

ATTACHMENT 1 TO APPENDIX H: EMISSION REDUCTION CREDITS

**DEVELOPMENT OF PM_{2.5} INTERPOLLUTANT TRADING RATIOS USED IN NEW
SOURCE REVIEWS WITHIN THE SAN JOAQUIN VALLEY**

Development of PM_{2.5} Interpollutant Trading Ratios Used in New Source Reviews within the San Joaquin Valley

1. Introduction

EPA's 2008 PM_{2.5} New Source Review (NSR) Implementation Rule¹ allows states to offset emissions increases of direct PM_{2.5} emissions or PM_{2.5} precursors in nonattainment areas with reductions of either direct PM_{2.5} emissions or PM_{2.5} precursors, where the emissions offsets are determined through interpollutant trading ratios. For the San Joaquin Valley (SJV), these ratios were determined using photochemical modeling. This document provides technical details of the procedures used.

2. Modeling Description

The modeling used in developing the interpollutant trading ratios follows the approach described in the Modeling Protocol for the 2012 24-hr PM_{2.5} State Implementation Plan (SIP) in the San Joaquin Valley, which used a 2007 base year and 2019 future year. All modeling related to the development of interpollutant trading ratios is based on the 2019 simulations, where future year anthropogenic emissions are used, but all other modeling inputs (meteorology, chemical boundary conditions, biogenic emissions, etc.) reflect the 2007 base year.

Briefly, the Mesoscale Meteorological Model version 5 (MM5; Grell et al., 1994) was used to simulate gridded hourly meteorological fields for 2007, which were in turn used to drive the Community Multi-scale Air Quality (CMAQ) Model v4.7.1 (Byun and Schere, 2006; Foley et al., 2010), with the SAPRC99 chemical mechanism (Carter, 2000) and the aero5 aerosol module, for simulations covering January through March (the first quarter) and October through December (the fourth quarter). Simulations were conducted at a 12-km resolution for the entire state and nested down to 4-km for the SJV. Chemical boundary conditions for the 12-km domain were provided by downscaled MOZART global chemistry model (Emmons et al., 2010) output for the year 2007 (<http://www.acd.ucar.edu/wrf-chem/mozart.shtml>).

Annual average emissions for point and area sources from the CEIDARS database (<http://www.arb.ca.gov/ei/drei/maintain/dbstruct.htm>) were processed through the Sparse Matrix Operator Kernel Emission (SMOKE) version 2.6 emissions processor (<http://www.smoke-model.org/>) to generate month-specific weekday and weekend hourly gridded emissions for 2019. Day-specific hourly on-road mobile source emissions for 2019 were developed through the EMFAC2011 (<http://www.arb.ca.gov/msei/modeling.htm>) and DTIM (Fieber and Ireson, 2001) models, while the day-specific hourly biogenic emissions inventory was generated using the

¹ Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}). 73 Fed. Reg. 96, pp. 28321-28350. (2008, May 16). Retrieved from http://www.epa.gov/NSR/fr/20080516_28321.pdf

MEGAN v2.01 (Guenther et al., 2006) model for 2007; MEGAN was modified to accept year-specific 8-day MODIS Leaf Area Index (<http://modis.gsfc.nasa.gov/>) and California-specific emission factor and plant functional type data (Scott and Benjamin, 2003). A more detailed description of the emissions inventory and model setup can be found in the Modeling Protocol for the 2012 24-hr PM_{2.5} SIP for the San Joaquin Valley.

3. Trading Ratios

Trading ratios were developed based on CMAQ sensitivity simulations for the future year (2019) anthropogenic emissions inventory. Separate sensitivity simulations were conducted for direct PM_{2.5}, oxides of nitrogen (NO_x), and oxides of sulfur (SO_x) to compare the relative change in particulate concentrations that would occur from a Valley-wide 50% decrease in emissions of NSR source categories as determined by the SJV. Model simulations covered the January to March and October to December time periods (first and fourth quarters) of 2019. Results from these sensitivity simulations were compared with those for the 2019 base simulations, where NSR source categories were not adjusted. The relative change of projected particulate concentration as established by the sensitivity simulations are used to establish a trading relationship of relative effect for the direct and precursor reductions. The trading ratios were calculated as follows:

- 1) Future year PM_{2.5} design values were calculated for each of the three sensitivity simulations based on the top 8 measured and top10% of simulated days in each quarter (For details on the design value calculation see the US EPA Memorandum on June 28th 2011 titled "Updates to the 24-hour PM_{2.5} NAAQS Models Attainment Test" from Tyler Fox to the Regional Air Program Managers).
- 2) The reduction in the 24-hour PM_{2.5} design value (DV) concentration per ton of emissions reduction (based on a 50% reduction) was calculated separately for direct PM_{2.5}, NO_x, and SO_x emissions from NSR source categories within the SJV (see Equation 1 and Table 1).

$$\frac{DV_{base} - DV_{sensitivity} [\mu g m^{-3}]}{average\ emissions\ reduction [tons\ day^{-1}]} \quad (1)$$

Here, DV_{base} is the 2019 baseline Design Value and DV_{sensitivity} is the Design Value after a 50% reduction of a given pollutant from all NSR sources domain wide. The average emissions reductions are 50% of the annual average values for all NSR sources. The site-specific results from this calculation are shown in Table 1.

Table 1. Change in 2019 Design Value PM_{2.5} concentrations due to 50% reduction in daily emissions of PM_{2.5}, NO_x, and SO_x from NSR source categories within the SJV [$\mu\text{g m}^{-3} \text{ ton}^{-1}$].

Station	PM _{2.5}	NO _x	SO _x
Bakersfield – CA	0.29	0.04	0.06
Bakersfield – Planz	0.25	0.04	0.08
Fresno – 1 st Street	0.14	0.03	0.03
Fresno – Hamilton	0.14	0.03	0.03
Clovis	0.14	0.03	0.03
Modesto – 14 th Street	0.14	0.02	0.06
Merced – M Street	0.09	0.03	0.03
Stockton – Hazelton St.	0.09	0.02	0.08
Visalia – N. Church St.	0.11	0.03	0.03
Corcoran – Patterson	0.20	0.03	0.03

From the results found in Table 1, the trading ratios of NO_x to PM_{2.5} and SO_x to PM_{2.5} can then be calculated by relating NO_x and SO_x directly to PM_{2.5}. This calculation results in the figures found in the following Table 2. The averages among the site specific trading ratios calculated in this table were 5.3 for NO_x:PM_{2.5} and 4.1 for SO_x:PM_{2.5}.

Table 2. NO_x:PM_{2.5} and SO_x:PM_{2.5} trading ratios for Valley-wide emission reductions of NSR source categories within the SJV.

Station	NO _x :PM _{2.5}	SO _x :PM _{2.5}
Bakersfield – CA	7.0	5.2
Bakersfield – Planz	5.9	2.9
Fresno – 1 st Street	4.0	4.8
Fresno – Hamilton	5.4	4.8
Clovis	4.0	4.8
Modesto – 14 th Street	8.1	2.4
Merced – M Street	3.6	3.2
Stockton – Hazelton St.	5.4	1.1
Visalia – N. Church St.	3.4	4.0
Corcoran – Patterson	6.0	7.2
<i>Average</i>	5.3	4.1

4. Alternative Approaches

In addition to the Valley-wide reduction analysis described in the previous section, two alternative approaches were taken in order to compare the possible trading ratios that could come from other analysis options. These results are presented here in the interests of full disclosure and to demonstrate that EPA's preferred method is indeed more conservative and will require more precursor reductions to offset a given PM_{2.5} increase.

One alternative that was explored was the assumption of county based emissions reductions as opposed to Valley-wide. In this approach, the total tonnage of reductions used in the Valley-wide analysis was separated into county level tonnages based on the county specific emissions inventory from the NSR source categories. Furthermore, it was assumed that the sensitivity modeling conducted in the Valley-wide reduction analysis was driven mostly by days with stagnant meteorology, where the design value concentration was predominately affected by local sources as opposed to the whole Valley. Under this assumption, county based emissions reductions would have the same effect as Valley-wide reductions. With the separated county based emissions reductions from the NSR source categories, each station was assigned to its county's emissions, at which point the trading ratios were recalculated and summarized in Table 3.

Table 3. NO_x:PM_{2.5} and SO_x:PM_{2.5} trading ratios for county based emission reductions of NSR source categories within the SJV.

Station	NO _x :PM _{2.5}	SO _x :PM _{2.5}
Bakersfield – CA	4.8	2.4
Bakersfield – Planz	2.0	1.4
Fresno – 1 st Street	4.1	4.8
Fresno – Hamilton	5.4	4.8
Clovis	4.1	4.8
Modesto – 14 th Street	9.1	2.3
Merced – M Street	3.3	1.5
Stockton – Hazelton St.	11.7	4.0
Visalia – N. Church St.	2.3	1.9
Corcoran – Patterson	3.1	1.1
<i>Average</i>	5.2	2.9

The results of the county based emission reduction approach were slightly lower than the Valley-wide approach; however, since this was an analysis based on local sources of emissions, a distance ratio would need to be applied. For instance, if a distance ratio of 1.5 was found to be appropriate, this would increase the average ratios to values comparable to the Valley-wide emission reduction approach.

As a second alternative to the Valley-wide emission reduction analysis approach, and as an extension to the speciated linear rollback analysis that was conducted to corroborate the regional photochemical model (detailed in Appendix G), an evaluation of the sensitivity of the rollback model was investigated. By applying 50% cuts in the PM_{2.5}, NO_x, and SO_x NSR source emissions inventories (as described in the Valley-wide reduction approach), the change in the projected 2019 PM_{2.5} design value was related to the change in the emissions inventory. Through these comparisons, interpollutant trading ratios were developed through the rollback model. Since the speciated linear rollback analysis was only conducted for the Fresno and Bakersfield areas, the following Table 4 shows the results for these areas of the Valley only.

Table 4. NO_x:PM_{2.5} and SO_x:PM_{2.5} trading ratios based on Speciated Linear Rollback Modeling Analysis of emission reductions of NSR source categories within the SJV.

Station	NO _x :PM _{2.5}	SO _x :PM _{2.5}
Bakersfield – CA	1.7	1.0
Fresno – 1 st Street	2.9	1.0

Since the speciated linear rollback model is also heavily based on impacts from localized emissions sources, a distance ratio would also be required here for use as NSR offsets. Applying a distance ratio would increase the linear rollback figures, however the values would still be less than the more conservative Valley-wide emission reduction analysis approach.

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