APPENDIX C
(APPENDIX 4.2-6 TO DRAFT EIR)
MITCHELL RANCH CENTER AIR QUALITY IMPACT ANALYSIS, SUPPLEMENTAL EVALUATION
URBAN CROSSROADS
NOVEMBER 3, 2010

URBAN CROSSROADS

41 Corporate Park | Suite 300 | Irvine, CA 92606 | (949) 660-1994
www.urbanXroads.com

November 3, 2010

Mr. Mark Teague, AICP
PMC
508 Chestnut Street, Suite A
Mount Shasta, CA 96067

Subject: Mitchell Ranch Center Air Quality Impact Analysis Supplemental Evaluation

Dear Mr. Teague:

Since preparation of the *Mitchell Ranch Center Air Quality Impact Analysis* Report, prepared by Urban Crossroads, Inc. dated June 11, 2008, the proposed project has been refined and an updated Air Impact Assessment has been prepared by Michael Brandman Associates (MBA) for purposes of satisfying the San Joaquin Valley Air Pollution Control District's (SJVAPCD's) Indirect Source Review (ISR) requirement.

The purpose of this supplemental evaluation is to determine if the results of the *Air Impact Assessment for Mitchell Ranch Center* prepared by MBA on September 8, 2010 is appropriate for use in the FEIR.

Since the original Air Quality Impact Analysis report was prepared over two years ago, there have been key changes to the scope of the project and assumptions that were available at the time the original Air Quality Impact Analysis report was prepared. Specifically the following refinements have occurred:

- The MBA assessment reflects the refined building footprint which is significantly smaller than what was analyzed in the original Air Quality Impact Analysis. The MBA assessment provides impacts based on a 299,830 square foot shopping center whereas the original Air Quality Impact Analysis based its impacts on a 327,329 square foot shopping center. This reduction in square feet results in a reduction of vehicle trips and building square footage which directly results in fewer vehicle emissions and area-source emissions.

- The MBA assessment includes refined project construction durations that are reflective of what is likely expected to occur. The original Air Quality Impact Analysis is based on a theoretical construction scenario that was to commence in 2008.

- The MBA assessment includes a refined trip length analysis based existing market conditions. The refined trip length analysis estimates a weighted trip length for Customer-based shopping trips as 2.61 miles. The original Air Quality Impact Analysis is based on the conservative default model trip length available in the URBEMIS 2007 emissions inventory model for Customer-based shopping trips as 7.4 miles.

- The MBA assessment reflects a Clean Truck Fleet for Walmart trucks as approved by the SJVAPCD on March 17, 2009. These emissions reductions are reflected in the "mitigated" summary totals for operational emissions.

Additionally, the MBA Assessment includes the following locational and on-site measures as follows:

- Street Design – there are 192 intersection nodes within ½ mile of the project center.
- Pedestrian Infrastructure – The project includes sidewalks on both sides of the street.
- Outside Electrical Outlets – As required by California Building Code, electrical outlets will be provided on the exterior of the buildings. The amount of electrical equipment that will be used is unknown. Therefore, the default 3% electrical equipment was used in emissions modeling.
- Energy Efficiency – Walmart buildings incorporate many energy savings measures that account for 9% energy efficiency above current Title 24 standards.
- Local Serving Retail – The project includes local-serving retail development.
- Bus Service – The Ceres Area Transit (CAT) provides 13 daily weekday stops near the project location.
- Bicycle Lane Coverage – 94% of the collector and arterial streets within a ½ mile radius of the project site have or will have Class I or II bicycle lanes.
- The City of Ceres General Plan Land Use Map was used to estimate a total of 3,517 jobs and 1,749 dwelling units within a ½ mile of the project site.

Urban Crossroads, Inc. has thoroughly reviewed the MBA assessment and concurs with the findings contained therein.

Table 1 presents the emissions summary table for Construction Activity for the proposed project based on the MBA assessment. As shown, the project will not exceed any of the SJVAPCD's numeric emissions thresholds and thus a less than significant impact is expected.

Table 2 presents the emissions summary table for Operational Activity for the proposed project based on the MBA assessment. As shown, the project will exceed the SJVAPCD's numeric emissions thresholds for emissions of VOCs/ROGs[1] and NOx prior to mitigation.

Table 3 presents the mitigated emissions summary table for Operational Activity for the proposed project based on the MBA Assessment. As shown, the project will not exceed any of the SJVAPCD's numeric

[1] Volatile Organic Compounds (VOCs) and Reactive Organic Gases (ROGs) are industry terms that are used interchangeably.

emissions thresholds (after implementation of the mitigation measures outlined in the MBA assessment and agreed to by the SJVAPCD) and thus a less than significant impact is expected.

If you have any questions, please contact me directly at (949) 660-1994 ext. 217.

Respectfully submitted,

URBAN CROSSROADS, INC.

Haseeb Qureshi
Senior Air Quality Specialist

TABLE 1

EMISSIONS SUMMARY OF CONSTRUCTION ACTIVITIES (TONS PER YEAR) (WITHOUT MITIGATION)

Source	VOCs/ROGs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Site Preparation	0.11	0.77	0.46	0	2.81	0.62
Walmart – 2012	0.87	1.67	2.30	0	0.12	0.11
Total Construction Emissions (2012)	**0.98**	**2.44**	**2.76**	**0**	**2.93**	**0.73**
SJVAPCD Significance Threshold	10	10	N/A	N/A	15	N/A
Significant?	**NO**	**NO**	**N/A**	**N/A**	**NO**	**N/A**
Walmart – 2013	1.48	0.13	0.20	0	0.01	0.01
Total Construction Emissions (2013)	**1.48**	**0.13**	**0.20**	**0**	**0.01**	**0.01**
SJVAPCD Significance Threshold	10	10	N/A	N/A	15	N/A
Significant?	**NO**	**NO**	**N/A**	**N/A**	**NO**	**N/A**
Major 2 – 2014	0.41	0.82	0.70	0	0.05	0.04
Major 3 – 2014	0.25	0.80	0.61	0	0.05	0.04
Major 4 – 2014	0.26	0.80	0.61	0	0.05	0.04
Shops 1 – 2014	0.24	0.80	0.60	0	0.05	0.04
Shops 2 – 2014	0.23	0.80	0.60	0	0.05	0.04
Shops 3 – 2014	0.18	0.80	0.57	0	0.05	0.04
Shops 4 – 2014	0.20	0.80	0.58	0	0.05	0.04
Pad A Retail – 2014	0.14	0.79	0.55	0	0.05	0.04
Pad A Restaurant – 2014	0.14	0.79	0.55	0	0.05	0.04
Pad B – 2014	0.14	0.79	0.55	0	0.05	0.04
Pad C – 2014	0.15	0.79	0.55	0	0.05	0.04
Total Construction Emissions (2014)	**2.34**	**8.78**	**6.47**	**0**	**0.55**	**0.44**
SJVAPCD Significance Threshold	10	10	N/A	N/A	15	N/A
Significant?	**NO**	**NO**	**N/A**	**N/A**	**NO**	**N/A**

Source: Air Impact Assessment for Mitchell Ranch Center Northwest corner of Mitchell Road and Service Road Ceres, California - Michael Brandman Associates (September 8, 2010).

TABLE 2

SUMMARY OF PEAK OPERATIONAL EMISSIONS TONS PER YEAR (WITHOUT MITIGATION)

Operational Activities	VOCs/ROGs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Walmart	7.42	11.33	63.42	0.05	3.89	0.96
Major 2	1.08	0.99	9.25	0.01	0.63	0.14
Major 3	0.52	0.47	4.53	0	0.30	0.07
Major 4	0.54	0.49	4.69	0	0.31	0.07
Shops 1	0.47	0.43	4.11	0	0.27	0.06
Shops 2	0.45	0.41	3.95	0	0.26	0.06
Shops 3	0.28	0.25	2.42	0	0.16	0.03
Shops 4	0.33	0.29	2.87	0	0.19	0.04
Pad A Retail	0.13	0.12	1.19	0	0.07	0.02
Pad A Restaurant	0.13	0.12	1.19	0	0.07	0.02
Pad B	0.12	0.11	1.11	0	0.07	0.01
Pad C	0.16	0.14	1.45	0	0.09	0.02
Total Operational Emissions	**11.63**	**15.15**	**100.18**	**0.06**	**6.31**	**1.5**
SJVAPCD Significance Threshold	10	10	N/A	N/A	15	N/A
Significant?	**YES**	**YES**	N/A	N/A	**NO**	N/A

Source: Air Impact Assessment for Mitchell Ranch Center Northwest corner of Mitchell Road and Service Road Ceres, California - Michael Brandman Associates (September 8, 2010).

TABLE 3

SUMMARY OF PEAK OPERATIONAL EMISSIONS TONS PER YEAR (WITH MITIGATION)

Operational Activities	VOCs/ROGs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Walmart	6.38	6.41	53.72	0.04	3.12	0.84
Major 2	0.92	0.84	7.81	0.01	0.53	0.12
Major 3	0.44	0.4	3.84	0	0.25	0.06
Major 4	0.46	0.42	3.97	0	0.26	0.06
Shops 1	0.4	0.37	3.48	0	0.23	0.05
Shops 2	0.39	0.35	3.34	0	0.22	0.05
Shops 3	0.24	0.21	2.05	0	0.13	0.03
Shops 4	0.28	0.25	2.43	0	0.16	0.03
Pad A Retail	0.11	0.1	1.02	0	0.06	0.01
Pad A Restaurant	0.11	0.1	1.02	0	0.06	0.01
Pad B	0.1	0.1	0.95	0	0.06	0.01
Pad C	0.14	0.12	1.23	0	0.08	0.02
Total Operational Emissions	**9.97**	**9.67**	**84.86**	**0.05**	**5.16**	**1.29**
SJVAPCD Significance Threshold	10	10	N/A	N/A	15	N/A
Significant?	**NO**	**NO**	N/A	N/A	**NO**	N/A

Source: Air Impact Assessment for Mitchell Ranch Center Northwest corner of Mitchell Road and Service Road Ceres, California - Michael Brandman Associates (September 8, 2010).

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT LETTER
NOTICE OF RECEIPT OF COMPLETE ISR APPLICATION
OCTOBER 20, 2010

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

OCT 20 2010

Rebekah Rodriguez
Walmart Stores Inc
2001 S.E. 10th Street
Bentonville, CA 72716

Re: Notice of Receipt of Complete Application
ISR Project Number: C-20100162
Land Use Agency: City of Ceres
Land Use Agency ID Number: EIR Certification, Vesting Tentative Subdivision Map, Conditional Use Permit, Demo Permits, Grading

Dear Ms. Rodriguez:

The San Joaquin Valley Air Pollution Control District (District) has deemed your Air Impact Assessment (AIA) application complete for the following project, Mitchell Ranch Center, located at Mitchell Road, Ceres, California. The next step in the process is for the District to quantify emissions from the project and to calculate the associated off-site mitigation fee. During processing of your application, the District may request additional information to clarify, correct or otherwise supplement, the information on file. We will begin processing your AIA application as soon as possible.

Please note that this letter is not an AIA approval. Upon completion of the District's AIA analysis and determination of offsite fees, the District will issue an AIA approval letter. For your convenience, a document is enclosed which addresses frequently asked questions regarding Indirect Source Review (ISR). This may be used as a reference to better understand ISR, and how the District will process your application.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

If you have any questions, please contact Ms. Debbie J. Johnson at (559) 230-5817.

Sincerely,

David Warner
Director of Permits Services

Daniel T Barber

for Arnaud Marjollet
Permit Services Manager

AQS: dj

Enclosure

cc:David M. Mitchell
Michael Brandman Associates
2444 Main Street, Suite 150
Fresno, CA 93721

Indirect Source Review
Complete Project Summary Sheet &
Monitoring and Reporting Schedule

Project Name:	**MITCHELL RANCH CENTER**
Applicant Name:	**WAL-MART STORES, INC.**
Project Location:	**MITCHELL ROAD** **NORTHWEST CORNER OF MITCHELL ROAD & SERVICE ROAD** **APN(s): 053-012-068**
Project Description:	**ACREAGE: 26.3**
ISR Project ID Number:	**C-20100162**
Applicant ID Number:	**C-300925**
Permitting Public Agency:	**CITY OF CERES**
Public Agency Permit No.	**IER CERTIFICATION, VESTING TENTATIVE SUBDIVISION MAP, CONDITIONAL USE PERMIT, DEMO PERMITS, GRADING**

Existing Emission Reduction Measures

Enforcing Agency	Measure	Quantification	Notes

There are no Existing Measures for this project.

Non-District Enforced Emission Reduction Measures

Enforcing Agency	Measure	Specific Implementation	Source Of Requirements
CITY OF CERES	Streets Design	192 Nodes/square mile	
CITY OF CERES	Sidewalk Coverage	100% sidewalks on both sides	
CITY OF CERES	Electrical Outlets	3% Landscape Equipment electrically powered	
STATE OF CALIFORNIA	Energy Efficiency	9% above Title 24	
CITY OF CERES	Local Serving Retail	Selected	
CITY OF CERES	Bus Service	13 Daily Weekday Busses within 1/4 mile of the site boundaries	
CITY OF CERES	Bicycle Lanes	94% Arterials or Collectors with Bike Lanes	
CITY OF CERES	Jobs to Housing Ratio	3,517 Jobs to 1,749 DU	

Number of Non-District Enforced Measures: 8

District Enforced Emission Reduction Measures

Enforcing Agency	Measure	Specific Implementation	Measure For Compliance	District Review

Indirect Source Review
Complete Project Summary Sheet & Monitoring and Reporting Schedule

(District Enforced Emission Reduction Measures Continued)

Enforcing Agency	Measure	Specific Implementation	Measure For Compliance	District Review
SJVAPCD	Construction and Operation - Recordkeeping	For each project phase, all records shall be maintained on site during construction and for a period of ten years following either the end of construction or the issuance of the first certificate of occupancy, whichever is later. Records shall be made available for District inspection upon request.	(Compliance Dept. Review)	Ongoing
SJVAPCD	Construction and Operational Dates	For each project phase, maintain records of (1) the construction start and end dates and (2) the date of issuance of the first certificate of occupancy, if applicable.	(Compliance Dept. Review)	Ongoing

Number of District Enforced Measures: 2

AIR QUALITY ASSESSMENT FOR MITCHELL RANCH CENTER AND INDIRECT SOURCE REVIEW (ISR) APPLICATION MICHAEL BRANDMAN ASSOCIATES OCTOBER 13, 2010

Michael Brandman Associates

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

October 13, 2010

San Joaquin Valley Air Pollution Control District
Attention: Mr. Daniel T. Barber, Ph.D.
1990 E. Gettysburg Avenue
Fresno, CA 93726

Subject: **Air Impact Assessment for Mitchell Ranch Center**
Northwest corner of Mitchell Road and Service Road
Ceres, California

Dear Mr. Barber:

Michael Brandman Associates respectfully submits an Air Impact application on behalf of Walmart Stores, Incorporated for the Mitchell Ranch Center Project in Ceres, California in Stanislaus County. The project consists of a 299,830 square foot shopping center on 26.3 acres anchored by a Walmart Store. The Walmart Store includes 185,668 square feet of indoor uses and a 5,762 square foot outdoor garden center. No tenants have been identified for the remaining center.

The project is assumed to begin construction January 2012 with the construction of the Walmart Store and become operational January 2013. The development of the remaining center is tentatively scheduled to be developed in January 2014. The project includes locational and on-site measures listed below:

- Street Design – there are 192 intersection nodes within ½ mile of the project center.
- Pedestrian Infrastructure – The project includes sidewalks on both sides of the street.
- Outside Electrical Outlets - As required by California Building Code, electrical outlets will be provided on the exterior of the buildings. The amount of electrical equipment that will be used is unknown. Therefore, the default 3% electrical equipment was used in emissions modeling.
- Energy Efficiency – Walmart buildings incorporate many energy saving measures that account for 9% energy efficiency above current Title 24 standards.
- Local Serving Retail –The project includes local-serving retail development.
- Bus Service – The Ceres Area Transit (CAT) provides 13 daily weekday stops near the project location.
- Bicycle Lane Coverage –94% of the collector and arterial streets within a ½ mile radius of the project site have or will have Class I or II bicycle lanes.
- The City of Ceres General Plan Land Use Map was used to estimate a total of 3,517 jobs and 1,749 dwelling units within a ½ mile of the project site.

Michael Brandman Associates prepared an emissions estimate using URBEMIS 2007 v. 9.2.4. In addition to the mitigation measures above, the following assumptions were input into the model:

- The traffic study prepared for the Environmental Impact Report identified various trip generation rates for Saturday and Weekdays. A weighted trip generation rate was calculated for the Walmart and Shopping Center uses. The traffic study also identified a 10 percent pass-by rate and 20 percent diverted rate. The default URBEMIS primary, diverted, and pass-by rates were adjusted accordingly.

- Trip Length Analysis – Customer-based shopping trips were calculated to have a weighted trip length of 2.61 miles. A memorandum summarizing the analysis is included in the supporting documentation.

- Clean Truck Fleet: Wal-Mart is making a commitment to using a clean fleet for its delivery vehicles. Wal-Mart operates a fleet of 354 heavy-duty diesel trucks to make deliveries in this region. Wal-Mart replaces its trucks on a five-year cycle, so all trucks in the fleet are five years old or newer. On February 12, 2009 MBA submitted a methodology to the San Joaquin Valley Air District (SJVAPCD) to quantify the emission reductions Wal-Mart obtains from operating its cleaner than average truck fleet. The methodology was approved by the SJVAPCD on March 17, 2009. The methodology and emissions summary are included in the application package to document the unmitigated baseline emissions from passenger vehicles, Wal-Mart heavy-duty trucks and non-Wal-Mart heavy-duty trucks. Mitigated emissions for Wal-Mart trucks were calculated using emission rates from the ARB Fleet Calculator. This amount was then subtracted from the mitigated amount generated in the URBEMIS 2007 without Wal-Mart on non-Wal-Mart trucks (passenger vehicles) run plus the unmitigated non-Wal-Mart truck emissions plus the mitigated WM truck emissions.

The ISR application, required attachments, detailed URBEMIS printouts and supporting documentation are included in the application package. A CD containing the URBEMIS modeling is also provided. The $700 application filing fee and a letter of authorization from Walmart Stores, Inc. for Michael Brandman Associates to act on their behalf for the Project's ISR review process is also included in the submittal.

If you have any questions or concerns regarding this application, please call me or Elena Nuño at 559.497.0310 or email dmitchell@brandman.com or enuno@brandman.com. MBA will expedite any request for additional information or clarification and is available to meet at any time to quickly resolve issues if they arise.

Sincerely,

David M. Mitchell

Dave Mitchell, Air Quality Services Manager
Michael Brandman Associates
2444 Main Street, Suite 150
Fresno, CA 93721

Enc: Letter of Authorization
Air Impact Assessment Application Package

Job Number
1758.0006

Walmart
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Fax 479-273-8380
www.walmart.com

July 27, 2010

San Joaquin Valley Air Pollution Control District (SJVAPCD)
Attention: Indirect Source Review
1990 E. Gettysburg Avenue
Fresno, CA 93726

To Whom It May Concern:

This letter authorizes Michael Brandman Associates (MBA) to negotiate, discuss and in any other way communicate with San Joaquin Valley Air Pollution Control District (SJVAPCD) in those areas relative to:

- SJVAPCD's Indirect Source Review (ISR) application for Mitchell Ranch Center – Ceres, CA
  APN #: 053-012-068; 053-013-016; 053-013-018; 053-013-019

Therefore, by the existence of this instrument, Wal-Mart Stores, Inc. hereby authorizes Michael Brandman Associates to submit applications and supporting information to the SJVAPCD and other actions as needed to expedite the application process. By my signature, I affirm that I have the authority to make and sign this authorization letter on behalf of Wal-Mart Stores, Inc.

Sincerely,

Frank Pampalone
Director of Design – West Team
Authorized Representative
Wal-Mart Stores, Inc.

San Joaquin Valley Air Pollution Control District
Indirect Source Review (ISR) - Air Impact Assessment (AIA)
Non-Residential Project Application Form

A. Applicant Information

Applicant/Business Name: Walmart Stores, Inc.			
Mailing Address: 2001 SE 10th Street	City: Bentonville	State: AR	Zip: 72716
Contact: Rebekah Rodriguez	Title: Sr. Design Manager		
Phone: 479.204.0700 / Fax: 479.273.8380	Email: rebekah.rodriguez@wal-mart.com		

B. Agent Information (if applicable)

Agent/Business Name: Michael Brandman Associates			
Mailing Address: 2444 Main Street, Suite 150	City: Fresno	State: CA	Zip: 93721
Contact: David M. Mitchell	Title: Air Quality Services Manager		
Phone: 559.497.0310 / Fax: 559.497.0319	Email: dmitchell@brandman.com		

If an Agent is signing the Air Impact Assessment Application on behalf of the Applicant, a signed letter from the Applicant giving the Agent authorization is required.

C. Project Information

Project Name: Mitchell Ranch Center	Tract Number(s) (if known):		
Project Location / Street: Mitchell Road	City: Ceres		Zip: 95307
Cross Streets: Northwest corner of Mitchell Road and Service Road		County: Stanislaus	
Permitting Agency Name: City of Ceres			
Mailing Address: 2220 Magnolia Street	City: Ceres	State: CA	Zip: 95307

Permit Type and Number (if known): EIR Certification, Vesting Tentative Subdivision Map, Conditional Use Permit, Demoliton Permits, Grading Permits, Building Permits

D. Project Description

Please briefly describe project (e.g.: 12,000 square foot supermarket and 10,000 square foot of office space): 299,830 square foot shopping center. Walmart is the major tenant (185,668 square feet + 5,762 square foot outdoor garden center). Remaining center is comprised of undertermined tenants totaling 108,400 square feet.

Please check the box next to each applicable land use below:

☒ Commercial / Retail	☐ Recreational	☐ Government
☐ Office	☐ Light Industrial	☐ Medical
☐ Educational	☐ Heavy Industrial	☐ Other

E. Notice of Violation

Is this application being submitted as a result of receiving a Notice of Violation (NOV) from the District?

☐ Yes ☒ No

NOV # _____

F. Voluntary Emission Reduction Agreement

Is this project part of a larger project for which there is a Voluntary Emission Reduction Agreement (VERA) with the District?

☐ Yes ☒ No

VERA agreement # _____

FOR APCD USE ONLY

Filing Fee Received:_____

Date Paid:_____

Applicant #:_____

Check #:_____

Project #:_____

Date Stamp

G. Parcel and Land Owner Information

	APN (000-000-00 Format)	Gross Acres	Land Owner
1.	053-012-068 and 053-013-016 through -019)	26.3	Walmart Stores, Inc.
2.			
3.			

Additional sheets for listing APN numbers can be found on the District's website at www.valleyair.org.

H. Project Development and Operation

Please note that development timelines provided within this section should reflect actual work time, and should not account for possible project delays.

Will the project require demolition of existing structures? ☒ Yes, *complete H-1* ☐ No, *complete H-2*

H-1. Demolition

Total volume of the building(s) being demolished (in cubic feet): **108,032.5**

Demolition Start Date (Month/Year): **1/2012**	Length of Demolition (Months): **0.13**

H-2. Timing

Will the project be developed in multiple phases? ☒ Yes, *complete H-3* ☐ No, *complete H-6 only*

H-3. Multiple Phase Development

How many total acres will be site graded for this project? **26.3**

Will **site grading and paving** be completed for the entire project before beginning any building construction? ☒ Yes, *complete H-4 only* ☐ No, *complete H-5 only*

H-4. Preliminary Site Development and Phased Building Construction

Site Grading Start Date (Month/Year): **01/2012**	Length of Site Grading (Months): **1.88**
Site Paving Start Date (Month/Year): **03/2012**	Length of Site Paving (Months): **0.50**

Phase		
1	Building Const. Start Date (Month/Year): **3/2012**	Length of Building Construction (Months): **10**
	Gross Acres: **14.9**	Square Footage: **191,430 (includes garden center)**
	First Date of Occupation (Month/Year): **2/2013**	
2	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **10**
	Gross Acres: **2.95**	Square Footage: **28,000**
	First Date of Occupation (Month/Year): **11/2014**	
3	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **10**
	Gross Acres: **1.42**	Square Footage: **13,500**
	First Date of Occupation (Month/Year): **11/2014**	
4	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **10**
	Gross Acres: **1.47**	Square Footage: **14,000**
	First Date of Occupation (Month/Year): **11/2014**	

Additional sheets for phasing information can be found on the District's website at www.valleyair.org.

San Joaquin Valley Air Pollution Control District

Indirect Source Review (ISR) - Non-Residential Project Application Form

Continuation Sheet for Section G-4 (Preliminary Site Development and Phased Building Construction)

Project Name: Mitchell Ranch Center
ISR Project No. (if known):

Phase	G-4. Preliminary Site Development and Phased Building Construction (continued)	
5	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **10**
	Gross Acres: **1.28**	Square Footage: **12,200**
	First Date of Occupation (Month/Year):	
6	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **10**
	Gross Acres: **1.24**	Square Footage: **11,700**
	First Date of Occupation (Month/Year):	
7	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **9**
	Gross Acres: **0.73**	Square Footage: **7,000**
	First Date of Occupation (Month/Year): **10/2014**	
8	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **9**
	Gross Acres: **0.89**	Square Footage: **8,400**
	First Date of Occupation (Month/Year): **10/2014**	
9	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **8**
	Gross Acres: **0.34**	Square Footage: **3,250**
	First Date of Occupation (Month/Year): **9/2014**	
10	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **8**
	Gross Acres: **0.34**	Square Footage: **3,250**
	First Date of Occupation (Month/Year): **9/2014**	
11	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **8**
	Gross Acres: **0.32**	Square Footage: **3,000**
	First Date of Occupation (Month/Year): **9/2014**	
12	Building Const. Start Date (Month/Year): **1/2014**	Length of Building Construction (Months): **8**
	Gross Acres: **0.41**	Square Footage: **4,000**
	First Date of Occupation (Month/Year): **9/2014**	
13	Building Const. Start Date (Month/Year):	Length of Building Construction (Months):
	Gross Acres:	Square Footage:
	First Date of Occupation (Month/Year):	

H-5. Phased Site Development and Building Construction

Phase		
1	Site Grading Start Date (Month/Year):	Length of Construction (Months):
	Gross Acres:	Building Square Footage:
	First Date of Occupation (Month/Year):	
2	Site Grading Start Date (Month/Year):	Length of Construction (Months):
	Gross Acres:	Building Square Footage:
	First Date of Occupation (Month/Year):	
3	Site Grading Start Date (Month/Year):	Length of Construction (Months):
	Gross Acres:	Building Square Footage:
	First Date of Occupation (Month/Year):	
4	Site Grading Start Date (Month/Year):	Length of Construction (Months):
	Gross Acres:	Building Square Footage:
	First Date of Occupation (Month/Year):	

Additional sheets for phasing information can be found on the District's website at www.valleyair.org.

H-6. Single Phase Development

Site Grading Start Date (Month/Year):	Length of Construction (Months):
Gross Acres:	Building Square Footage:
First Date of Occupation (Month/Year):	

I. On-Site Air Pollution Reductions (Mitigations)

Listed below are categories of possible mitigation measures that will reduce a project's impact on air quality. If a category is applicable to the project, check "Yes", and please complete the corresponding page to identify specific measures within that category. If a category is not applicable to the project, check "No", and please provide a brief explanation as to why not, and do not fill out the corresponding page(s) for that category.

1. Construction Fleet (Will you be using a construction fleet that will achieve the emission reductions required by District Rule 9510?)

☐ Yes, applicable to project, *please complete this section on page 5*

☒ No, not applicable to project, *brief explanation*: **construction fleet undetermined**

2. Building Design (e.g. increased energy effeciency, electrical outlets, parking space reduction, etc.)

☒ Yes, applicable to project, *please complete this section on pages 5 and 6*

☐ No, not applicable to project, *brief explanation*:

3. Demographics (e.g. presence of local serving retail, jobs to housing ratio, affordable housing, etc.)

☒ Yes, applicable to project, *please complete this section on pages 6 and 7*

☐ No, not applicable to project, *brief explanation*:

4. Transportation / Transit (e.g. bus service, shuttle service, transit passes, public transportation, etc.)

☒ Yes, applicable to project, *please complete this section on pages 7 and 8*

☐ No, not applicable to project, *brief explanation*:

5. Bicycle / Pedestrian Design (e.g. bicycle lanes, sidewalks, intersection density, bicycle parking, etc.)

☒ Yes, applicable to project, *please complete this section on pages 9 and 10*

☐ No, not applicable to project, *brief explanation*:

6. Operational (e.g. parking charges, alternative work schedules, telecommuting, carpooling, etc.)

☒ Yes, applicable to project, *please complete this section on pages 10 through 14*

☐ No, not applicable to project, *brief explanation*:

J. Review Period

You may request a five (5) day period to review a draft of the District's analysis of your project before it is finalized. However, if you choose this option, it will delay the project's finalization by five (5) business days.

☒ **I request to review a draft of the District's analysis.**

K. Fee Deferral Schedule

If the project's on-site air pollution reductions (mitigation) insufficiently reduced air pollution as outlined in Rule 9510, an off-site fee is assessed based on the excess air pollution. The money collected from this fee will be used by the District to reduce air pollution emissions 'off-site' on behalf of the project.

An Applicant may request a deferral of all or part of the 'off-site' fees up to, but not to exceed, the start date of construction. The start of construction is any of the following, whichever occcurs first: start of grading, start of demolition, or any other site development activities not mentioned above.

☒ **I request a Fee Deferral Schedule, and have enclosed the Fee Deferral Schedule Application.**

The Fee Deferral Schedule Application, can be found on the District's website at www.valleyair.org.

L. Change of Project Developer

The Applicant assumes all responsibility for ISR compliance for this project. If the project developer changes, the Applicant must notify the Buyer, and both Buyer and Applicant must file a 'Change of Project Developer' form with the District. If there is a change of project developer, and a 'Change of Project Developer' form is not filed with the District, the Applicant will remain liable for ISR compliance.

The Change of Project Developer form can be found on the District's website at www.valleyair.org.

M. Required Attachments

I am enclosing the following required documents:

☒ Monitoring & Reporting Schedule, *if applicable*

☒ Tract Map or Project Design Map

☒ Vicinity Map

☒ Letter from Applicant granting Agent authorization (if necessary)

☒ Application Filing Fee $700.00

N. Certification Statement

I certify that I have reviewed and completed the entire application and hereby attest that the information relayed within is true and correct to the best of my knowledge. I commit to implementation of those on-site measures that I have selected above. I am responsible for notifying the District if I will be unable to implement these measures. If a committed measure is not implemented, the project may be re-assessed for air quality impacts.

(An authorized Agent may sign the form in lieu of the Applicant if an authorization letter **signed by the Applicant** is provided).

Name (printed):David M. Mitchell	Title: Air Quality Services Manager
Signature: David M. Mitchell	Date: September 8, 2010

Optional Section

Do you want to receive information about the Healthy Air Living Business Partners Program? [ ] Yes [X] No

Construction Fleet Details

A. Construction – Detailed Fleet

Will the project use a construction fleet that will achieve the emission reductions required by District Rule 9510?	☐ Yes	☒ No

Daily records of the total hours of operation for each piece of equipment greater than 50-horsepower being used on the project site during construction shall be maintained. Within 30-days of completing construction of each project phase, a report summarizing total hours of operation of each piece of construction equipment greater than 50-horsepower shall be submitted to the District. The *Construction – Detailed Fleet Template* may be used as an outline.

For each project phase, the District will verify that the fleet details achieved the required emission reductions. If the reductions are not met, the District will notify applicant of the mitigation fee amount to cover any remaining emissions after on-site mitigation has been applied.

Building Design Mitigation

A. Energy Efficiency

Will the energy efficiency rating of the project's buildings be greater than required by California Title 24 requirements?	☒ Yes* (*Please complete sections below*)	☐ No

Percent of increase greater than California Title 24 requirements: 9% (Walmart only)

Please attach relevant analysis or summary pages of Title 24 documentation.

☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**
	Source of Requirement: **Project Design Features/Mitigation Measures in EIR**

☐ District Enforcement

B. Outside Electrical Outlets for Landscape Equipment

Will the project provide electrical outlets on the front and rear of all buildings, **and /or** provide the use of electrical maintenance equipment including but not limited to electric lawn mowers, electric leaf blowers, etc.?	☒ Yes* (*Please complete sections below*)	☐ No

Percent of landscape equipment that will be electrically powered: 3%

3% is the assumed statewide average for landscape equipment, provide documentation if claiming greater than 3%.

☒ Non-District Enforcement	Name of Enforcing Agency: **State of California**
	Source of Requirement: **Building Code**

☐ District Enforcement

C. Preferential Parking Spaces

Will the project provide spaces near the entrance of the building for those who carpool, vanpool or rideshare, and signs designating those parking spaces?	☐ Yes* (*Please complete sections below*)	☒ No

☐ Non-District Enforcement	Name of Enforcing Agency:
	Source of Requirement:

☐ District Enforcement

Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.

Building Design Mitigation (continued)

D. Showers / Changing / Locker Facilities

Will the project provide shower / changing / locker facilities to encourage employees to bike and/or walk to work (typically one shower and three lockers for every 25 employees)?	☐ Yes* *(Please complete sections below)*	☒ No Walmart provides lockers
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

E. Parking Space Reduction

Will the project provide fewer parking spaces than the rate provided by the Institute of Transportation and Engineering (ITE) Parking Generation Handbook?	☐ Yes* *(Please complete sections below)*	☒ No
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

Demographics Mitigation

A. Local Serving Retail

Is the project center located within **1/2 mile** of residential facilities?	☒ Yes* *(Please complete sections below)*	☐ No
☐ Local Serving Retail is already in place. Please **attach** relevant reference material or the project's vicinity map or aerial photograph in relation to the project and include a distance legend. Please identify location of existing local retail/commercial facilities uses. Use terminology such as retail, office, etc. or show the zoning type to identify the retail/commercial facilities.		
☒ Planned	1. *Please **attach** a copy of the relevant section of the planning document*	
	2. Planning Document: **Mitchell Ranch Center EIR and City of Ceres General Plan**	
	3. Implementing Agency: **City of Ceres**	
	4. Date Adopted: **2010 and 1997**	
☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**	
	Source of Requirement: **Certified EIR and approved General Plan**	
☐ District Enforcement		

* ***Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.***

Demographics Mitigation (continued)

B. Jobs to Housing Ratio

Is the project center located within **1/2 mile** of a mix of uses that includes employment?	☒ Yes* (*Please complete sections below*)	☐ No
Number of dwelling units within **1/2 mile** radius of the project's center: **1,749**		
Number of jobs within **1/2 mile** radius of the project: **3,517**		
☒ Existing Jobs and Housing (including planned housing from this project). Please **attach** supporting documentation to justify the provided number of jobs and housing within a ½ mile radius of the project.		
☒ Planned	1. *Please **attach** a copy of the relevant section of the planning document*	
	2. Planning Document: **General Plan**	
	3. Implementing Agency: **City of Ceres**	
	4. Date Adopted: **1997**	
☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**	
	Source of Requirement: **Approved General Plan**	
☐ District Enforcement		

Transportation / Transit Mitigation

A. Bus Service

Is the project within 1/4 mile of an existing or planned bus stop?	☒ Yes* (*Please complete sections below*)	☐ No
Number daily Weekday Buses stopping within ¼ mile of the site boundaries: **13**		
☒ Bus Service is already in place. Please **attach** a copy of the transportation agency's bus service schedule and identify the location of bus stops on tract, design or aerial map.		
☐ Transit is planned	1. *Please **attach** a copy of the relevant section of the planning document*	
	2. Planning Document:	
	3. Implementing Agency:	
	4. Date Adopted:	
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

B. Transit Passes

Will the project make available free annual transit pass subsidies to all residents for first 10 years of operation?	☐ Yes* (*Please complete sections below*)	☒ No
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

* ***Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.***

Transportation / Transit Mitigation (continued)

C. Rail, Light-Rail, or Bus Rapid Transit Service

Is the project within 1/2 mile of an existing or planned daily rail or rapid transit bus stop?	☐ Yes* (*Please complete sections below*)	☒ No
Number of daily Rail or Rapid Transit Buses stopping within ½ mile of the site boundaries:		
☐ Rail, Light-Rail, or Rapid Transit Bus Service is already in place. Please **attach** a copy of the transportation agency's daily rail or rapid transit service schedule and identify the location of rail or rapid transit stops on tract, design or aerial map.		
☐ Transit is planned	1. *Please **attach** a copy of the relevant section of the planning document*	
	2. Planning Document:	
	3. Implementing Agency:	
	4. Date Adopted:	
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

D. Shuttle Service

Does the project site have, or will have, a dedicated daily shuttle service?	☐ Yes* (*Please complete sections below*)	☒ No
Number of dedicated Daily Shuttle Trips:		
☐ Shuttle Service already in place. Please **attach** a copy of the transportation agency's shuttle service schedule and identify the location of shuttle stops on tract, design or aerial map.		
☐ Transit is planned	1. *Please **attach** a copy of the relevant section of the planning document*	
	2. Planning Document:	
	3. Implementing Agency:	
	4. Date Adopted:	
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

E. Signage/Kiosk

Will the project provide a display case or kiosk displaying transportation information in a prominent area accessible to residents?	☐ Yes* (*Please complete sections below*)	☒ No
Please attach and identify the location of the planned or existing transportation signage on the project's tract map, project design map, or aerial photograph.		
Transportation Signage Description (information to be posted, i.e. bus schedules):		
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.

Bicycle / Pedestrian Mitigation

A. Intersection Density

1. Square Miles within the Study Area: **a.** If the distance from the center of the project out to its farthest boundary is less than or equal to ½ mile then the Square Miles within the Study Area will be 0.79. Enter this value in the blank to the right. **b.** If the distance from the center of the project out to its farthest boundary is greater than ½ mile then calculate the area value by: Study Area Square Miles = 3.14 x radius$^{(squared)}$. (Enter this value in the blank to the right.)				**0.79** Square Miles
2. Intersection within the Study Area: Number and type of intersections within the project area:	Number of 3-Way Intersections:	**40**	x 3 =	**120**
	Number of 4-Way Intersections:	**8**	x 4 =	**32**
	Number of 5-Way Intersections:	**0**	x 5 =	**0**
	Total Intersections (sum of above) = 152			
3. Intersection Density within the Study Area: Intersection Density is the Study Area's 'Total Intersections' value (B.) divided by the 'Square Miles' value (A.):	**192** Intersections / sq. mi.			

Attach the project's vicinity map or aerial photograph identifying the intersections and intersection count within the study area.

☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**
	Source of Requirement: **existing street pattern**
☐ District Enforcement	

B. Sidewalk Coverage

Study Area Sidewalks:

1. _____% of streets that have sidewalks on **One (1)** side of the street (0% if sidewalks are on both sides of the street).
2. 100% of streets that have sidewalks on **Two (2)** sides of the street (100% if sidewalks are on both sides of the street).

☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**
	Source of Requirement: **Municipal Code and EIR mitigation measures**
☐ District Enforcement	

C. Bicycle Parking

Will bicycle parking be provided within the project? ☒ Yes* ☐ No

(Please complete sections below)

Number of Bicycle Spaces: **TBD (no credit is taken for this measure)**

☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**
	Source of Requirement: **EIR mitigation measure, site plan review**
☐ District Enforcement	

* ***Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.***

Bicycle / Pedestrian Mitigation (continued)

D. Existing and Planned Bicycle Lanes

Does the project Study Area contain existing or planned Class I or Class II bicycle lanes?	☒ Yes* *(Please complete sections below)*	☐ No
Bicycle Lane Location *(Street, etc)*: **Mitchell Road, Service Road, El Camino, Moore Road**		
Bicycle Lanes: 94% Calculate this value by counting the number of individual Class I and Class II Bicycle Lanes and the number of individual Collector and Arterial streets within ½ mile radius of the project center. Then divide the total number of Class I and Class II Bicycle Lanes by the total number of Collector and Arterial streets.		
☒ Bicycle Lanes are already in place - Please **attach** a copy of the applicable section of the area's Bicycle Plan showing/describing the bicycle lane location and type (including a distance legend)		
☒ Planned Bicycle Lanes	1. *Please **attach** a copy of the relevant section of the planning document*	
	2. Planning Document: **Stanislaus County Non-Motorized Transportation Plan**	
	3. Implementing Agency: **City of Ceres/Stanislaus County**	
	4. Date Adopted: **2008**	
☒ Non-District Enforcement	Name of Enforcing Agency: **City of Ceres**	
	Source of Requirement: **Approved transportation plan and also included as mitigation in EIR.**	
☐ District Enforcement		

Operational Mitigation

A. Parking Charges

Will the project implement parking charges?	☐ Yes* *(Please complete sections below)*	☒ No
Please provide Daily Parking Charge (in dollars):		
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

B. Telecommuting

Will the project implement an employee telecommuting policy for the first 10 years of operation.	☐ Yes* *(Please complete sections below)*	☒ No
Percent of employees anticipated to participate in the employee Telecommuting Program:		
Average number of days per week employees will participate:		
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☐ District Enforcement		

* ***Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.***

Operational Mitigation (continued)

C. Alternative Work Schedules

Will the project implement alternative work schedules, such as compressed workweek schedules (where weekly work hours are compressed into fewer than five days), for the first 10 years of operation?	☐ Yes* *(Please complete the sections below)*	☒ No

Identify all that may apply:
1. Percent of employees to participate in a 3/36 work schedule: _____%
2. Percent of employees to participate in a 4/40 work schedule: _____%
3. Percent of employees to participate in a 9/80 work schedule: _____%

☐ Non-District Enforcement	Name of Enforcing Agency:
	Source of Requirement:
☐ District Enforcement	

D. Guaranteed Ride Home

Will the project provide a guaranteed ride home for the first 10 years of operation?	☐ Yes* *(Please complete sections below)*	☒ No

☐ Non-District Enforcement	Name of Enforcing Agency:
	Source of Requirement:
☐ District Enforcement	

E. Car Sharing Services

Will the project provide a guaranteed car sharing service for the first 10 years of operation?	☐ Yes* *(Please complete sections below)*	☒ No

☐ Non-District Enforcement	Name of Enforcing Agency:
	Source of Requirement:
☐ District Enforcement	

F. Transportation Coordinator

Will the project employ or appoint an Employee Transportation Coordinator to work with the Transportation Management Agency and the District for the first 10 years of operation?	☐ Yes* *(Please complete sections below)*	☒ No

☐ Non-District Enforcement	Name of Enforcing Agency:
	Source of Requirement:
☐ District Enforcement	

G. Carpool Matching Assistance

Will the project provide carpool-matching assistance for the first 10 years of operation?	☐ Yes* *(Please complete sections below)*	☒ No

☐ Non-District Enforcement	Name of Enforcing Agency:
	Source of Requirement:
☐ District Enforcement	

* ***Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.***

Operational Mitigation (continued)

H. On-Road Fleet

Will the project obtain reductions from vehicle fleet or contracts with clean fleet operators? See **Specific Measure Selection** below for details. For more information, please contact the District at (559) 230-6000.	☒ Yes* *(Please complete sections below)*	☐ No
☐ Non-District Enforcement	Name of Enforcing Agency:	
	Source of Requirement:	
☒ District Enforcement		
This measure includes options for:	Medium Trucks	Line Haul Trucks
	Light-Heavy Trucks	Urban Buses
	Medium Heavy Trucks	School Buses
	Heavy-Heavy Trucks	
Please attach additional sheets if necessary.		

* ***Note: Select the applicable Enforcement Agency below. Each mitigation measure that is selected, and not required or enforced by another public agency will require District enforcement.***

Operational Mitigation (continued)				
Specific Measure Selection				
Vehicle Type (Weight Range)	**Selected**	**Measure**	**Number of Vehicles**	**Percent of trips mitigated by this measure**
Medium *5,751-8,500 lbs*	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel fuel		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		
Light Heavy *8,500-10,00 lbs*	☐	DCM DOC Muffler w/series 6000 or 6100 catalyst		
	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel fuel		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		
Light Heavy *10,001 -14,000 lbs*	☐	DCM DOC Muffler w/series 6000 or 6100 catalyst		
	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel fuel		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		
Medium Heavy *14,001- 33,000 lbs*	☐	AZ Purifier & AZ Purimuffler (Cummins & Navistart: 1991-03)		
	☐	DCM DOC Muffler w/series 6000 or 6100 catalyst		
	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel fuel		
	☐	DPM DPF muffler with/Series 6300 catalyst formulation		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Lubrizol Engine Control Systems Purifilter		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		

Operational Mitigation (continued)				
Specific Measure Selection (continued)				
Vehicle Type (Weight Range)	**Selected**	**Measure**	**Number of Vehicles**	**Percent of trips mitigated by this measure**
Heavy Heavy *33,001 - 60,000 lbs*	☐	DCM DOC Muffler w/series 6000 or 6100 catalyst		
	☐	Cleaire Flash and Match oxidation catalyst		
	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel Fuel		
	☐	DPM DPF muffler w/series 6300 catalyst formulation		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Lubrizol Engine Control Systems Purifilter		
	☐	Cleaire Flash Match system (Cummins M11 engines only)		
	☐	Cleaire Longview (ultra low diesel)		
	☒	Other: **Clean Fleet**	**354**	**100**
Line Haul Vehicles >60,000 lbs	☐	DCM DOC Muffler w/series 6000 or 6100 catalyst		
	☐	Cleaire Flash and Match oxidation catalyst		
	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel Fuel		
	☐	DPM DPF muffler w/series 6300 catalyst formulation		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Lubrizol Engine Control Systems Purifilter		
	☐	Cleaire Flash Match system (Cummins M11 engines only)		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		
Urban Bus	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel Fuel		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		
School Bus	☐	ESW Particulate Reactor		
	☐	PuriNOx Emulsified Diesel Fuel		
	☐	CCRT Particulate Filter		
	☐	CRT Particulate Filter		
	☐	Cleaire Longview (ultra low diesel)		
	☐	Other:		

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Indirect Source Review (ISR)
Non-Residential
Monitoring and Reporting Schedule Supplemental Form

This form is for on-site emission reduction measures that are subject to District monitoring and/or reporting. Each on-site mitigation measure that is selected, but is not required or enforced by another public agency will require District enforcement. The relevant sections of this form must be completed for ***each*** on-site measure that identifies the District as the "Enforcement Mechanism".

For those measures that require a Monitoring and Reporting Schedule (MRS) with the District, **please check the corresponding check box (left column) and sign this form**. The District will enforce checklist measures selected by the applicant through the compliance measures listed below. Please note—the District reserves the right to perform on-site inspections for all measures identified even if not explicitly stated under "District Monitoring".

Project Name: Mitchell Ranch Center

Monitoring and Reporting Schedule			
	On-Site Measure	**Reporting Standard for Compliance**	**District Monitoring**
Construction			
☐	**Detailed Fleet Information**	The Construction Schedule -DETAIL Fleet Supplemental Form should be completed for all diesel powered off-road equipment, greater than 50 horsepower, being used on the project site during construction. The form shall be submitted to the District prior to start of construction. During construction, maintain daily records of the total hours of operation for diesel powered off-road equipment, greater than 50 horsepower. The detailed daily reports shall be maintained on site and shall be made available for District inspection upon request.	During Construction
Building Design			
☒	**Energy Efficiency**	Provide Title 24 Summary Report before start of construction.	None Required
☒	**Electrical Landscape Equipment**	1) If use of electrical landscape equipment is required by developer, provide a copy of compliance document (e.g. Deed Restriction or CC&Rs), before start of construction. 2) If providing electrical landscape equipment, maintain records demonstrating distribution of equipment to residences. All records shall be retained until buildout and shall be made available for District inspection upon request.	As appropriate, until buildout
☐	**Shower/Lockers**	Provide approved building plan before start of construction. Identify location of showers and lockers.	As appropriate, when operational
☐	**Preferential Parking**	Provide approved site plan before start of construction. Identify the location and quantity of preferential parking, include example of signage.	As appropriate, when operational
☐	**Parking Space Reduction**	Provide approved site plan before start of construction. Identify the quantity of parking.	As appropriate, when operational

Monitoring and Reporting Schedule			
	On-Site Measure	**Reporting Standard for Compliance**	**District Monitoring**
Transportation Measures			
☐	**Signage**	Provide approved site plan before start of construction. Identify location of signage, list contents of sign and schedule of maintenance.	As appropriate, when operational
☐	**Transit Passes**	Provide commitment letter at time of AIA application. Maintain records demonstrating distribution of transit passes to residences. All records shall be retained for ten years and shall be made available for District inspection upon request.	As appropriate, when operational
☐	**Shuttle Service**	Provide commitment letter at time of AIA application. Maintain records demonstrating operation of shuttle service for residences. All records shall be retained for ten years and shall be made available for District inspection upon request.	As appropriate, when operational
Bicycle/Pedestrian			
☒	**Bicycle Infrastructure (Bike Lanes)**	Submit approved site plan before start of construction. Identify location and types of bike lanes.	As appropriate, when operational
☒	**Bicycle Storage**	Submit approved site plan before start of construction. Identify location and types of bike storage facilities.	As appropriate, when operational
☒	**Pedestrian Infrastructure (Sidewalk coverage)**	Submit approved site plan before start of construction. Identify location and types of bike storage facilities.	As appropriate, when operational
Operational Measures			
☐	**Parking Charges**	Provide commitment letter before start of construction that identifies the Parking Charges and evidence of funding source for implementation. Maintain records demonstrating Operation of Parking Charges. All records shall be retained for ten years and shall be made available for District inspection upon request.	When operational and annually for 10 years
☐	**Telework**	Provide commitment letter before start of construction that identifies the percent of employees participating and the average number of days per week employees Telework. Maintain records demonstrating operation of Telework. All records shall be retained for ten years and shall be made available for District inspection upon request.	At Buildout and annually for 10 years
☐	**Guaranteed Ride Home**	Provide commitment letter before start of construction that identifies the Guaranteed Ride Home policy and evidence of funding source for implementation. Maintain records demonstrating operation of the Guaranteed Ride Home Policy. All records shall be retained for ten years and shall be made available for District inspection upon request.	At issuance of first occupancy permit and annually for 10 years
☐	**Carpool Matching Assistance**	Provide commitment letter before start of construction that identifies the Carpool Matching Assistance policy and evidence of funding source for implementation. Maintain records demonstrating operation Carpool Matching Assistance. All records shall be retained for ten years and shall be made available for District inspection upon request.	When operational and annually for 10 years
☐	**Car Sharing Services**	Provide commitment letter before start of construction that identifies the Car Sharing Services policy and evidence of funding source for implementation. Maintain records demonstrating operation of the Car Sharing Services. All records shall be retained for ten years and shall be made available for District inspection upon request.	When operation and annually for 10 years

Non-Residential Monitoring and Reporting Schedule Supplemental Form

☐	**Transportation Coordinator**	Provide commitment letter before start of construction that identifies the Transportation Coordinator policy and evidence of funding source for implementation. Maintain records demonstrating operation of the Transportation Coordinator. All records shall be retained for ten years and shall be made available for District inspection upon request.	When operation and annually for 10 years
☐	**Alternative Work Schedules**	Provide commitment letter before start of construction that identifies the Alternative Work Schedules and the percent of participating employees. Maintain records demonstrating operation of the Alternative Work Schedules. All records shall be retained for ten years and shall be made available for District inspection upon request.	When operation and annually for 10 years
☒	**On-Road Fleet**	Provide commitment letter before start of construction that identifies the vehicle type, the emission reduction measure, and the percent of trips mitigated by each measure. Maintain annual records demonstrating operation of the On-Road Fleet. All records shall be retained for ten years and shall be made available for District inspection upon request.	When operation and annually for 10 years

Certification Statement

I certify that I have reviewed and completed the Residential Monitoring and Reporting Schedule and hereby attest that the information relayed within is true and correct to the best of my knowledge. I commit to implementation of those on-site measures that I have selected above. I am responsible for notifying the District if I will be unable to implement these measures. If a committed measure is not implemented, the project may be re-assessed for air quality impacts.

(An authorized agent may sign the form in lieu of the applicant if an authorization letter **signed by the applicant** is provided)

Applicant/Business Name: Walmart Stores, Inc.

Name (printed): David M. Mitchell	Title: Air Quality Services Manager Michael Brandman Associates
Signature: David M. Mitchell	Date (mm/dd/yy): September 8, 2010

Source: NAIP for Stanislaus County (2009).

Michael Brandman Associates

NORTH

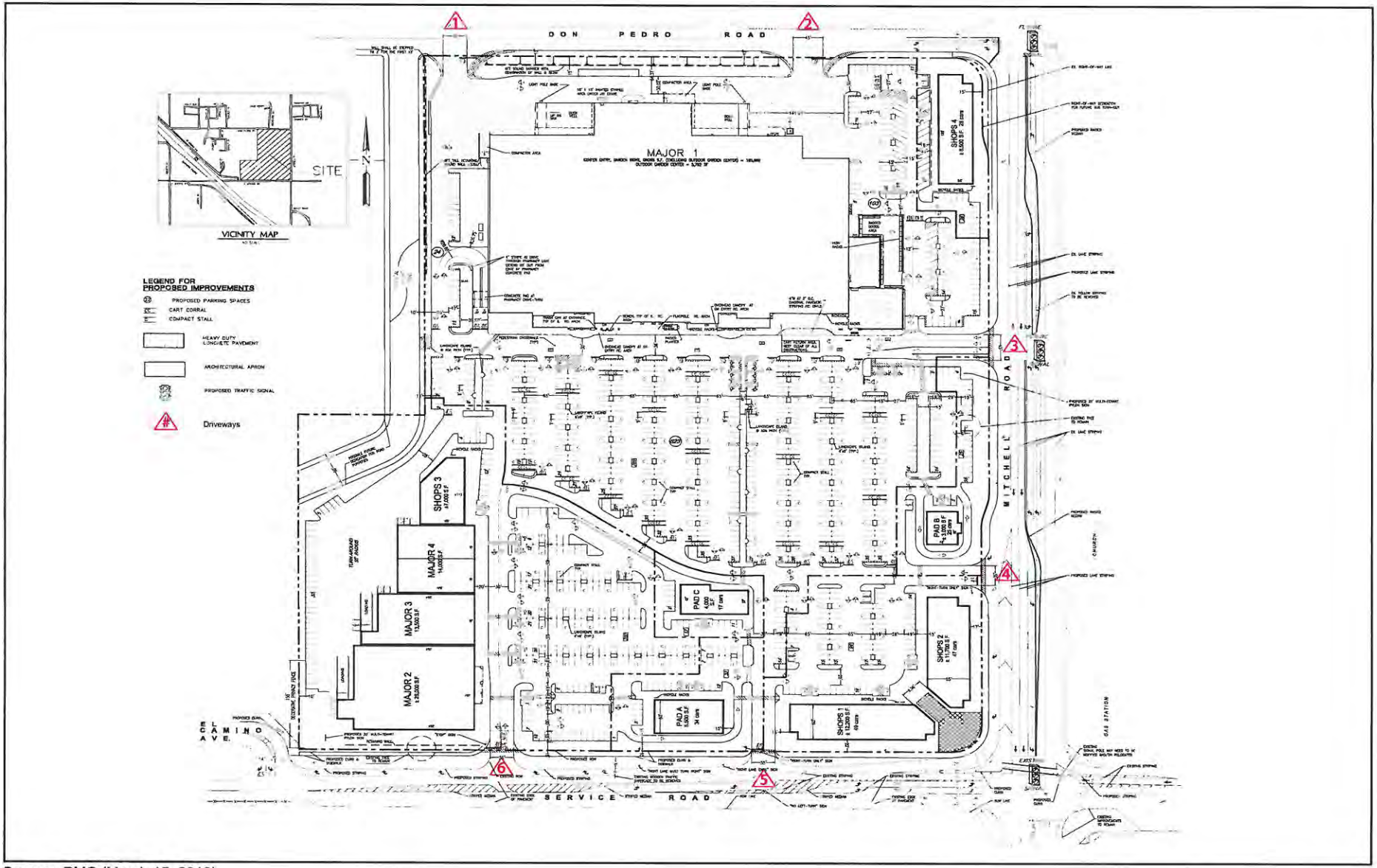
800 400 0 800

Feet

Exhibit 1
Local Vicinity Map

17580006 • 07/2010 | 1_Local_Vicinity.mxd

GREENBERG FARROW • MITCHELL RANCH CENTER • CERES, CALIFORNIA
AIR IMPACT ASSESSMENT APPLICATION



Source: PMC (March 15, 2010).

NORTH

200 100 0 200 Feet

Michael Brandman Associates

17580006 • 07/2010 | 2_Site_Plan.ai

Exhibit 2
Site Plan

GREENBERG FARROW • MITCHELL RANCH CENTER • CERES, CALIFORNIA
AIR IMPACT ASSESSMENT APPLICATION

Emissions Summary for Mitchell Ranch Center Project Operations

Mitchell Ranch Center - Construction Emissions

Source	Unmitigated NOx	Unmitigated PM10
Site Preparation	0.77	0.04
Walmart - 2012	1.67	0.11
Walmart - 2013	0.13	0.01
Major 2 - 2014	0.82	0.04
Major 3 -2014	0.8	0.05
Major 4 -2014	0.8	0.04
Shops 1 - 2014	0.8	0.05
Shops 2 -2014	0.8	0.05
Shops 3 - 2014	0.8	0.05
Shops 4 - 2014	0.8	0.05
Pad A Retail - 2014	0.79	0.04
Pad A Restaurant - 2014	0.79	0.04
Pad B - 2014	0.79	0.04
Pad C - 2014	0.79	0.04
Total	**11.35**	**0.65**

Walmart Area and Operational Emissions

Source	Unmitigated NOx	Unmitigated PM10
Wal Mart Passenger Vehicle Trips	6.68	3.53
Wal Mart Trucks	4.44	0.34
Non-Wal Mart Trucks	0.21	0.02
TOTAL	**11.33**	**3.89**

Walmart Area and Operational Emissions

Source	Mitigated NOx	Mitigated PM10
Wal Mart Passenger Vehicle Trips	5.66	2.98
Wal Mart Trucks	0.54	0.12
Non-Wal Mart Trucks	0.21	0.02
TOTAL	**6.41**	**3.12**

Mitchell Ranch Center - Operational Emissions

Source	Unmitigated NOx	Mitigaged NOx	Unmitigated PM10	Mitigated PM10
Walmart	11.33	6.41	3.89	3.12
Major 2	0.99	0.84	0.63	0.53
Major 3	0.47	0.40	0.3	0.25
Major 4	0.49	0.42	0.31	0.26
Shops 1	0.43	0.37	0.27	0.23
Shops 2	0.41	0.35	0.26	0.22
Shops 3	0.25	0.21	0.16	0.13
Shops 4	0.29	0.25	0.19	0.16
Pad A Retail	0.12	0.10	0.07	0.06
Pad A Restaurant	0.12	0.10	0.07	0.06
Pad B	0.11	0.10	0.07	0.06
Pad C	0.14	0.12	0.09	0.08
Total	**15.15**	**9.67**	**6.31**	**5.16**

San Joaquin Valley Air Pollution Control District

Indirect Source Review (ISR) - Fee Deferral Schedule (FDS)

A. Applicant Information

Applicant/Business Name: Walmart Stores, Inc.			
Mailing Address: 2001 SE 10th St.	City: Bentonville	State: AR	Zip: 72716-0550
Contact: Rebekah Rodriguez	Title: Sr. Design Manager		
Phone: 479.204.0700	Fax: 479.273.8380	Email: rebekah.rodriguez@wal-mart.com	

B. Project Information

Project Name: Mitchell Ranch Center			
Project Location	Street: Mitchell Road	City: Ceres	County: Stanislaus
Cross Streets: Northwest corner of Mitchell Road and Service Road			
ISR Project Number (if known):			

C. Payment Dates

For each project phase identified in the Air Impact Assessment (AIA) Application form, please provide the following information.

Phase Number	Proposed Payment Date (mm/dd/yy) (no later than construction start date)	Estimated Payment Amount (if known)
1 Site Prep and Walmart Construction	1/9/2012	$5,670.08
2 Walmart Operations	2/1/2013	$110,114.16
3 Major 2 Construction	1/6/2014	$1,804.40
4 Major 3 Construction	1/6/2014	$1,765.92
5 Major 4 Construction	1/6/2014	$1,765.92
6 Shops 1 Construction	1/6/2014	$1,765.92
7 Shops 2 Cosntruction	1/6/2014	$1,765.92
8 Shops 3 Construction	1/6/2014	$1,765.92

9 Shops 4 Construction	1/6/2014	$1,765.92
10 Pad A Retail Construction	1/6/2014	$1,704.56
11 Pad A Restaurant Construction	1/6/2014	$1,704.56
12 Pad B Construction	1/6/2014	$1,704.56
13 Pad C Construction	1/6/2014	$1,704.56
14 Pad A Retail Operational	9/15/2014	$3,800.16
15 Pad A Restaurant Operational	9/15/2014	$3,800.16
16 Pad B Operational	9/15/2014	$4,286.88
17 Pad C Operational	9/15/2014	$5,223.92
18 Shops 3 Operational	10/15/2014	$7,844.72
19 Shops 4 Operational	10/15/2014	$10,223.20
20 Major 2 Operational	11/15/2014	$33,274.80
21 Major 3 Operational	11/15/2014	$15691.52
22 Major 4 Operational	11/15/2014	$16,646.24
23 Shops 1 Operational	11/15/2014	$14,979.12
24 Shops 2 operational	11/15/2014	$15,790.32

D. Change of Project Developer

The applicant assumes all responsibility for ISR compliance for this project. If the project developer changes, the applicant must notify the buyer, and both buyer and applicant must file a 'Change of Project Developer' form with the District. If the project developer changes, and a 'Change of Project Developer' form is not filed with the District, the applicant remains liable for ISR compliance.

E. Project Termination

In the event that a project is terminated or cancelled, and no construction has taken place, and the use has never occupied the site, the applicant is entitled to a refund of the entire paid off-site fee, and the 4% fee less any administrative costs incurred by the APCO. To qualify for a refund, the applicant must provide a written request for refund, with proof of project termination, within thirty (30) calendar days of the termination. Proof of project termination may consist of confirmation by the local agency of permit cancellation.

F. Fee Payment

Fees are to be paid in full on or before the dates established in the approved Fee Deferral Schedule (FDS). Failure to satisfy the terms of the approved FDS may be deemed a violation of Rule 9510 and subject to District compliance procedures. Failure to satisfy terms of the FDS does not apply to projects that have been terminated.

G. Project Delay

The applicant is responsible for notifying the District of project delays. Notification must include a new start of construction and/or anticipated build-out date for each phase of the project. The applicant may propose a new FDS, and if not, the District shall prepare and provide the applicant with a revised FDS within 30 calendar days of receipt of notification of project delay. The applicant is responsible for completing and returning the revised FDS within 30 days of the receipt of the revised FDS.

H. Certification Statement

I certify that I have reviewed and completed the entire application and hereby attest that the information relayed within is true and correct to the best of my knowledge. (An authorized Agent may sign the form in lieu of the Applicant if an authorization letter **signed by the Applicant** is provided).

Name (printed):David M. Mitchell	Title: Air Quality Services Manager Michael Brandman Associates
Signature: David M. Mitchell	Date:September 8, 2010

Off-site Emissions Estimator Worksheet

9/8/2010

Applicant/Business Name:	Walmart Stores Inc
Project Name:	Mitchell Ranch Center
Project Location:	Ceres, CA
District Project ID No.:	

Project Construction Emissions

		NOx				PM10			
Phase	Construction Start Date	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)
1 Site Preparation	1/9/2012	0.7700	0.7700	0.0000	0.1540	0.0400	0.0400	0.0000	0.0180
2 Major 1 - Walmart - Const.	3/25/2012	1.6700	1.6700	0.0000	0.3340	0.1100	0.1100	0.0000	0.0495
3 Major 1 - Walmart - Const.-cont.	1/1/2013	0.1300	0.1300	0.0000	0.0260	0.0100	0.0100	0.0000	0.0045
4				0.0000	0.0000			0.0000	0.0000
5 Major 2 - const.	1/6/2014	0.8200	0.8200	0.0000	0.1640	0.0400	0.0400	0.0000	0.0180
6 Major 3 - const.	1/6/2014	0.8000	0.8000	0.0000	0.1600	0.0500	0.0500	0.0000	0.0225
7 Major 4 - const.	1/6/2014	0.8000	0.8000	0.0000	0.1600	0.0500	0.0500	0.0000	0.0225
8 Shops 1 - const.	1/6/2014	0.8000	0.8000	0.0000	0.1600	0.0500	0.0500	0.0000	0.0225
9 Shops 2 - const.	1/6/2014	0.8000	0.8000	0.0000	0.1600	0.0500	0.0500	0.0000	0.0225
10 Shops 3 - const.	1/6/2014	0.8000	0.8000	0.0000	0.1600	0.0500	0.0500	0.0000	0.0225
	Total	7.3900	7.3900	0.0000	1.4780	0.4500	0.4500	0.0000	0.2025

Total Achieved On-Site Reductions (tons)

Phase	NOx	PM10
1	0.0000	0.0000
2	0.0000	0.0000
3	0.0000	0.0000
4	36.9000	7.7000
5	0.0000	0.0000
6	0.0000	0.0000
7	0.0000	0.0000
8	0.0000	0.0000
9	0.0000	0.0000
10	0.0000	0.0000
Total	36.9000	7.7000

Project Operations Emissions (Area + Mobile)

		NOx				PM10			
Phase	Operation Start Date	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)
1				0.0000	0.0000			0.0000	0.0000
2				0.0000	0.0000			0.0000	0.0000
3				0.0000	0.0000			0.0000	0.0000
4 Major 1 - Walmart - Op	2/1/2013	11.3300	6.4100	36.9000	0.0000	3.8900	3.1200	7.7000	11.7500
5				0.0000	0.0000			0.0000	0.0000
6				0.0000	0.0000			0.0000	0.0000
7				0.0000	0.0000			0.0000	0.0000
8				0.0000	0.0000			0.0000	0.0000
9				0.0000	0.0000			0.0000	0.0000
10				0.0000	0.0000			0.0000	0.0000
	Total	11.3300	6.4100	36.9000	0.0000	3.8900	3.1200	7.7000	11.7500

Total Required Off-Site Reductions (tons)

Phase	NOx	PM10
1	0.1540	0.0180
2	0.3340	0.0495
3	0.0260	0.0045
4	0.0000	11.7500
5	0.1640	0.0180
6	0.1600	0.0225
7	0.1600	0.0225
8	0.1600	0.0225
9	0.1600	0.0225
10	0.1600	0.0225
Total	1.4780	11.9525

Note: TPY = Tons Per Year

Fee Estimator Worksheet

9/6/2010

Applicant/Business Name:	Walmart Stores Inc.
Project Name:	Mitchell Ranch Center
Project Location:	Ceres, CA
District Project ID No.:	

Scheduled Payment Date per Phase	Start Date per Phase	Phase	Pollutant	Required Reductions (tons)	Project Reductions (tons)	NO FDS	FEE DEFERRAL SCHEDULE (FDS) BY PAYMENT YEAR							
						2010	2010	2011	2012	2013	2014	2015	2016	2017
1/9/2012	1/9/2012	1 Site Preparation	NOx	0.1540	0.1540	0.1540			0.1540					
			PM10	0.0180	0.0180	0.0180			0.0180					
1/9/2012	3/25/2012	2 Major 1- Walmart - Const.	NOx	0.3340	0.3340	0.3340			0.3340					
			PM10	0.0495	0.0495	0.0495			0.0495					
1/9/2012	1/1/2013	3 Major 1 - Walmart - Const.-cont.	NOx	0.0260	0.0260	0.0260			0.0260					
			PM10	0.0045	0.0045	0.0045			0.0045					
2/1/2013	2/1/2013	4 Major 1 - Walmart - Op	NOx	0.0000	0.0000	0.0000				0.0000				
			PM10	11.7500	11.7500	11.7500				11.7500				
1/6/2014	1/6/2014	5 Major 2 - const.	NOx	0.1640	0.1640	0.1640					0.1640			
			PM10	0.0180	0.0180	0.0180					0.0180			
1/6/2014	1/6/2014	6 Major 3 - const.	NOx	0.1600	0.1600	0.1600					0.1600			
			PM10	0.0225	0.0225	0.0225					0.0225			
1/6/2014	1/6/2014	7 Major 4 - const.	NOx	0.1600	0.1600	0.1600					0.1600			
			PM10	0.0225	0.0225	0.0225					0.0225			
1/6/2014	1/6/2014	8 Shops 1 - const.	NOx	0.1600	0.1600	0.1600					0.1600			
			PM10	0.0225	0.0225	0.0225					0.0225			
1/6/2014	1/6/2014	9 Shops 2 - const.	NOx	0.1600	0.1600	0.1600					0.1600			
			PM10	0.0225	0.0225	0.0225					0.0225			
1/6/2014	1/6/2014	10 Shops 3 - const.	NOx	0.1600	0.1600	0.1600					0.1600			
			PM10	0.0225	0.0225	0.0225					0.0225			
TOTAL (tons)			NOx	1.4780	1.4780	1.4780	0.0000	0.0000	0.5140	0.0000	0.9640	0.0000	0.0000	0.0000
			PM10	11.9525	11.9525	11.9525	0.0000	0.0000	0.0720	11.7500	0.1305	0.0000	0.0000	0.0000

Rule 9510 Fee Schedule ($/ton)		
Year	NOx	PM10
2010 and beyond	$9,350	$9,011

Offsite Fee by Pollutant by Year ($)	NOx	$13,817	$0	$0	$4,804	$0	$9,013	$0	$0	$0
	PM10	$107,699	$0	$0	$648	$105,879	$1,172	$0	$0	$0
Administrative Fee by Year ($)		$4,860.64	$0.00	$0.00	$218.08	$4,235.16	$407.40	$0.00	$0.00	$0.00
Offsite Mitigation Fee by Year ($)		$126,376.64	$0.00	$0.00	$5,670.08	$110,114.16	$10,592.40	$0.00	$0.00	$0.00
Total Project Offsite Fee ($)		$126,376.64	$126,376.64							

Summary		Without Fee Deferral Schedule (A)	With Fee Deferral Schedule (B)	Amount Saved Through One-Time Payment (B-A)
Total Offsite Mitigation Fee by Pollutant ($)	NOx	$13,817	$13,817	$0
	PM10	$107,699	$107,699	$0
Total Administrative Fee ($)		$4,860.64	$4,860.64	$0.00
Total ($)		$126,376.64	$126,376.64	$0.00

Total Amount Saved Through On-Site Mitigation Measures	
NOx	$345,015
PM10	$69,385
Total Savings ($)	$414,400

(A) If you have chosen a **ONE-TIME** payment for the project, then the total amount due for ALL PHASES combined is: **$126,376.64**

(B) If you have chosen a **DEFERRED** payment schedule for the project, then according to the above Fee Deferral Schedule, the total amount due for ALL PHASES combined is: **$126,376.64**

Note: If the District did not receive a request for a Fee Deferral Schedule, an invoice is issued according to the **one-time** payment option.

Off-site Emissions Estimator Worksheet

9/8/2010

Applicant/Business Name:	Walmart Stores Inc.
Project Name:	Mitchell Ranch Center
Project Location:	Ceres, CA
District Project ID No.:	

Project Construction Emissions

		NOx				PM10			
Phase	Construction Start Date	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)
11 Shops 4 - const.	1/6/2014	0.8000	0.8000	0.0000	0.1600	0.0500	0.0500	0.0000	0.0225
12 Pad A Retail - Const.	1/6/2014	0.7900	0.7900	0.0000	0.1580	0.0400	0.0400	0.0000	0.0180
13 Pad A Rest. - Const.- cont.	1/6/2014	0.7900	0.7900	0.0000	0.1580	0.0400	0.0400	0.0000	0.0180
14 Pad B - Const.	1/6/2014	0.7900	0.7900	0.0000	0.1580	0.0400	0.0400	0.0000	0.0180
15 Pad C - const.	1/6/2014	0.7900	0.7900	0.0000	0.1580	0.0400	0.0400	0.0000	0.0180
16				0.0000	0.0000			0.0000	0.0000
17				0.0000	0.0000			0.0000	0.0000
18				0.0000	0.0000			0.0000	0.0000
19				0.0000	0.0000			0.0000	0.0000
20				0.0000	0.0000			0.0000	0.0000
	Total	3.9600	3.9600	0.0000	0.7920	0.2100	0.2100	0.0000	0.0945

Total Achieved On-Site Reductions (tons)

Phase	NOx	PM10
1	0.0000	0.0000
2	0.0000	0.0000
3	0.0000	0.0000
4	0.0000	0.0000
5	0.0000	0.0000
6	1.1250	1.0000
7	0.5250	0.5000
8	0.5250	0.5000
9	0.4500	0.4000
10	0.4500	0.4000
Total	3.0750	2.8000

Project Operations Emissions (Area + Mobile)

		NOx				PM10			
Phase	Operation Start Date	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)
11				0.0000	0.0000			0.0000	0.0000
12				0.0000	0.0000			0.0000	0.0000
13				0.0000	0.0000			0.0000	0.0000
14				0.0000	0.0000			0.0000	0.0000
15				0.0000	0.0000			0.0000	0.0000
16 Major 2 - Op.	11/15/2014	0.9900	0.8400	1.1250	1.3500	0.6300	0.5300	1.0000	2.1500
17 Major 3 - Op.	11/15/2014	0.4700	0.4000	0.5250	0.6500	0.3000	0.2500	0.5000	1.0000
18 Major 4 - Op.	11/15/2014	0.4900	0.4200	0.5250	0.7000	0.3100	0.2600	0.5000	1.0500
19 Shops 1 - Op.	11/15/2014	0.4300	0.3700	0.4500	0.6250	0.2700	0.2300	0.4000	0.9500
20 Shops 2 - Op.	11/15/2014	0.4100	0.3500	0.4500	0.5750	0.2600	0.2200	0.4000	0.9000
	Total	2.7900	2.3800	3.0750	3.9000	1.7700	1.4900	2.8000	6.0500

Total Required Off-Site Reductions (tons)

Phase	NOx	PM10
1	0.1600	0.0225
2	0.1580	0.0180
3	0.1580	0.0180
4	0.1580	0.0180
5	0.1580	0.0180
6	1.3500	2.1500
7	0.6500	1.0000
8	0.7000	1.0500
9	0.6250	0.9500
10	0.5750	0.9000
Total	4.6920	6.1445

Note: TPY = Tons Per Year

Fee Estimator Worksheet

Applicant/Business Name:	Walmart Stores Inc.
Project Name:	Mitchell Ranch Center
Project Location:	Ceres, CA
District Project ID No.:	

Scheduled Payment Date per Phase	Start Date per Phase	Phase	Pollutant	Required Reductions (tons)	Project Reductions (tons)	NO FDS	FEE DEFERRAL SCHEDULE (FDS) BY PAYMENT YEAR							
						2010	2010	2011	2012	2013	2014	2015	2016	2017
1/6/2014	1/6/2014	11 Shops 4 - const.	NOx	0.1600	0.1600	0.1600					0.1600			
			PM10	0.0225	0.0225	0.0225					0.0225			
1/6/2014	1/6/2014	12 Pad A Retail - Const.	NOx	0.1580	0.1580	0.1580					0.1580			
			PM10	0.0180	0.0180	0.0180					0.0180			
1/6/2014	1/6/2014	Pad A Rest. - Const.- cont.	NOx	0.1580	0.1580	0.1580					0.1580			
			PM10	0.0180	0.0180	0.0180					0.0180			
1/6/2014	1/6/2014	14 Pad B - Const.	NOx	0.1580	0.1580	0.1580					0.1580			
			PM10	0.0180	0.0180	0.0180					0.0180			
1/6/2014	1/6/2014	15 Pad C - const.	NOx	0.1580	0.1580	0.1580					0.1580			
			PM10	0.0180	0.0180	0.0180					0.0180			
11/15/2014	11/15/2014	16 Major 2 - Op.	NOx	1.3500	1.3500	1.3500					1.3500			
			PM10	2.1500	2.1500	2.1500					2.1500			
11/15/2014	11/15/2014	17 Major 3 - Op.	NOx	0.6500	0.6500	0.6500					0.6500			
			PM10	1.0000	1.0000	1.0000					1.0000			
11/15/2014	11/15/2014	18 Major 4 - Op.	NOx	0.7000	0.7000	0.7000					0.7000			
			PM10	1.0500	1.0500	1.0500					1.0500			
11/15/2014	11/15/2014	19 Shops 1 - Op.	NOx	0.6250	0.6250	0.6250					0.6250			
			PM10	0.9500	0.9500	0.9500					0.9500			
11/15/2014	11/15/2014	20 Shops 2 - Op.	NOx	0.5750	0.5750	0.5750					0.5750			
			PM10	0.9000	0.9000	0.9000					0.9000			
TOTAL (tons)			NOx	4.6920	4.6920	4.6920	0.0000	0.0000	0.0000	0.0000	4.6920	0.0000	0.0000	0.0000
			PM10	6.1445	6.1445	6.1445	0.0000	0.0000	0.0000	0.0000	6.1445	0.0000	0.0000	0.0000

Rule 9510 Fee Schedule ($/ton)		
Year	NOx	PM10
2010 and beyond	$9,350	$9,011

Offsite Fee by Pollutant by Year ($)	NOx	$43,867	$0	$0	$0	$0	$43,867	$0	$0	$0
	PM10	$55,364	$0	$0	$0	$0	$55,364	$0	$0	$0
Administrative Fee by Year ($)		$3,969.24	$0.00	$0.00	$0.00	$0.00	$3,969.24	$0.00	$0.00	$0.00
Offsite Mitigation Fee by Year ($)		$103,200.24	$0.00	$0.00	$0.00	$0.00	$103,200.24	$0.00	$0.00	$0.00
Total Project Offsite Fee ($)		$103,200.24	$103,200.24							

Summary		Without Fee Deferral Schedule (A)	With Fee Deferral Schedule (B)	Amount Saved Through One-Time Payment (B-A)
Total Offsite Mitigation Fee by Pollutant ($)	NOx	$43,867	$43,867	$0
	PM10	$55,364	$55,364	$0
Total Administrative Fee ($)		$3,969.24	$3,969.24	$0.00
Total ($)		$103,200.24	$103,200.24	$0.00

Total Amount Saved Through On-Site Mitigation Measures	
NOx	$28,751
PM10	$25,231
Total Savings ($)	$53,982

(A) If you have chosen a **ONE-TIME** payment for the project, then the total amount due for ALL PHASES combined is: **$103,200.24**

(B) If you have chosen a **DEFERRED** payment schedule for the project, then according to the above Fee Deferral Schedule, the total amount due for ALL PHASES combined is: **$103,200.24**

Note: If the District did not receive a request for a Fee Deferral Schedule, an invoice is issued according to the **one-time** payment option.

Off-site Emissions Estimator Worksheet

9/8/2010

Applicant/Business Name:	Walmart Stores Inc.
Project Name:	Mitchell Ranch Center
Project Location:	Ceres, CA
District Project ID No.:	

Project Construction Emissions

		NOx				PM10			
Phase	Construction Start Date	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)
21				0.0000	0.0000			0.0000	0.0000
22				0.0000	0.0000			0.0000	0.0000
23				0.0000	0.0000			0.0000	0.0000
24				0.0000	0.0000			0.0000	0.0000
25				0.0000	0.0000			0.0000	0.0000
26				0.0000	0.0000			0.0000	0.0000
27				0.0000	0.0000			0.0000	0.0000
28				0.0000	0.0000			0.0000	0.0000
29				0.0000	0.0000			0.0000	0.0000
30				0.0000	0.0000			0.0000	0.0000
	Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Total Achieved On-Site Reductions (tons)		
Phase	NOx	PM10
1	0.3000	0.3000
2	0.3000	0.3000
3	0.1500	0.1000
4	0.1500	0.1000
5	0.0750	0.1000
6	0.1500	0.1000
7	0.0000	0.0000
8	0.0000	0.0000
9	0.0000	0.0000
10	0.0000	0.0000
Total	**1.1250**	**1.0000**

Project Operations Emissions (Area + Mobile)

		NOx				PM10			
Phase	Operation Start Date	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)	Unmitigated Baseline (TPY)	Mitigated Baseline (TPY)	Achieved Onsite Reductions (tons)	Required Offsite Reductions (tons)
21 Shops 3 - Op.	10/15/2014	0.2500	0.2100	0.3000	0.3250	0.1600	0.1300	0.3000	0.5000
22 Shops 4 - Op.	10/15/2014	0.2900	0.2500	0.3000	0.4250	0.1900	0.1600	0.3000	0.6500
23 Pad A Retail-Op.	9/15/2014	0.1200	0.1000	0.1500	0.1500	0.0700	0.0600	0.1000	0.2500
24 Pad A Rest. - Op.	9/15/2014	0.1200	0.1000	0.1500	0.1500	0.0700	0.0600	0.1000	0.2500
25 Pad B - Op.	9/15/2014	0.1100	0.1000	0.0750	0.2000	0.0700	0.0600	0.1000	0.2500
26 Pad C - Op.	9/15/2014	0.1400	0.1200	0.1500	0.2000	0.0900	0.0800	0.1000	0.3500
27				0.0000	0.0000			0.0000	0.0000
28				0.0000	0.0000			0.0000	0.0000
29				0.0000	0.0000			0.0000	0.0000
30				0.0000	0.0000			0.0000	0.0000
	Total	**1.0300**	**0.8800**	**1.1250**	**1.4500**	**0.6500**	**0.5500**	**1.0000**	**2.2500**

Total Required Off-Site Reductions (tons)		
Phase	NOx	PM10
1	0.3250	0.5000
2	0.4250	0.6500
3	0.1500	0.2500
4	0.1500	0.2500
5	0.2000	0.2500
6	0.2000	0.3500
7	0.0000	0.0000
8	0.0000	0.0000
9	0.0000	0.0000
10	0.0000	0.0000
Total	**1.4500**	**2.2500**

Note: TPY = Tons Per Year

Fee Estimator Worksheet

9/8/2010

Applicant/Business Name:	Walmart Stores Inc.
Project Name:	Mitchell Ranch Center
Project Location:	Ceres, CA
District Project ID No.:	

Scheduled Payment Date per Phase	Start Date per Phase	Phase	Pollutant	Required Reductions (tons)	Project Reductions (tons)
10/15/2014	10/15/2014	21 Shops 3 - Op.	NOx	0.3250	0.3250
			PM10	0.5000	0.5000
10/15/2014	10/15/2014	22 Shops 4 - Op.	NOx	0.4250	0.4250
			PM10	0.6500	0.6500
9/15/2014	9/15/2014	23 Pad A Retail- Op.	NOx	0.1500	0.1500
			PM10	0.2500	0.2500
9/15/2014	9/15/2014	24 Pad A Rest. - Op.	NOx	0.1500	0.1500
			PM10	0.2500	0.2500
9/15/2014	9/15/2014	25 Pad B - Op.	NOx	0.2000	0.2000
			PM10	0.2500	0.2500
9/15/2014	9/15/2014	26 Pad C - Op.	NOx	0.2000	0.2000
			PM10	0.3500	0.3500
		7	NOx	0.0000	0.0000
			PM10	0.0000	0.0000
		8	NOx	0.0000	0.0000
			PM10	0.0000	0.0000
		9	NOx	0.0000	0.0000
			PM10	0.0000	0.0000
		10	NOx	0.0000	0.0000
			PM10	0.0000	0.0000
TOTAL (tons)			NOx	1.4500	1.4500
			PM10	2.2500	2.2500

NO FDS	FEE DEFERRAL SCHEDULE (FDS) BY PAYMENT YEAR							
2010	2010	2011	2012	2013	2014	2015	2016	2017
0.3250						0.3250		
0.5000						0.5000		
0.4250						0.4250		
0.6500						0.6500		
0.1500						0.1500		
0.2500						0.2500		
0.1500						0.1500		
0.2500						0.2500		
0.2000						0.2000		
0.2500						0.2500		
0.2000						0.2000		
0.3500						0.3500		
0.0000								
0.0000								
0.0000								
0.0000								
0.0000								
0.0000								
0.0000								
0.0000								
1.4500	0.0000	0.0000	0.0000	0.0000	0.0000	1.4500	0.0000	0.0000
2.2500	0.0000	0.0000	0.0000	0.0000	0.0000	2.2500	0.0000	0.0000

Rule 9510 Fee Schedule ($/ton)		
Year	NOx	PM10
2010 and beyond	$9,350	$9,011

Offsite Fee by Pollutant by Year ($)	NOx	$13,555	$0	$0	$0	$0	$0	$13,555	$0	$0
	PM10	$20,271	$0	$0	$0	$0	$0	$20,271	$0	$0
Administrative Fee by Year ($)		$1,353.04	$0.00	$0.00	$0.00	$0.00	$0.00	$1,353.04	$0.00	$0.00
Offsite Mitigation Fee by Year ($)		$35,179.04	$0.00	$0.00	$0.00	$0.00	$0.00	$35,179.04	$0.00	$0.00
Total Project Offsite Fee ($)		$35,179.04	$35,179.04							

Summary		Without Fee Deferral Schedule (A)	With Fee Deferral Schedule (B)	Amount Saved Through One-Time Payment (B-A)
Total Offsite Mitigation Fee by Pollutant ($)	NOx	$13,555	$13,555	$0
	PM10	$20,271	$20,271	$0
Total Administrative Fee ($)		$1,353.04	$1,353.04	$0.00
Total ($)		$35,179.04	$35,179.04	$0.00

Total Amount Saved Through On-Site Mitigation Measures	
NOx	$10,519
PM10	$9,011
Total Savings ($)	$19,530

(A) If you have chosen a **ONE-TIME** payment for the project, then the total amount due for ALL PHASES combined is: $35,179.04

(B) If you have chosen a **DEFERRED** payment schedule for the project, then according to the above Fee Deferral Schedule, the total amount due for ALL PHASES combined is: $35,179.04

Note: If the District did not receive a request for a Fee Deferral Schedule, an invoice is issued according to the **one-time** payment option.

Wal-Mart Truck Fleet Methodology

The following describes the methodology used to calculate the emission reduction from Wal-Mart's (WM) heavy-duty (HD) truck vehicle fleet.

WM operates a fleet of 354 HD diesel trucks to make deliveries in this region. WM replaces its trucks on a five-year cycle, so all trucks in the fleet are five years old or newer. Although these vehicles do not operate exclusively in the San Joaquin Valley, since the WM fleet consists only of clean trucks, all stores benefit to the same extent on average.

Fleet Emission Estimates. WM has provided data that identifies the model year of each of 354 trucks in the current fleet and provides projections of future fleet composition based on a five-year replacement schedule. This information was used in the California Air Resources Board (ARB) "Statewide Heavy Duty Truck and Bus Fleet Calculator V.4". The spreadsheet calculates average fleet emissions compared to the regulation's targets for each year for NOx and PM10.

WM Fleet Emissions are as follows:

Year	NOx	PM10
2010	4.23	0.20
2011	2.85	0.11
2012	1.89	0.11
2013	1.74	0.11
2014 and beyond	1.60	0.11

The ARB fleet regulation NOx requirements start in 2013 and provide baseline emissions for 2013 and later. MBA used EMFAC 2007 to generate composite HD truck emission factors for 2010, 2011, and 2012. The EMFAC runs included all model years up to and including the year analyzed and used default speeds for the San Joaquin Valley from URBEMIS 2007 (35 miles per hour) and default temperature for summertime (85°and 20% relative humidity). All modeling runs used to support this submittal are attached. The results of the analysis show that WM's fleet is 73 to 88 percent cleaner than the statewide average between 2010 and 2019. The composite fleet emission factor is lower in 2011 and 2012 than the ARB NOx regulation limit in 2013 because only one speed, temperature and relative humidity are included in determining the factor. However, the percent reduction is comparable between the composite fleet and the regulation limit.

PM10 reductions are also achieved in the early years; however, after 2014 the WM fleet meets the Fleet Regulation targets. No PM10 reductions are obtained after 2014 because the new vehicles purchased during the later years are required to meet the ARB targets. If ARB adopts lower new truck emission standards for PM10 in the next 10 years, surplus emission reductions would be available by continuing to replace trucks on a five-year cycle.

The emission limits used to determine the percent reduction in emissions are shown below:

Heavy Duty Trucks

	NOx	PM10
2010	15.49*	0.58*
2011	14.03*	0.71
2012	12.59*	0.53
2013	14.40	0.32
2014, 2015	9.80	0.11
2016	7.80	0.11
2017, 2018. 2019	6.00	0.11

*The HD Truck EMFAC Composite Fleet emission factor for the San Joaquin Valley with URBEMIS defaults for temperature and speed were used.

Wal-Mart Truck Trips. WM primarily uses its own fleet to deliver goods to its stores, but also uses other vendors and service providers. WM provided truck trip estimates from Receiving Managers from two existing California superstores. On average, stores receive 7.07 deliveries/pickups per day. 5.71 trips are made by Wal-Mart trucks and 1.36 are made by other vendor trucks. WM trucks generate 81 percent of all HD truck trips. Deliveries by trucks less than 33,000 pounds are not included in these estimates since Wal-Mart does not operate those vehicles. Those lite-HD trucks are used by vendors that deliver items such as soft drinks, chips, and milk using two axle vehicles. The following table provides weekly and daily average trips.

Wal-Mart Heavy-Duty Truck Trips from Company Fleet and Outside Vendors

Delivery Type	La Quinta Store #1805 (trips/week)	Hanford Store #1645 (trips/week)	Average Weekly Trips (both stores)	Average Daily Trips (both stores)
Wal-Mart Trucks	**40**	**40**	**40**	**5.71**
Grocery	19			
General Merchandise	21			
Other Vendors Trucks	**11**	**8**	**9.5**	**1.36**
Tires	0.25	1		
Batteries	1	1		
Used Tire Pickup	0.25	1		
Used Oil Pickup	0.5	1		
Bale (recycle matl) Pickup	7	2		
Trash Pickup	2	1		
All HD Trucks	**51**	**48**	**49.5**	**7.07**
Fraction WM Trips	0.78	0.83	0.81	0.81

URBEMIS 2007 includes the EMFAC 2007 fleet mix for each county in the San Joaquin Valley. The percentage assigned to HD trucks varies from 1.6 percent in San Joaquin County to 5.4 percent in Kings County. These numbers include trucks traveling through the San Joaquin Valley and overstate project level trip generation. For example, using default trip generation rates for a 226,860 square foot discount superstore of 49.21 the project would generate 11,164 trips per day. 1.6 percent of 11,164 trips equals 179 HD truck trips per day compared to the WM estimate of 7 deliveries or 14 two-way trips per day. Using Kings County's 5.4 percent HD truck split would generate 603 HD truck trips per day. Since deliveries trips are nearly the same from store to store regardless of location, it is clear that default fleet percentages should not be used for these projects. Emissions from trucks trips were calculated separately using WM estimates of trips per store and a trip length applicable to only trucks. The following table provides the EMFAC 2007 truck fleet percentages for San Joaquin Valley counties as currently used as default values in URBEMIS 2007.

EMFAC 2007 Heavy Duty Truck Fleet Percentages for San Joaquin Valley Counties	
San Joaquin	1.6%
Stanislaus	1.7%
Merced	4.2%
Madera	2.4%
Kern	5.0%
Kings	5.4%
Fresno	2.4%
Tulare	1.7%
San Joaquin Valley	2.8%

Trip Length Estimates. WM operates several distribution centers that service stores in the San Joaquin Valley including one in the City of Porterville. The WM truck fleet is used not only for store delivery, but also for making trips to re-supply the distribution centers from ports of entry and from manufacturers. In some cases, trucks make deliveries to multiple stores during one trip, but the exact amount is not known. These factors make estimating trip length and vehicle miles traveled by store from accumulated mileage for the entire truck fleet infeasible. Because of the complexity of the delivery system, MBA used 100 miles as an average delivery trip length as a reasonably conservative estimate of travel within the San Joaquin Valley Air Basin for all stores regardless of location of the individual stores.

Examining actual distances traveled in the Valley is instructive. The Porterville distribution center would provide a substantial portion of the general merchandise delivered to San Joaquin Valley stores. All stores south of Madera would be within 100 miles of the Distribution center and many would be within 50 miles. Currently, food and groceries are delivered from distribution centers outside the San Joaquin Valley. Trips from the distribution centers north of the Valley would travel on State Route 99 or Interstate 5 beginning at the San Joaquin County line. The trip distance from the northern boundary of the basin to Merced is about 88 miles, and to Fresno is 145 miles. Trips from distribution centers southeast of the Valley would enter on State Route 58 at Tehachapi. The trip distance from Tehachapi to Bakersfield is 41 miles, to Delano is 73, to Tulare is 105, to Hanford is 127, and Fresno is 150 miles. Trips to Fresno from outside the Valley would constitute the longest trips at 150 miles; however, a majority of the trips for Fresno would come from the Porterville distribution center with a trip distance of 70 miles. So assuming 50 percent of the trips were from Porterville and 50 percent from outside the Valley even Fresno would be expected to have an average trip length of 110 miles. When considering the shorter distances traveled in the Air Basin for deliveries to stores in the northern Valley, the potential for some trips to service more than one store, and

the close proximity of stores to the Porterville distribution center in the southern Valley, we believe that 100 miles as an average is conservative.

San Joaquin Valley Delivery Trip Distances		
Trip Starting Point	Trip Ending Point	Distance (Miles)
Porterville	Tulare	41
Porterville	Hanford	48
Porterville	Bakersfield	51
Porterville	Fresno	71
Porterville	Madera	92
Porterville	Merced	125
Tehachapi	Bakersfield	41
Tehachapi	Delano	73
Tehachapi	Porterville	92
Tehachapi	Tulare	105
Tehachapi	Hanford	127
Tehachapi	Fresno	150
Galt	Lodi	10
Galt	Stockton	24
Galt	Tracy	44
Galt	Merced	88
Galt	Los Banos	101
Galt	Madera	121
Galt	Fresno	145
Mileages from Mapquest		

Non-WM truck trips would likely be made from the local area and should use the trip lengths from the URBEMIS 2007 model runs for all other commercial trips. However, MBA prepared an analysis using EMFAC composite emission rates and a 20-mile average trip length to show the effect of using a longer trip length than the default.

Calculating Unmitigated Baseline Emissions. MBA used URBEMIS 2007 to calculate unmitigated baseline emissions. Separate runs were accomplished for vehicle fleets without WM HD trucks, for WM HD trucks only and for non-WM HD trucks. The vehicle fleet mix for the without WM trucks run was modified to remove the fraction of trucks operated by WM and non-WM vendors and to equally weight the first four categories of vehicle classes (Light Auto to Medium Truck) to add to 100 percent. The emissions for WM trucks were estimated by setting the land use screen to a project size of 1.0 and a trip generation rate of 11.42 and a 100-mile trip length to generate VMT totaling 1,142 miles per day. (5.71 deliveries/day x 2 trips coming and going to the site x 100 miles/trip). The Commute Trip Percentage, Diverted Trip Percentage and Pass-by Trip Percentage were set to zero and the Primary Trip Percentage was set to 100 percent. The emissions for non-WM trucks were estimated by setting the land use screen to a project size of 1.0 and a trip generation rate of 2.72 and a 20-mile trip length to generate VMT total 54.4 miles per day (1.35 deliveries/day x 2 trips coming and going to site x 20 miles/trip). The Commute Trip Percentage, Diverted Trip Percentage and Pass-by Trip Percentage were set to zero and the Primary Trip Percentage

was set to 100 percent. MBA also calculated the emissions using the same trip data and EMFAC 2007 emission rates in grams/mile for comparison. The two methods produced results that were very close.

The Unmitigated Baseline = URB 07 WM Emissions from Passenger Vehicles (no HD trucks) + URB 07 WM HD Truck Emissions + URB 07 Non-WM HD Truck Emissions.

The unmitigated baseline emissions for NOx and PM10 are used in the District's fee estimator spreadsheet.

Calculating Mitigated Emissions. Mitigated emissions for Passenger Vehicles were calculated using URBEMIS 2007 and by applying URBEMIS mitigation measures such as Mix of Uses, pedestrian-friendliness, presence of local-serving retail, etc.

Mitigated emissions for WM trucks were calculated by subtracting the emission reductions from the clean vehicle fleet from the URB 07 WM unmitigated truck emissions.

The non-Wal-Mart HD trucks have no mitigation applied.

The total Mitigated Emissions = Mitigated URB 07 Passenger Vehicle + Mitigated WM HD Truck Emissions + Unmitigated Non-WM HD Trucks.

The Rule 9510 fee formula uses the emissions generated during the first year of project operation to calculate fees. The formula accounts for declining emissions obtained from implementing vehicle tailpipe and fuel regulations over time. Therefore, it is appropriate to determine the mitigated emission amount for the truck fleet using the same approach. As long as the reductions are surplus to those required by the ARB fleet regulation, the full reduction amount from the first year of operation should be used. In this case, projects with a 2010 operation date would base the reduction on WM's 2010 truck fleet compared to the 2010 EMFAC composite emission rate for HD trucks. A project with a 2015 operation date would use the 2015 WM truck fleet compared to ARB Fleet Regulation target emission rate for 2015.

Calculating Rule 9510 Mitigation Fees. The unmitigated and mitigated operational emissions are then entered into the District's mitigation fee calculator where the fees for NOx, PM10, and administration are automatically calculated based on the fee rates in effect for the year of operation or the payment date, whichever is earlier. Copies of the mitigation fee calculator spreadsheets are included in the technical appendix.

Attachments:
1. ARB Fleet Emissions Calculator
2. Mitchell Ranch Center Walmart Truck Fleet Calculations

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Meet any combination of compliance options for PM and NOx by January 1 of each year

ARB Help Hotline
1-866-634-3735

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Meet any one of three options		PM
Option 1 - BACT Schedule		Comply
Option 2 - Percent Limits	Projected Fleet	100%
	Goal	25%
Option 3 - Fleet Average	Projected Fleet	0.110
	Goal	0.710
# of vehicle used in % limit & fleet average calc.		354

Complies With Requirements	Meets Option(s)
	1, 2, 3

		2010								2011							
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control		Adjusted Emissions		Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control		Adjusted Emissions	
					PM Control	NOx Control	PM Factor	NOx Factor				PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-1024	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-1025	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-1185	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-502	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-612	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-613	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-618	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-822	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
1-943	2002	2007	Y				0.11	7.0	2007	Y				0.11	7.0
2-0182	2003	2008	Y				0.11	7.0	2008	Y				0.11	7.0
2-0407	2003	2008	Y				0.11	7.0	2008	Y				0.11	7.0
2-0412	2003	2008	Y				0.11	7.0	2008	Y				0.11	7.0
2-0414	2003	2008	Y				0.11	7.0	2008	Y				0.11	7.0
4-0001	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0003	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0004	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0005	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0006	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0008	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0009	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0010	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0011	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0014	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0015	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0016	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0017	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0018	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0019	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0020	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0021	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0022	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0023	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0024	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0025	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0026	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0027	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0028	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0030	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0031	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0032	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0033	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0034	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0035	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0036	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0038	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0039	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0040	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0041	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0042	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0044	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0046	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0047	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0048	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0051	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0052	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0053	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0054	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0055	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0057	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0059	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0060	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0061	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0062	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0063	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0064	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0065	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0066	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0067	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0068	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0069	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0071	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0214	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0215	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0760	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0761	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0762	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0763	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0764	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0765	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0845	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0846	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0847	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0848	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1036	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1225	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1226	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1227	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1228	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1229	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1230	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1231	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1232	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1233	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6

Meet any combination of compliance options for PM and NOx by January 1 of each year

ARB Help Hotline
1-866-634-3735

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Meet any one of three options		PM
Option 1 - BACT Schedule		Comply
Option 2 - Percent Limits	Projected Fleet	100%
	Goal	50%
Option 3 - Fleet Average	Projected Fleet	0.110
	Goal	0.530
# of vehicle used in % limit & fleet average calc.		354

Complies With Requirements	Meets Option(s)
	1, 2, 3

Vehicle ID	Existing Engine Model Year	2012 Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control PM Control	Emission Control NOx Control	Adjusted Emissions PM Factor	Adjusted Emissions NOx Factor
1-909	2002	2007	Y				0.11	7.0
1-1024	2002	2007	Y				0.11	7.0
1-1025	2002	2007	Y				0.11	7.0
1-1185	2002	2007	Y				0.11	7.0
1-502	2002	2007	Y				0.11	7.0
1-612	2002	2007	Y				0.11	7.0
1-613	2002	2007	Y				0.11	7.0
1-618	2002	2007	Y				0.11	7.0
1-822	2002	2007	Y				0.11	7.0
1-943	2002	2007	Y				0.11	7.0
2-0182	2003	2008	Y				0.11	7.0
2-0407	2003	2008	Y				0.11	7.0
2-0412	2003	2008	Y				0.11	7.0
2-0414	2003	2008	Y				0.11	7.0
4-0001	2005	2010	Y				0.11	1.6
4-0003	2005	2010	Y				0.11	1.6
4-0004	2005	2010	Y				0.11	1.6
4-0005	2005	2010	Y				0.11	1.6
4-0006	2005	2010	Y				0.11	1.6
4-0008	2005	2010	Y				0.11	1.6
4-0009	2005	2010	Y				0.11	1.6
4-0010	2005	2010	Y				0.11	1.6
4-0011	2005	2010	Y				0.11	1.6
4-0014	2005	2010	Y				0.11	1.6
4-0015	2005	2010	Y				0.11	1.6
4-0016	2005	2010	Y				0.11	1.6
4-0017	2005	2010	Y				0.11	1.6
4-0018	2005	2010	Y				0.11	1.6
4-0019	2005	2010	Y				0.11	1.6
4-0020	2005	2010	Y				0.11	1.6
4-0021	2005	2010	Y				0.11	1.6
4-0022	2005	2010	Y				0.11	1.6
4-0023	2005	2010	Y				0.11	1.6
4-0024	2005	2010	Y				0.11	1.6
4-0025	2005	2010	Y				0.11	1.6
4-0026	2005	2010	Y				0.11	1.6
4-0027	2005	2010	Y				0.11	1.6
4-0028	2005	2010	Y				0.11	1.6
4-0030	2005	2010	Y				0.11	1.6
4-0031	2005	2010	Y				0.11	1.6
4-0032	2005	2010	Y				0.11	1.6
4-0033	2005	2010	Y				0.11	1.6
4-0034	2005	2010	Y				0.11	1.6
4-0035	2005	2010	Y				0.11	1.6
4-0036	2005	2010	Y				0.11	1.6
4-0038	2005	2010	Y				0.11	1.6
4-0039	2005	2010	Y				0.11	1.6
4-0040	2005	2010	Y				0.11	1.6
4-0041	2005	2010	Y				0.11	1.6
4-0042	2005	2010	Y				0.11	1.6
4-0044	2005	2010	Y				0.11	1.6
4-0046	2005	2010	Y				0.11	1.6
4-0047	2005	2010	Y				0.11	1.6
4-0048	2005	2010	Y				0.11	1.6
4-0051	2005	2010	Y				0.11	1.6
4-0052	2005	2010	Y				0.11	1.6
4-0053	2005	2010	Y				0.11	1.6
4-0054	2005	2010	Y				0.11	1.6
4-0055	2005	2010	Y				0.11	1.6
4-0057	2005	2010	Y				0.11	1.6
4-0059	2005	2010	Y				0.11	1.6
4-0060	2005	2010	Y				0.11	1.6
4-0061	2005	2010	Y				0.11	1.6
4-0062	2005	2010	Y				0.11	1.6
4-0063	2005	2010	Y				0.11	1.6
4-0064	2005	2010	Y				0.11	1.6
4-0065	2005	2010	Y				0.11	1.6
4-0066	2005	2010	Y				0.11	1.6
4-0067	2005	2010	Y				0.11	1.6
4-0068	2005	2010	Y				0.11	1.6
4-0069	2005	2010	Y				0.11	1.6
4-0071	2005	2010	Y				0.11	1.6
4-0214	2005	2010	Y				0.11	1.6
4-0215	2005	2010	Y				0.11	1.6
4-0760	2005	2010	Y				0.11	1.6
4-0761	2005	2010	Y				0.11	1.6
4-0762	2005	2010	Y				0.11	1.6
4-0763	2005	2010	Y				0.11	1.6
4-0764	2005	2010	Y				0.11	1.6
4-0765	2005	2010	Y				0.11	1.6
4-0845	2005	2010	Y				0.11	1.6
4-0846	2005	2010	Y				0.11	1.6
4-0847	2005	2010	Y				0.11	1.6
4-0848	2005	2010	Y				0.11	1.6
4-1036	2005	2010	Y				0.11	1.6
4-1225	2005	2010	Y				0.11	1.6
4-1226	2005	2010	Y				0.11	1.6
4-1227	2005	2010	Y				0.11	1.6
4-1228	2005	2010	Y				0.11	1.6
4-1229	2005	2010	Y				0.11	1.6
4-1230	2005	2010	Y				0.11	1.6
4-1231	2005	2010	Y				0.11	1.6
4-1232	2005	2010	Y				0.11	1.6
4-1233	2005	2010	Y				0.11	1.6

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	97%
	Goal	75%	25%
Option 3 - Fleet Average	Projected Fleet	0.110	1.74
	Goal	0.320	14.40
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

2013 Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control PM Control	Emission Control NOx Control	Adjusted Emissions PM Factor	Adjusted Emissions NOx Factor
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2013	Y				0.11	1.6
2008	Y				0.11	7.0
2008	Y				0.11	7.0
2008	Y				0.11	7.0
2008	Y				0.11	7.0
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6
2010	Y				0.11	1.6

Meet any combination of compliance options for PM and NOx by January 1 of each year

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Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Early Action Option Expires		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	50%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	9.80
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	50%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	9.80
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

		2014							2015						
					Emission Control		Adjusted Emissions					Emission Control		Adjusted Emissions	
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	PM Control	NOx Control	PM Factor	NOx Factor	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-1024	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-1025	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-1185	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-502	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-612	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-613	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-618	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-822	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-943	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
2-0182	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
2-0407	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
2-0412	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
2-0414	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
4-0001	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0003	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0004	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0005	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0006	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0008	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0009	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0010	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0011	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0014	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0015	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0016	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0017	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0018	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0019	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0020	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0021	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0022	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0023	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0024	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0025	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0026	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0027	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0028	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0030	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0031	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0032	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0033	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0034	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0035	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0036	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0038	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0039	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0040	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0041	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0042	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0044	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0046	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0047	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0048	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0051	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0052	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0053	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0054	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0055	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0057	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0059	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0060	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0061	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0062	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0063	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0064	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0065	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0066	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0067	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0068	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0069	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0071	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0214	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0215	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0760	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0761	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0762	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0763	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0764	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0765	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0845	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0846	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0847	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-0848	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1036	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1225	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1226	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1227	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1228	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1229	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1230	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1231	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1232	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6
4-1233	2005	2010	Y				0.11	1.6	2010	Y				0.11	1.6

Meet any combination of compliance options for PM and NOx by January 1 of each year

ARB Help Hotline
1-866-634-3735

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	60%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	7.80
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Limited-Mileage Farm Exemption Expires		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	80%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	6.00
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

		2016							2017						
					Emission Control		Adjusted Emissions					Emission Control		Adjusted Emissions	
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	PM Control	NOx Control	PM Factor	NOx Factor	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-1024	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-1025	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-1185	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-502	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-612	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-613	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-618	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-822	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
1-943	2002	2013	Y				0.11	1.6	2013	Y				0.11	1.6
2-0182	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
2-0407	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
2-0412	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
2-0414	2003	2014	Y				0.11	1.6	2014	Y				0.11	1.6
4-0001	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0003	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0004	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0005	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0006	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0008	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0009	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0010	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0011	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0014	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0015	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0016	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0017	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0018	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0019	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0020	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0021	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0022	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0023	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0024	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0025	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0026	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0027	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0028	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0030	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0031	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0032	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0033	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0034	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0035	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0036	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0038	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0039	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0040	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0041	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0042	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0044	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0046	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0047	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0048	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0051	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0052	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0053	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0054	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0055	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0057	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0059	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0060	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0061	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0062	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0063	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0064	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0065	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0066	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0067	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0068	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0069	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0071	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0214	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0215	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0760	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0761	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0762	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0763	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0764	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0765	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0845	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0846	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0847	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-0848	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1036	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1225	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1226	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1227	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1228	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1229	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1230	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1231	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1232	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6
4-1233	2005	2016	Y				0.11	1.6	2016	Y				0.11	1.6

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Meet any combination of compliance options for PM and NOx by January 1 of each year

Hybrid Double Count Expires		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	80%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	6.00
# of vehicle used in % limit & fleet average calc.		354	354
Complies With Requirements		Meets Option(s)	Meets Option(s)
		1, 2, 3	1, 2, 3

ARB Help Hotline 1-866-634-3735

		2018						
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control		Adjusted Emissions	
					PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2013	Y				0.11	1.6
1-1024	2002	2013	Y				0.11	1.6
1-1025	2002	2013	Y				0.11	1.6
1-1185	2002	2013	Y				0.11	1.6
1-502	2002	2013	Y				0.11	1.6
1-612	2002	2013	Y				0.11	1.6
1-613	2002	2013	Y				0.11	1.6
1-618	2002	2013	Y				0.11	1.6
1-822	2002	2013	Y				0.11	1.6
1-943	2002	2013	Y				0.11	1.6
2-0182	2003	2014	Y				0.11	1.6
2-0407	2003	2014	Y				0.11	1.6
2-0412	2003	2014	Y				0.11	1.6
2-0414	2003	2014	Y				0.11	1.6
4-0001	2005	2016	Y				0.11	1.6
4-0003	2005	2016	Y				0.11	1.6
4-0004	2005	2016	Y				0.11	1.6
4-0005	2005	2016	Y				0.11	1.6
4-0006	2005	2016	Y				0.11	1.6
4-0008	2005	2016	Y				0.11	1.6
4-0009	2005	2016	Y				0.11	1.6
4-0010	2005	2016	Y				0.11	1.6
4-0011	2005	2016	Y				0.11	1.6
4-0014	2005	2016	Y				0.11	1.6
4-0015	2005	2016	Y				0.11	1.6
4-0016	2005	2016	Y				0.11	1.6
4-0017	2005	2016	Y				0.11	1.6
4-0018	2005	2016	Y				0.11	1.6
4-0019	2005	2016	Y				0.11	1.6
4-0020	2005	2016	Y				0.11	1.6
4-0021	2005	2016	Y				0.11	1.6
4-0022	2005	2016	Y				0.11	1.6
4-0023	2005	2016	Y				0.11	1.6
4-0024	2005	2016	Y				0.11	1.6
4-0025	2005	2016	Y				0.11	1.6
4-0026	2005	2016	Y				0.11	1.6
4-0027	2005	2016	Y				0.11	1.6
4-0028	2005	2016	Y				0.11	1.6
4-0030	2005	2016	Y				0.11	1.6
4-0031	2005	2016	Y				0.11	1.6
4-0032	2005	2016	Y				0.11	1.6
4-0033	2005	2016	Y				0.11	1.6
4-0034	2005	2016	Y				0.11	1.6
4-0035	2005	2016	Y				0.11	1.6
4-0036	2005	2016	Y				0.11	1.6
4-0038	2005	2016	Y				0.11	1.6
4-0039	2005	2016	Y				0.11	1.6
4-0040	2005	2016	Y				0.11	1.6
4-0041	2005	2016	Y				0.11	1.6
4-0042	2005	2016	Y				0.11	1.6
4-0044	2005	2016	Y				0.11	1.6
4-0046	2005	2016	Y				0.11	1.6
4-0047	2005	2016	Y				0.11	1.6
4-0048	2005	2016	Y				0.11	1.6
4-0051	2005	2016	Y				0.11	1.6
4-0052	2005	2016	Y				0.11	1.6
4-0053	2005	2016	Y				0.11	1.6
4-0054	2005	2016	Y				0.11	1.6
4-0055	2005	2016	Y				0.11	1.6
4-0057	2005	2016	Y				0.11	1.6
4-0059	2005	2016	Y				0.11	1.6
4-0060	2005	2016	Y				0.11	1.6
4-0061	2005	2016	Y				0.11	1.6
4-0062	2005	2016	Y				0.11	1.6
4-0063	2005	2016	Y				0.11	1.6
4-0064	2005	2016	Y				0.11	1.6
4-0065	2005	2016	Y				0.11	1.6
4-0066	2005	2016	Y				0.11	1.6
4-0067	2005	2016	Y				0.11	1.6
4-0068	2005	2016	Y				0.11	1.6
4-0069	2005	2016	Y				0.11	1.6
4-0071	2005	2016	Y				0.11	1.6
4-0214	2005	2016	Y				0.11	1.6
4-0215	2005	2016	Y				0.11	1.6
4-0760	2005	2016	Y				0.11	1.6
4-0761	2005	2016	Y				0.11	1.6
4-0762	2005	2016	Y				0.11	1.6
4-0763	2005	2016	Y				0.11	1.6
4-0764	2005	2016	Y				0.11	1.6
4-0765	2005	2016	Y				0.11	1.6
4-0845	2005	2016	Y				0.11	1.6
4-0846	2005	2016	Y				0.11	1.6
4-0847	2005	2016	Y				0.11	1.6
4-0848	2005	2016	Y				0.11	1.6
4-1036	2005	2016	Y				0.11	1.6
4-1225	2005	2016	Y				0.11	1.6
4-1226	2005	2016	Y				0.11	1.6
4-1227	2005	2016	Y				0.11	1.6
4-1228	2005	2016	Y				0.11	1.6
4-1229	2005	2016	Y				0.11	1.6
4-1230	2005	2016	Y				0.11	1.6
4-1231	2005	2016	Y				0.11	1.6
4-1232	2005	2016	Y				0.11	1.6
4-1233	2005	2016	Y				0.11	1.6

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	80%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	6.00
# of vehicle used in % limit & fleet average calc.		354	354
Complies With Requirements		Meets Option(s)	Meets Option(s)
		1, 2, 3	1, 2, 3

		2019						
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control		Adjusted Emissions	
					PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2019	Y				0.11	1.6
1-1024	2002	2019	Y				0.11	1.6
1-1025	2002	2019	Y				0.11	1.6
1-1185	2002	2019	Y				0.11	1.6
1-502	2002	2019	Y				0.11	1.6
1-612	2002	2019	Y				0.11	1.6
1-613	2002	2019	Y				0.11	1.6
1-618	2002	2019	Y				0.11	1.6
1-822	2002	2019	Y				0.11	1.6
1-943	2002	2019	Y				0.11	1.6
2-0182	2003	2014	Y				0.11	1.6
2-0407	2003	2014	Y				0.11	1.6
2-0412	2003	2014	Y				0.11	1.6
2-0414	2003	2014	Y				0.11	1.6
4-0001	2005	2016	Y				0.11	1.6
4-0003	2005	2016	Y				0.11	1.6
4-0004	2005	2016	Y				0.11	1.6
4-0005	2005	2016	Y				0.11	1.6
4-0006	2005	2016	Y				0.11	1.6
4-0008	2005	2016	Y				0.11	1.6
4-0009	2005	2016	Y				0.11	1.6
4-0010	2005	2016	Y				0.11	1.6
4-0011	2005	2016	Y				0.11	1.6
4-0014	2005	2016	Y				0.11	1.6
4-0015	2005	2016	Y				0.11	1.6
4-0016	2005	2016	Y				0.11	1.6
4-0017	2005	2016	Y				0.11	1.6
4-0018	2005	2016	Y				0.11	1.6
4-0019	2005	2016	Y				0.11	1.6
4-0020	2005	2016	Y				0.11	1.6
4-0021	2005	2016	Y				0.11	1.6
4-0022	2005	2016	Y				0.11	1.6
4-0023	2005	2016	Y				0.11	1.6
4-0024	2005	2016	Y				0.11	1.6
4-0025	2005	2016	Y				0.11	1.6
4-0026	2005	2016	Y				0.11	1.6
4-0027	2005	2016	Y				0.11	1.6
4-0028	2005	2016	Y				0.11	1.6
4-0030	2005	2016	Y				0.11	1.6
4-0031	2005	2016	Y				0.11	1.6
4-0032	2005	2016	Y				0.11	1.6
4-0033	2005	2016	Y				0.11	1.6
4-0034	2005	2016	Y				0.11	1.6
4-0035	2005	2016	Y				0.11	1.6
4-0036	2005	2016	Y				0.11	1.6
4-0038	2005	2016	Y				0.11	1.6
4-0039	2005	2016	Y				0.11	1.6
4-0040	2005	2016	Y				0.11	1.6
4-0041	2005	2016	Y				0.11	1.6
4-0042	2005	2016	Y				0.11	1.6
4-0044	2005	2016	Y				0.11	1.6
4-0046	2005	2016	Y				0.11	1.6
4-0047	2005	2016	Y				0.11	1.6
4-0048	2005	2016	Y				0.11	1.6
4-0051	2005	2016	Y				0.11	1.6
4-0052	2005	2016	Y				0.11	1.6
4-0053	2005	2016	Y				0.11	1.6
4-0054	2005	2016	Y				0.11	1.6
4-0055	2005	2016	Y				0.11	1.6
4-0057	2005	2016	Y				0.11	1.6
4-0059	2005	2016	Y				0.11	1.6
4-0060	2005	2016	Y				0.11	1.6
4-0061	2005	2016	Y				0.11	1.6
4-0062	2005	2016	Y				0.11	1.6
4-0063	2005	2016	Y				0.11	1.6
4-0064	2005	2016	Y				0.11	1.6
4-0065	2005	2016	Y				0.11	1.6
4-0066	2005	2016	Y				0.11	1.6
4-0067	2005	2016	Y				0.11	1.6
4-0068	2005	2016	Y				0.11	1.6
4-0069	2005	2016	Y				0.11	1.6
4-0071	2005	2016	Y				0.11	1.6
4-0214	2005	2016	Y				0.11	1.6
4-0215	2005	2016	Y				0.11	1.6
4-0760	2005	2016	Y				0.11	1.6
4-0761	2005	2016	Y				0.11	1.6
4-0762	2005	2016	Y				0.11	1.6
4-0763	2005	2016	Y				0.11	1.6
4-0764	2005	2016	Y				0.11	1.6
4-0765	2005	2016	Y				0.11	1.6
4-0845	2005	2016	Y				0.11	1.6
4-0846	2005	2016	Y				0.11	1.6
4-0847	2005	2016	Y				0.11	1.6
4-0848	2005	2016	Y				0.11	1.6
4-1036	2005	2016	Y				0.11	1.6
4-1225	2005	2016	Y				0.11	1.6
4-1226	2005	2016	Y				0.11	1.6
4-1227	2005	2016	Y				0.11	1.6
4-1228	2005	2016	Y				0.11	1.6
4-1229	2005	2016	Y				0.11	1.6
4-1230	2005	2016	Y				0.11	1.6
4-1231	2005	2016	Y				0.11	1.6
4-1232	2005	2016	Y				0.11	1.6
4-1233	2005	2016	Y				0.11	1.6

Meet any combination of compliance options for PM and NOx by January 1 of each year

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	90%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	4.40
# of vehicle used in % limit & fleet average calc.		354	354

ARB Help Hotline 1-866-634-3735

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

		2020						
					Emission Control		Adjusted Emissions	
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2019	Y				0.11	1.6
1-1024	2002	2019	Y				0.11	1.6
1-1025	2002	2019	Y				0.11	1.6
1-1185	2002	2019	Y				0.11	1.6
1-502	2002	2019	Y				0.11	1.6
1-612	2002	2019	Y				0.11	1.6
1-613	2002	2019	Y				0.11	1.6
1-618	2002	2019	Y				0.11	1.6
1-822	2002	2019	Y				0.11	1.6
1-943	2002	2019	Y				0.11	1.6
2-0182	2003	2020	Y				0.11	1.6
2-0407	2003	2020	Y				0.11	1.6
2-0412	2003	2020	Y				0.11	1.6
2-0414	2003	2020	Y				0.11	1.6
4-0001	2005	2016	Y				0.11	1.6
4-0003	2005	2016	Y				0.11	1.6
4-0004	2005	2016	Y				0.11	1.6
4-0005	2005	2016	Y				0.11	1.6
4-0006	2005	2016	Y				0.11	1.6
4-0008	2005	2016	Y				0.11	1.6
4-0009	2005	2016	Y				0.11	1.6
4-0010	2005	2016	Y				0.11	1.6
4-0011	2005	2016	Y				0.11	1.6
4-0014	2005	2016	Y				0.11	1.6
4-0015	2005	2016	Y				0.11	1.6
4-0016	2005	2016	Y				0.11	1.6
4-0017	2005	2016	Y				0.11	1.6
4-0018	2005	2016	Y				0.11	1.6
4-0019	2005	2016	Y				0.11	1.6
4-0020	2005	2016	Y				0.11	1.6
4-0021	2005	2016	Y				0.11	1.6
4-0022	2005	2016	Y				0.11	1.6
4-0023	2005	2016	Y				0.11	1.6
4-0024	2005	2016	Y				0.11	1.6
4-0025	2005	2016	Y				0.11	1.6
4-0026	2005	2016	Y				0.11	1.6
4-0027	2005	2016	Y				0.11	1.6
4-0028	2005	2016	Y				0.11	1.6
4-0030	2005	2016	Y				0.11	1.6
4-0031	2005	2016	Y				0.11	1.6
4-0032	2005	2016	Y				0.11	1.6
4-0033	2005	2016	Y				0.11	1.6
4-0034	2005	2016	Y				0.11	1.6
4-0035	2005	2016	Y				0.11	1.6
4-0036	2005	2016	Y				0.11	1.6
4-0038	2005	2016	Y				0.11	1.6
4-0039	2005	2016	Y				0.11	1.6
4-0040	2005	2016	Y				0.11	1.6
4-0041	2005	2016	Y				0.11	1.6
4-0042	2005	2016	Y				0.11	1.6
4-0044	2005	2016	Y				0.11	1.6
4-0046	2005	2016	Y				0.11	1.6
4-0047	2005	2016	Y				0.11	1.6
4-0048	2005	2016	Y				0.11	1.6
4-0051	2005	2016	Y				0.11	1.6
4-0052	2005	2016	Y				0.11	1.6
4-0053	2005	2016	Y				0.11	1.6
4-0054	2005	2016	Y				0.11	1.6
4-0055	2005	2016	Y				0.11	1.6
4-0057	2005	2016	Y				0.11	1.6
4-0059	2005	2016	Y				0.11	1.6
4-0060	2005	2016	Y				0.11	1.6
4-0061	2005	2016	Y				0.11	1.6
4-0062	2005	2016	Y				0.11	1.6
4-0063	2005	2016	Y				0.11	1.6
4-0064	2005	2016	Y				0.11	1.6
4-0065	2005	2016	Y				0.11	1.6
4-0066	2005	2016	Y				0.11	1.6
4-0067	2005	2016	Y				0.11	1.6
4-0068	2005	2016	Y				0.11	1.6
4-0069	2005	2016	Y				0.11	1.6
4-0071	2005	2016	Y				0.11	1.6
4-0214	2005	2016	Y				0.11	1.6
4-0215	2005	2016	Y				0.11	1.6
4-0760	2005	2016	Y				0.11	1.6
4-0761	2005	2016	Y				0.11	1.6
4-0762	2005	2016	Y				0.11	1.6
4-0763	2005	2016	Y				0.11	1.6
4-0764	2005	2016	Y				0.11	1.6
4-0765	2005	2016	Y				0.11	1.6
4-0845	2005	2016	Y				0.11	1.6
4-0846	2005	2016	Y				0.11	1.6
4-0847	2005	2016	Y				0.11	1.6
4-0848	2005	2016	Y				0.11	1.6
4-1036	2005	2016	Y				0.11	1.6
4-1225	2005	2016	Y				0.11	1.6
4-1226	2005	2016	Y				0.11	1.6
4-1227	2005	2016	Y				0.11	1.6
4-1228	2005	2016	Y				0.11	1.6
4-1229	2005	2016	Y				0.11	1.6
4-1230	2005	2016	Y				0.11	1.6
4-1231	2005	2016	Y				0.11	1.6
4-1232	2005	2016	Y				0.11	1.6
4-1233	2005	2016	Y				0.11	1.6

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

NOx Exempt & Unique Expires		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	90%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	4.40
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

		2021						
					Emission Control		Adjusted Emissions	
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2019	Y				0.11	1.6
1-1024	2002	2019	Y				0.11	1.6
1-1025	2002	2019	Y				0.11	1.6
1-1185	2002	2019	Y				0.11	1.6
1-502	2002	2019	Y				0.11	1.6
1-612	2002	2019	Y				0.11	1.6
1-613	2002	2019	Y				0.11	1.6
1-618	2002	2019	Y				0.11	1.6
1-822	2002	2019	Y				0.11	1.6
1-943	2002	2019	Y				0.11	1.6
2-0182	2003	2020	Y				0.11	1.6
2-0407	2003	2020	Y				0.11	1.6
2-0412	2003	2020	Y				0.11	1.6
2-0414	2003	2020	Y				0.11	1.6
4-0001	2005	2016	Y				0.11	1.6
4-0003	2005	2016	Y				0.11	1.6
4-0004	2005	2016	Y				0.11	1.6
4-0005	2005	2016	Y				0.11	1.6
4-0006	2005	2016	Y				0.11	1.6
4-0008	2005	2016	Y				0.11	1.6
4-0009	2005	2016	Y				0.11	1.6
4-0010	2005	2016	Y				0.11	1.6
4-0011	2005	2016	Y				0.11	1.6
4-0014	2005	2016	Y				0.11	1.6
4-0015	2005	2016	Y				0.11	1.6
4-0016	2005	2016	Y				0.11	1.6
4-0017	2005	2016	Y				0.11	1.6
4-0018	2005	2016	Y				0.11	1.6
4-0019	2005	2016	Y				0.11	1.6
4-0020	2005	2016	Y				0.11	1.6
4-0021	2005	2016	Y				0.11	1.6
4-0022	2005	2016	Y				0.11	1.6
4-0023	2005	2016	Y				0.11	1.6
4-0024	2005	2016	Y				0.11	1.6
4-0025	2005	2016	Y				0.11	1.6
4-0026	2005	2016	Y				0.11	1.6
4-0027	2005	2016	Y				0.11	1.6
4-0028	2005	2016	Y				0.11	1.6
4-0030	2005	2016	Y				0.11	1.6
4-0031	2005	2016	Y				0.11	1.6
4-0032	2005	2016	Y				0.11	1.6
4-0033	2005	2016	Y				0.11	1.6
4-0034	2005	2016	Y				0.11	1.6
4-0035	2005	2016	Y				0.11	1.6
4-0036	2005	2016	Y				0.11	1.6
4-0038	2005	2016	Y				0.11	1.6
4-0039	2005	2016	Y				0.11	1.6
4-0040	2005	2016	Y				0.11	1.6
4-0041	2005	2016	Y				0.11	1.6
4-0042	2005	2016	Y				0.11	1.6
4-0044	2005	2016	Y				0.11	1.6
4-0046	2005	2016	Y				0.11	1.6
4-0047	2005	2016	Y				0.11	1.6
4-0048	2005	2016	Y				0.11	1.6
4-0051	2005	2016	Y				0.11	1.6
4-0052	2005	2016	Y				0.11	1.6
4-0053	2005	2016	Y				0.11	1.6
4-0054	2005	2016	Y				0.11	1.6
4-0055	2005	2016	Y				0.11	1.6
4-0057	2005	2016	Y				0.11	1.6
4-0059	2005	2016	Y				0.11	1.6
4-0060	2005	2016	Y				0.11	1.6
4-0061	2005	2016	Y				0.11	1.6
4-0062	2005	2016	Y				0.11	1.6
4-0063	2005	2016	Y				0.11	1.6
4-0064	2005	2016	Y				0.11	1.6
4-0065	2005	2016	Y				0.11	1.6
4-0066	2005	2016	Y				0.11	1.6
4-0067	2005	2016	Y				0.11	1.6
4-0068	2005	2016	Y				0.11	1.6
4-0069	2005	2016	Y				0.11	1.6
4-0071	2005	2016	Y				0.11	1.6
4-0214	2005	2016	Y				0.11	1.6
4-0215	2005	2016	Y				0.11	1.6
4-0760	2005	2016	Y				0.11	1.6
4-0761	2005	2016	Y				0.11	1.6
4-0762	2005	2016	Y				0.11	1.6
4-0763	2005	2016	Y				0.11	1.6
4-0764	2005	2016	Y				0.11	1.6
4-0765	2005	2016	Y				0.11	1.6
4-0845	2005	2016	Y				0.11	1.6
4-0846	2005	2016	Y				0.11	1.6
4-0847	2005	2016	Y				0.11	1.6
4-0848	2005	2016	Y				0.11	1.6
4-1036	2005	2016	Y				0.11	1.6
4-1225	2005	2016	Y				0.11	1.6
4-1226	2005	2016	Y				0.11	1.6
4-1227	2005	2016	Y				0.11	1.6
4-1228	2005	2016	Y				0.11	1.6
4-1229	2005	2016	Y				0.11	1.6
4-1230	2005	2016	Y				0.11	1.6
4-1231	2005	2016	Y				0.11	1.6
4-1232	2005	2016	Y				0.11	1.6
4-1233	2005	2016	Y				0.11	1.6

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Meet any combination of compliance options for PM and NOx by January 1 of each year

		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	90%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	3.00
# of vehicle used in % limit & fleet average calc.		354	354

ARB Help Hotline 1-866-634-3735

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2, 3

		2022						
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control		Adjusted Emissions	
					PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2019	Y				0.11	1.6
1-1024	2002	2019	Y				0.11	1.6
1-1025	2002	2019	Y				0.11	1.6
1-1185	2002	2019	Y				0.11	1.6
1-502	2002	2019	Y				0.11	1.6
1-612	2002	2019	Y				0.11	1.6
1-613	2002	2019	Y				0.11	1.6
1-618	2002	2019	Y				0.11	1.6
1-822	2002	2019	Y				0.11	1.6
1-943	2002	2019	Y				0.11	1.6
2-0182	2003	2020	Y				0.11	1.6
2-0407	2003	2020	Y				0.11	1.6
2-0412	2003	2020	Y				0.11	1.6
2-0414	2003	2020	Y				0.11	1.6
4-0001	2005	2022	Y				0.11	1.6
4-0003	2005	2022	Y				0.11	1.6
4-0004	2005	2022	Y				0.11	1.6
4-0005	2005	2022	Y				0.11	1.6
4-0006	2005	2022	Y				0.11	1.6
4-0008	2005	2022	Y				0.11	1.6
4-0009	2005	2022	Y				0.11	1.6
4-0010	2005	2022	Y				0.11	1.6
4-0011	2005	2022	Y				0.11	1.6
4-0014	2005	2022	Y				0.11	1.6
4-0015	2005	2022	Y				0.11	1.6
4-0016	2005	2022	Y				0.11	1.6
4-0017	2005	2022	Y				0.11	1.6
4-0018	2005	2022	Y				0.11	1.6
4-0019	2005	2022	Y				0.11	1.6
4-0020	2005	2022	Y				0.11	1.6
4-0021	2005	2022	Y				0.11	1.6
4-0022	2005	2022	Y				0.11	1.6
4-0023	2005	2022	Y				0.11	1.6
4-0024	2005	2022	Y				0.11	1.6
4-0025	2005	2022	Y				0.11	1.6
4-0026	2005	2022	Y				0.11	1.6
4-0027	2005	2022	Y				0.11	1.6
4-0028	2005	2022	Y				0.11	1.6
4-0030	2005	2022	Y				0.11	1.6
4-0031	2005	2022	Y				0.11	1.6
4-0032	2005	2022	Y				0.11	1.6
4-0033	2005	2022	Y				0.11	1.6
4-0034	2005	2022	Y				0.11	1.6
4-0035	2005	2022	Y				0.11	1.6
4-0036	2005	2022	Y				0.11	1.6
4-0038	2005	2022	Y				0.11	1.6
4-0039	2005	2022	Y				0.11	1.6
4-0040	2005	2022	Y				0.11	1.6
4-0041	2005	2022	Y				0.11	1.6
4-0042	2005	2022	Y				0.11	1.6
4-0044	2005	2022	Y				0.11	1.6
4-0046	2005	2022	Y				0.11	1.6
4-0047	2005	2022	Y				0.11	1.6
4-0048	2005	2022	Y				0.11	1.6
4-0051	2005	2022	Y				0.11	1.6
4-0052	2005	2022	Y				0.11	1.6
4-0053	2005	2022	Y				0.11	1.6
4-0054	2005	2022	Y				0.11	1.6
4-0055	2005	2022	Y				0.11	1.6
4-0057	2005	2022	Y				0.11	1.6
4-0059	2005	2022	Y				0.11	1.6
4-0060	2005	2022	Y				0.11	1.6
4-0061	2005	2022	Y				0.11	1.6
4-0062	2005	2022	Y				0.11	1.6
4-0063	2005	2022	Y				0.11	1.6
4-0064	2005	2022	Y				0.11	1.6
4-0065	2005	2022	Y				0.11	1.6
4-0066	2005	2022	Y				0.11	1.6
4-0067	2005	2022	Y				0.11	1.6
4-0068	2005	2022	Y				0.11	1.6
4-0069	2005	2022	Y				0.11	1.6
4-0071	2005	2022	Y				0.11	1.6
4-0214	2005	2022	Y				0.11	1.6
4-0215	2005	2022	Y				0.11	1.6
4-0760	2005	2022	Y				0.11	1.6
4-0761	2005	2022	Y				0.11	1.6
4-0762	2005	2022	Y				0.11	1.6
4-0763	2005	2022	Y				0.11	1.6
4-0764	2005	2022	Y				0.11	1.6
4-0765	2005	2022	Y				0.11	1.6
4-0845	2005	2022	Y				0.11	1.6
4-0846	2005	2022	Y				0.11	1.6
4-0847	2005	2022	Y				0.11	1.6
4-0848	2005	2022	Y				0.11	1.6
4-1036	2005	2022	Y				0.11	1.6
4-1225	2005	2022	Y				0.11	1.6
4-1226	2005	2022	Y				0.11	1.6
4-1227	2005	2022	Y				0.11	1.6
4-1228	2005	2022	Y				0.11	1.6
4-1229	2005	2022	Y				0.11	1.6
4-1230	2005	2022	Y				0.11	1.6
4-1231	2005	2022	Y				0.11	1.6
4-1232	2005	2022	Y				0.11	1.6
4-1233	2005	2022	Y				0.11	1.6

Statewide Heavy Duty Truck & Bus Fleet Calculator V.4

Low-Mileage Farm Option Expires		PM	NOx
Option 1 - BACT Schedule		Comply	Comply
Option 2 - Percent Limits	Projected Fleet	100%	100%
	Goal	100%	100%
Option 3 - Fleet Average	Projected Fleet	0.110	1.60
	Goal	0.110	1.60
# of vehicle used in % limit & fleet average calc.		354	354

Complies With Requirements	Meets Option(s)	Meets Option(s)
	1, 2, 3	1, 2

		2023						
Vehicle ID	Existing Engine Model Year	Projected Engine Model Year	Heavy-Duty or Tractor (Y or N)	Exemptions (Select)	Emission Control		Adjusted Emissions	
					PM Control	NOx Control	PM Factor	NOx Factor
1-909	2002	2019	Y				0.11	1.6
1-1024	2002	2019	Y				0.11	1.6
1-1025	2002	2019	Y				0.11	1.6
1-1185	2002	2019	Y				0.11	1.6
1-502	2002	2019	Y				0.11	1.6
1-612	2002	2019	Y				0.11	1.6
1-613	2002	2019	Y				0.11	1.6
1-618	2002	2019	Y				0.11	1.6
1-822	2002	2019	Y				0.11	1.6
1-943	2002	2019	Y				0.11	1.6
2-0182	2003	2020	Y				0.11	1.6
2-0407	2003	2020	Y				0.11	1.6
2-0412	2003	2020	Y				0.11	1.6
2-0414	2003	2020	Y				0.11	1.6
4-0001	2005	2022	Y				0.11	1.6
4-0003	2005	2022	Y				0.11	1.6
4-0004	2005	2022	Y				0.11	1.6
4-0005	2005	2022	Y				0.11	1.6
4-0006	2005	2022	Y				0.11	1.6
4-0008	2005	2022	Y				0.11	1.6
4-0009	2005	2022	Y				0.11	1.6
4-0010	2005	2022	Y				0.11	1.6
4-0011	2005	2022	Y				0.11	1.6
4-0014	2005	2022	Y				0.11	1.6
4-0015	2005	2022	Y				0.11	1.6
4-0016	2005	2022	Y				0.11	1.6
4-0017	2005	2022	Y				0.11	1.6
4-0018	2005	2022	Y				0.11	1.6
4-0019	2005	2022	Y				0.11	1.6
4-0020	2005	2022	Y				0.11	1.6
4-0021	2005	2022	Y				0.11	1.6
4-0022	2005	2022	Y				0.11	1.6
4-0023	2005	2022	Y				0.11	1.6
4-0024	2005	2022	Y				0.11	1.6
4-0025	2005	2022	Y				0.11	1.6
4-0026	2005	2022	Y				0.11	1.6
4-0027	2005	2022	Y				0.11	1.6
4-0028	2005	2022	Y				0.11	1.6
4-0030	2005	2022	Y				0.11	1.6
4-0031	2005	2022	Y				0.11	1.6
4-0032	2005	2022	Y				0.11	1.6
4-0033	2005	2022	Y				0.11	1.6
4-0034	2005	2022	Y				0.11	1.6
4-0035	2005	2022	Y				0.11	1.6
4-0036	2005	2022	Y				0.11	1.6
4-0038	2005	2022	Y				0.11	1.6
4-0039	2005	2022	Y				0.11	1.6
4-0040	2005	2022	Y				0.11	1.6
4-0041	2005	2022	Y				0.11	1.6
4-0042	2005	2022	Y				0.11	1.6
4-0044	2005	2022	Y				0.11	1.6
4-0046	2005	2022	Y				0.11	1.6
4-0047	2005	2022	Y				0.11	1.6
4-0048	2005	2022	Y				0.11	1.6
4-0051	2005	2022	Y				0.11	1.6
4-0052	2005	2022	Y				0.11	1.6
4-0053	2005	2022	Y				0.11	1.6
4-0054	2005	2022	Y				0.11	1.6
4-0055	2005	2022	Y				0.11	1.6
4-0057	2005	2022	Y				0.11	1.6
4-0059	2005	2022	Y				0.11	1.6
4-0060	2005	2022	Y				0.11	1.6
4-0061	2005	2022	Y				0.11	1.6
4-0062	2005	2022	Y				0.11	1.6
4-0063	2005	2022	Y				0.11	1.6
4-0064	2005	2022	Y				0.11	1.6
4-0065	2005	2022	Y				0.11	1.6
4-0066	2005	2022	Y				0.11	1.6
4-0067	2005	2022	Y				0.11	1.6
4-0068	2005	2022	Y				0.11	1.6
4-0069	2005	2022	Y				0.11	1.6
4-0071	2005	2022	Y				0.11	1.6
4-0214	2005	2022	Y				0.11	1.6
4-0215	2005	2022	Y				0.11	1.6
4-0760	2005	2022	Y				0.11	1.6
4-0761	2005	2022	Y				0.11	1.6
4-0762	2005	2022	Y				0.11	1.6
4-0763	2005	2022	Y				0.11	1.6
4-0764	2005	2022	Y				0.11	1.6
4-0765	2005	2022	Y				0.11	1.6
4-0845	2005	2022	Y				0.11	1.6
4-0846	2005	2022	Y				0.11	1.6
4-0847	2005	2022	Y				0.11	1.6
4-0848	2005	2022	Y				0.11	1.6
4-1036	2005	2022	Y				0.11	1.6
4-1225	2005	2022	Y				0.11	1.6
4-1226	2005	2022	Y				0.11	1.6
4-1227	2005	2022	Y				0.11	1.6
4-1228	2005	2022	Y				0.11	1.6
4-1229	2005	2022	Y				0.11	1.6
4-1230	2005	2022	Y				0.11	1.6
4-1231	2005	2022	Y				0.11	1.6
4-1232	2005	2022	Y				0.11	1.6
4-1233	2005	2022	Y				0.11	1.6

1. Obtain Wal-Mart and default fleet emissions rates using ARB fleet emissions calculator emission rates

ARB Fleet Calculator Emission Factors

Table A-2 - Engine Emissions Factors (g/mile)

	Greater Than 33,000 lbs (HHD)		Less Than 33,001 lbs (MHD)	
Model Year*	**PM**	**NOx**	**PM**	**NOx**
1990	3.36	22.0	1.65	14.2
1991	1.25	22.0	0.84	14.2
1994	0.81	22.0	0.43	14.2
2004	0.81	12.0	0.43	6.7
2007	0.11	7.0	0.06	4.0
2010	0.11	1.6	0.06	0.8

* Engine model year emissions standard met.

2. Determine NOx emission reductions from operating clean fleet for each year compared to amount required by ARB Fleet Regulation

NOx Emission Comparison WM Fleet and ARB Fleet Rule

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WM Fleet Emis g/mi	4.23	2.85	1.90	1.74	1.60	1.60	1.60	1.60	1.60	1.60
ARB Target Rates g/mi	14.40	14.40	14.40	14.40	9.80	9.80	7.80	6.00	6.00	6.00
Emission Reduction Fraction	0.71	0.80	0.87	0.88	0.84	0.84	0.79	0.73	0.73	0.73

Note: ARB NOx regulations do not begin until 2013, the 2013 emission limit level was used for the years 2010, 2011 and 2012

3. Determine PM10 emission reductions from operating clean fleet for each year compared to amount required by ARB Fleet Regulation

PM10 Emission Comparison WM Fleet and ARB Fleet Rule

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WM Fleet Emis g/mi	0.20	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
ARB Target Rates g/m	0.71	0.71	0.53	0.32	0.11	0.11	0.11	0.11	0.11	0.11
Emission Reduction Fraction	0.72	0.85	0.79	0.66	0.00	0.00	0.00	0.00	0.00	0.00

Note: ARB PM10 regulations do not begin until 2011, the 2011 emission limit was used for the year 2010

4. Adjust fleet mix to obtain mix without WM fleet and without heavy-duty trucks

Fleet Mix for Mitchell Ranch Wal-Mart (Ceres) Using Stanislaus County Defaults

Fleet Mix Allocation Table	URBEMIS Percent Type	Adjusted Percent Type
Light Auto	42.9%	43.7%
Light Truck <3750 lbs	12.2%	12.5%
Light Truck 3750-5750 lbs	20.9%	21.3%
Med Truck 5751-8500	11.8%	12.0%
Lite-Heavy Truck 8501-10000 lbs	2.5%	2.5%
Lite-Heavy Truck 10,001-14000 lbs	0.9%	0.9%
Med-Heavy Truck 14,001-33,000 lbs	1.4%	1.4%
Heavy-Heavy Truck 33,001-60,000 lbs	1.7%	0.0%
Other Bus	0.1%	0.1%
Urban Bus	0.0%	0.0%
Motorcycle	4.4%	4.4%
School Bus	0.1%	0.1%
Motor Home	1.1%	1.1%
	100%	100%
Percentage Wal-Mart HD Trucks	0.0	
Percentage Other HD Trucks	0.0	

See Fleet Mix Calculation on Separate Page

5. Use WM weekly estimates for two superstores to determine an average daily trip rate.

Wal-Mart Heavy Duty Truck Trips from Company Fleet and Outside Vendors

Delivery Type	La Quinta Store #1805 (trips/week)	Hanford Store #1645 (trips/week)	Average Weekly Trips (both stores)	Average Daily Trips (both stores)
Wal-Mart Trucks	**40**	**40**	**40**	**5.71**
Grocery	19			
General Merchandise	21			
Other Vendors Trucks	**11**	**8**	**9.5**	**1.36**
Tires	0.25	1		
Batteries	1	1		
Used Tire Pickup	0.25	1		
Used Oil Pickup	0.5	1		
Bale (recycle matl) Pickup	7	2		
Trash Pickup	2	1		
All HD Trucks	**51**	**48**	**49.5**	**7.07**
Percentage WM Trips	0.78	0.83	0.81	0.81

6. Calculate WM truck NOx emissions using URBEMIS 2007 and calculate emission reduction based on ARB Fleet Calculator results.

Emission Calculations for Mitchell Ranch Center Walmart (Ceres) using 185,668 sf using URBEMIS 2007

	NOx (tons/year)	Percent Reduction	Emission Reduction (ton/yr)	Clean Fleet Emissions (ton/yr)
Wal-Mart Truck Emissions	4.44	0.88	3.90	0.54
Other Vendor Truck Emissions	0.21			
Total	4.65			

7. Calculate WM truck fleet NOx emissions using emission rates from EMFAC 2007 and ARB fleet calculator

Emissions Using Store Delivery Trip Counts and 100 mile average trip length

	NOx g/mile	miles/day	g/day	g/lb	lbs/day	tons/year
Wal-Mart Fleet 2013 Emission Rate	1.74	1142	1987.08	454	4.38	0.80
EMFAC 2013 Composite Fleet	14.40	1142	16444.80	454	36.22	6.61
Percent Reduction	0.88					5.81

8. Calculate WM truck PM10 emissions using URBEMIS 2007 and calculate emission reduction based on ARB Fleet Calculator results.

	PM10 (tons/year)	Percent Reduction	Emission Reduction (ton/yr)	Clean Fleet Emissions (ton/yr)
Wal-Mart Truck Emissions	0.34	0.66	0.22	0.12
Other Vendor Truck Emissions	0.02			
Total	0.36			

9. Calculate WM truck fleet PM10 emissions using emission rates from EMFAC 2007 and ARB fleet calculator

Emissions Using Store Delivery Trip Counts and 100 mile average trip length

	PM10 g/mile	miles/day	g/day	g/lb	lbs/day	tons/year
Wal-Mart Fleet 2013 Emission Rate	0.11	1142	125.62	454	0.28	0.05
ARB Regulation	0.32	1142	365.44	454	0.80	0.15
Percent Reduction	0.66					0.10

10. For comparison purposes, calculate the emission reductions that would be achieved each year and an average for 10 years.

Emissions Using Store Delivery Trip Counts, WM fleet emission rates and 100 mile average trip length

	NOx g/mile	miles/day	g/day	g/lb	lbs/day	tons/year
WM 2010	4.23	1142	4832.53	454.00	10.64	1.94
WM 2011	2.85	1142	3254.70	454.00	7.17	1.31
WM 2012	1.88	1142	2146.96	454.00	4.73	0.86
WM 2012	1.60	1142	1827.20	454.00	4.02	0.73
WM 2013	1.60	1142	1827.20	454.00	4.02	0.73
WM 2014	1.60	1142	1827.20	454.00	4.02	0.73
WM 2015	1.60	1142	1827.20	454.00	4.02	0.73
WM 2016	1.60	1142	1827.20	454.00	4.02	0.73
WM 2017	1.60	1142	1827.20	454.00	4.02	0.73
WM 2018	1.60	1142	1827.20	454.00	4.02	0.73
WM 2019	1.60	1142	1827.20	454.00	4.02	0.73
Cumulative Emissions Total						9.99

Emissions Using Store Delivery Trip Counts, ARB Regulation emission rates and 100 mile average trip length

	NOx g/mile	miles/day	g/day	g/lb	lbs/day	tons/year
Default Rate 2010	15.24	1142	17404.08	454.00	38.33	7.00
Default Rate 2011	14.55	1142	16616.10	454.00	36.60	6.68
Default Rate 2012	14.41	1142	16456.22	454.00	36.25	6.62
Default Rate 2013	14.40	1142	16444.80	454.00	36.22	6.61
Default Rate 2014	9.80	1142	11191.60	454.00	24.65	4.50
Default Rate 2015	9.80	1142	11191.60	454.00	24.65	4.50
Default Rate 2016	7.80	1142	8907.60	454.00	19.62	3.58
Default Rate 2017	6.00	1142	6852.00	454.00	15.09	2.75
Default Rate 2018	6.00	1142	6852.00	454.00	15.09	2.75
Default Rate 2019	6.00	1142	6852.00	454.00	15.09	2.75
Cumulative Emissions Total						47.74

	Default 10 yr	WM 10 yr	Emission Red tons	% Reduction
Cumulative Emission	47.74	9.99	37.75	0.79

Emissions Using Store Delivery Trip Counts for Non WM Trucks, ARB Fleet Regulation emission rates and 20 mile average trip length

	NOx g/mile	miles/day	g/day	g/lb	lbs/day	tons/year
Default Rate 2010	15.24	54	829.06	454.00	1.83	0.33
Default Rate 2011	14.55	54	791.52	454.00	1.74	0.32
Default Rate 2012	14.41	54	783.90	454.00	1.73	0.32
Default Rate 2013	14.40	54	783.36	454.00	1.73	0.31
Default Rate 2014	9.80	54	533.12	454.00	1.17	0.21
Default Rate 2015	9.80	54	533.12	454.00	1.17	0.21
Default Rate 2016	7.80	54	424.32	454.00	0.93	0.17
Default Rate 2017	6.00	54	326.40	454.00	0.72	0.13
Default Rate 2018	6.00	54	326.40	454.00	0.72	0.13
Default Rate 2019	6.00	54	326.40	454.00	0.72	0.13
Cumulative Emissions Total						2.27

	Tons/Year
Emissions generated by Non-WM trucks	0.23

Mitchell Ranch Center
Daily Trip Generation for Air Quality Analysis

Assumptions

Saturdays per Year	52
Weekdays per Year	313
Total Days	365
Walmart Size (1000 sf)	185.668
Shopping Center (1000 sf)	108.4

Notes:
sf = square feet
du = dwelling units

From Traffic Study - Trip Generation

Walmart		Weighted Trips
Saturday Trip Rate/ 1000 sf	71.17	687127.56
Weekday Trip Rate/1000 sf	56.04	3256713.27
Total Trips		3943840.83
Weighted Average Trips Per Day		10805.04
Weighted Average Trip Rate/1000 sf		**58.20**

Shopping Center		Weighted Trips
Saturday Trip Rate/ 1000 sf	88.25	497447.60
Weekday Trip Rate/1000 sf	65.08	2208112.34
Total Trips		2705559.94
Weighted Average Trips Per Day		7412.49
Weighted Average Trip Rate/1000 sf		**68.38**

TABLE 8
PROJECT TRIP GENERATION ESTIMATES

Land Use and Size	Weekday							Saturday			
		AM Peak Hour			PM Peak Hour				Peak Hour		
	Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total
113,090-square foot Shopping Center[1] 65.08	7,360	104	66	170	326	353	679	9,980 88.23	488	450	938
214,139-square foot Walmart[2] 56.04	12,000	201	193	394	542	542	1,084	15,240 71.17	828	795	1,623
Driveway Volumes	19,360	305	259	564	868	895	1,763	25,220	1,316	1,245	2,561
10% Pass-by[3]	-1,940	-29	-29	-58	-89	-89	-178	-2,520	-129	-129	-258
20% Diverted Trips[3]	-3,870	-57	-57	-114	-177	-177	-354	-5,050	-257	-257	-514
Net new trips to Regional Transportation Network	13,550	219	173	392	602	629	1,231	17,650	930	859	1,789

Notes: sf = square-feet

1. Trip generation based on ITE average rates and regression equations for Shopping Center (Land Use 820):
   Weekday Daily: Ln (T) = 0.65 Ln(X) + 5.83
   AM Peak Hour: Ln (T) = 0.60 Ln(X) + 2.29 (inbound = 61%, outbound = 39%)
   PM Peak Hour: Ln (T) = 0.66 Ln(X) + 3.40 (inbound = 48%, outbound = 52%)
   Saturday Daily: Ln (T) = 0.63 Ln(X) + 6.23
   Saturday Peak hour: Ln (T) = 0.65 Ln(X) + 3.77 (inbound = 52%, outbound = 48%)
   Where: T = trip ends, Ln = natural logarithm, and X = 1,000 sf
2. Trip generation based on rates presented below:
   Weekday Daily: T = 56.02 (X) [ITE Land Use 815]
   AM Peak Hour: T = 1.84 (X) (inbound = 51%, outbound = 49%) [ITE Land Use 813]
   PM Peak Hour: T = 5.8 (X) (inbound = 48%, outbound = 52%) [ITE Land Use 815]
   Saturday Daily: T = 71.19 (X) [ITE Land Use 815]
   Saturday Peak hour: T = 7.58 (X) (inbound = 51%, outbound = 49%) [Land Use 815]
   Where: T = trip ends, and X = 1,000 sf
3. Pass-by and diverted trips based on information contained in ITE's *Trip Generation Handbook*, 2004.

Source: *Trip Generation*, (7th Edition), 2003, ITE; *Trip Generation Handbook*, 2004, ITE; Fehr & Peers, 2009.

TRIP DISTRIBUTION

The Transportation Planning Partnership Group (TPPG) Countywide Travel Demand Model (TPPG Model) traffic projections in conjunction with existing traffic volumes at the study intersections, and the locations of complementary land uses (existing and planned) were used to develop the project's trip distribution patterns for the Existing and Cumulative conditions. The proposed project trip distributions are shown on Figures 5 and 6 for the Existing and Cumulative scenarios, respectively. Project trips were assigned to the roadway network based on the trip distribution percentages, as shown on Figure 7 for the Existing and Figure 8 for the Cumulative condition. The Project as currently designed proposes to be served by two driveways on Don Pedro Road (unrestricted access), two driveways on Mitchell Road (one full access and one restricted to right-in/right-out only) and two driveways on Service Road (one restricted to right-in/left-out/right-out and one restricted to left-in/right-in/right-out). The project trip assignment takes into consideration potential turning movement restrictions at the project driveways.

TITLE: FLEET MIX FOR FREE-STANDING DISCOUNT SUPERSTORE - STANISLAUS COUNTY

URBEMIS Default Vehicle Type	URBEMIS Default Fleet %	NEW Fleet %	URBEMIS trip rate per 1,000sf	URBEMIS default Trips/day by Vehicle Type	new trips/day by vehicle type	New Fleet Mix % to enter in URBEMIS
Light Auto	42.90%	43.70%	**56.4**	24.1956	24.65	**43.70%**
Light Truck < 3750 lbs	12.20%	12.49%		6.8808	7.04	**12.50%**
Light truck 3751-5750 lbs	20.90%	21.30%		11.7876	12.02	**21.30%**
Med Truck 5751-8500 lbs	11.80%	12.01%		6.6552	6.77	**12.00%**
Lite-heavy truck 8501-10,000 lbs	2.50%	2.50%		1.41	1.41	**2.50%**
Lite-heavy truck 10,001-14,000lbs	0.90%	0.90%		0.5076	0.51	**0.90%**
Med-heavy truck 14,001-33,000 lbs	1.40%	1.40%		0.7896	0.79	**1.40%**
Heavy-heavy truck 33,001-60,000 lbs	1.70%	0.00%		0.9588	0.00	**0.00%**
Other Bus	0.10%	0.10%		0.0564	0.06	**0.10%**
Urban Bus	0	0		0	0.00	**0.00%**
Motorcycle	4.40%	4.40%		2.4816	2.48	**4.40%**
School Bus	0.10%	0.10%		0.0564	0.06	**0.10%**
Motor Home	1.10%	1.10%		0.6204	0.62	**1.10%**
	100.00%	100.00%				
Total Trips/1,000 sq ft by vehicle type				**56.4**		100.00%

Any reduction to this group will be added to the Light to Medium vehicle types by the following approach:

(% reduction in Heavy Duty Vehicles) (% of vehicle type for Light and Medium Vehicles) + % of vehicle type for Light and Medium Vehicles

Total percent reduction in Heavy Duty Vehicles will be distributed across the light to medium class vehicles based on the percentage of each light to medium class vehicle.

		Original % of 4 categories receiving redistribution	% of 4 categories receiving redistribution
Heavy-heavy truck 33,001-60,000 lbs	1.70%	41.10%	47.3%
Total reduction =	1.70%	14.60%	16.8%
		20.70%	23.8%
		10.50%	12.1%
		86.90%	100.00%

TITLE: FLEET MIX FOR REMAINING CENTER - STANISLAUS COUNTY

URBEMIS Default Vehicle Type	URBEMIS Default Fleet %	NEW Fleet %	New Fleet Mix % to enter in URBEMIS
Light Auto	42.90%	43.68%	**43.70%**
Light Truck < 3750 lbs.	12.20%	12.42%	**12.40%**
Light truck 3751-5750 lbs	20.90%	21.28%	**21.30%**
Med Truck 5751-8500 lbs	11.80%	12.02%	**12.00%**
Lite-heavy truck 8501-10,000 lbs	2.50%	2.50%	**2.50%**
Lite-heavy truck 10,001-14,000lbs	0.90%	0.90%	**0.90%**
Med-heavy truck 14,001-33,000 lbs	1.40%	1.40%	**1.40%**
Heavy-heavy truck 33,001-60,000 lbs	1.70%	0.10%	**0.10%**
Other Bus	0.10%	0.10%	**0.10%**
Urban Bus	0	0	**0.00%**
Motorcycle	4.40%	4.40%	**4.40%**
School Bus	0.10%	0.10%	**0.10%**
Motor Home	1.10%	1.10%	**1.10%**
	100.00%	100.00%	
Total Trips/1,000 sq ft by vehicle type			100.00%

Any reduction to this group will be added to the Light to Medium vehicle types by the following approach:

(% reduction in Heavy Duty Vehicles) (% of vehicle type for Light and Medium Vehicles) + % of vehicle type for Light and Medium Vehicles

Total percent reduction in Heavy Duty Vehicles will be distributed across the light to medium class vehicles based on the percentage of each light to medium class vehicle.

		Original % of 4 categories receiving redistribution	% of 4 categories receiving redistribution
Heavy-heavy truck 33,001-60,000 lbs	1.60%	42.90%	48.9%
Total reduction =	1.60%	12.20%	13.9%
		20.90%	23.8%
		11.80%	13.4%
		87.80%	100.00%

Multiple-Phase Development Timeline Calculator

Applicant Name:	**Walmart Stores, Inc.**
Project Name:	**Mitchell Ranch Center**
Project Location:	**Ceres, CA**
ISR Project Number:	

This calculator is to be used to estimate the timeline of construction phases for a multiple-phase project, where site grading will be completed for the entire project area before any building construction begins. Please enter the site grading start date and the total site grading time length in the first set of yellow boxes below. Take the information from the resulting output in the green boxes, and enter the construction phases, start, and end dates in the construction window of URBEMIS2007. Similarly, for each phase of the project, enter the building development start date and the building development time length in the yellow boxes. Take the information from the resulting output in the green boxes, and enter the construction phases, start, and end dates in the construction window of URBEMIS2007. If the project consists of more than 3 phases, then continue on the second sheet.

Demolition and Site Grading Input

Development Start Date (MM/DD/YYYY):	1/9/2012
Total Development Length (months):	2.5
Will this project require demolition?	Yes

SITE GRADING AND PAVING

Demolition and Site Grading Output

Phase	Length (months)	Start Date	End Date
Demolition	0.13	1/9/2012	1/12/2012
Site Grading	1.88	1/12/2012	3/9/2012
Site Paving	0.50	3/9/2012	3/25/2012

PHASE 1

Building Development Input

Development Start Date (MM/DD/YYYY):	3/25/2012
Total Development Length (months):	10

Building Development Output

Phase	Length (months)	Start Date	End Date
Building Construction	10.00	3/25/2012	1/23/2013
Architectural Coating	1.00	12/23/2012	1/23/2013

Walmart- Major 1

PHASE 2

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	10

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.50	1/6/2014	1/21/2014
Building Construction	10.00	1/6/2014	11/6/2014
Architectural Coating	1.00	10/6/2014	11/6/2014

Major 2

Note: This calculator is a rough estimate only, and is not meant to be precise. The applicant is always welcome to provide precise construction timelines if they are known.

Multiple-Phase Development Timeline Calculator

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	10

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.50	1/6/2014	1/21/2014
Building Construction	10.00	1/6/2014	11/6/2014
Architectural Coating	1.00	10/6/2014	11/6/2014

PHASE 3

Major 3

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	10

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.50	1/6/2014	1/21/2014
Building Construction	10.00	1/6/2014	11/6/2014
Architectural Coating	1.00	10/6/2014	11/6/2014

PHASE 4

Major 4

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	10

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.50	1/6/2014	1/21/2014
Building Construction	10.00	1/6/2014	11/6/2014
Architectural Coating	1.00	10/6/2014	11/6/2014

PHASE 5

Shops 1

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	10

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.50	1/6/2014	1/21/2014
Building Construction	10.00	1/6/2014	11/6/2014
Architectural Coating	1.00	10/6/2014	11/6/2014

PHASE 6

Shops 2

Note: This calculator is a rough estimate only, and is not meant to be precise. The applicant is always welcome to provide precise construction timelines if they are known.

Multiple-Phase Development Timeline Calculator

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	9

PHASE 7

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.45	1/6/2014	1/19/2014
Building Construction	9.00	1/6/2014	10/6/2014
Architectural Coating	0.90	9/9/2014	10/6/2014

Shops 3

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	9

PHASE 8

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.45	1/6/2014	1/19/2014
Building Construction	9.00	1/6/2014	10/6/2014
Architectural Coating	0.90	9/9/2014	10/6/2014

Shops 4

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	8

PHASE 9

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.40	1/6/2014	1/18/2014
Building Construction	8.00	1/6/2014	9/6/2014
Architectural Coating	0.80	8/13/2014	9/6/2014

Pad A (retail)

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	8

PHASE 10

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.40	1/6/2014	1/18/2014
Building Construction	8.00	1/6/2014	9/6/2014
Architectural Coating	0.80	8/13/2014	9/6/2014

Pad A (rest)

Multiple-Phase Development Timeline Calculator

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	8

PHASE 11

Pad B

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.40	1/6/2014	1/18/2014
Building Construction	8.00	1/6/2014	9/6/2014
Architectural Coating	0.80	8/13/2014	9/6/2014

Building Development Input

Development Start Date (MM/DD/YYYY):	1/6/2014
Total Development Length (months):	8

PHASE 12

Pad C

Building Development Output

Phase	Length (months)	Start Date	End Date
Paving	0.40	1/6/2014	1/18/2014
Building Construction	8.00	1/6/2014	9/6/2014
Architectural Coating	0.80	8/13/2014	9/6/2014

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Grading&Paving.urb924

Project Name: Mitchell Ranch - Construction - Grading and Paving

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.11	0.77	0.46	0.00	2.77	0.04	2.81	0.58	0.04	0.62	83.06

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

2012	0.11	0.77	0.46	0.00	2.77	0.04	2.81	0.58	0.04	0.62	83.06
Demolition 01/09/2012-01/12/2012	0.01	0.05	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	5.94
Fugitive Dust	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.01	0.00	0.01	0.00
Demo Off Road Diesel	0.01	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.56
Demo On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
Fine Grading 01/12/2012-03/09/2012	0.08	0.62	0.36	0.00	2.76	0.03	2.80	0.58	0.03	0.61	65.84
Fine Grading Dust	0.00	0.00	0.00	0.00	2.76	0.00	2.76	0.58	0.00	0.58	0.00
Fine Grading Off Road Diesel	0.08	0.62	0.34	0.00	0.00	0.03	0.03	0.00	0.03	0.03	63.16
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.69
Asphalt 03/09/2012-03/25/2012	0.02	0.10	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	11.28
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.07	0.04	0.00	0.00	0.01	0.01	0.00	0.01	0.01	6.23
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.93
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13

Phase Assumptions

Phase: Demolition 1/9/2012 - 1/12/2012 - Default Demolition

Building Volume Total (cubic feet): 112500

Building Volume Daily (cubic feet): 10000

On Road Truck Travel (VMT): 138.89

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Fine Grading 1/12/2012 - 3/9/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 26.3

Maximum Daily Acreage Disturbed: 6.58

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 3/9/2012 - 3/25/2012 - Default Paving Description

Acres to be Paved: 6.58

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name:

Project Name: Major 1 - Walmart - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.87	1.67	2.30	0.00	0.01	0.11	0.12	0.00	0.10	0.11	320.64
2013 TOTALS (tons/year unmitigated)	1.48	0.13	0.20	0.00	0.00	0.01	0.01	0.00	0.01	0.01	28.81

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012	0.87	1.67	2.30	0.00	0.01	0.11	0.12	0.00	0.10	0.11	320.64
Building 03/25/2012-01/23/2013	0.36	1.67	2.29	0.00	0.01	0.11	0.12	0.00	0.10	0.11	320.02
Building Off Road Diesel	0.32	1.49	1.06	0.00	0.00	0.10	0.10	0.00	0.10	0.10	162.93
Building Vendor Trips	0.01	0.13	0.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	31.06
Building Worker Trips	0.04	0.06	1.12	0.00	0.01	0.00	0.01	0.00	0.00	0.00	126.04
Coating 12/23/2012-01/23/2013	0.51	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Architectural Coating	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61

2013	1.48	0.13	0.20	0.00	0.00	0.01	0.01	0.00	0.01	0.01	28.81
Building 03/25/2012-01/23/2013	0.03	0.13	0.18	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.07
Building Off Road Diesel	0.02	0.12	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	13.78
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.63
Building Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.66
Coating 12/23/2012-01/23/2013	1.45	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74
Architectural Coating	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74

Phase Assumptions

Phase: Building Construction 3/25/2012 - 1/23/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 12/23/2012 - 1/23/2013 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 2_Construction.urb924

Project Name: Major 2 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.41	0.82	0.70	0.00	0.00	0.05	0.05	0.00	0.04	0.04	130.63

Construction Unmitigated Detail Report

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.41	0.82	0.70	0.00	0.00	0.05	0.05	0.00	0.04	0.04	130.63
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.39
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.76	0.65	0.00	0.00	0.04	0.04	0.00	0.04	0.04	122.88
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.95
Building Worker Trips	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.11
Coating 10/06/2014-11/06/2014	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Architectural Coating	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.74

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 3_Construction.urb924

Project Name: Major 3 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.25	0.80	0.61	0.00	0.00	0.05	0.05	0.00	0.04	0.04	117.25

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.25	0.80	0.61	0.00	0.00	0.05	0.05	0.00	0.04	0.04	117.25
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.17
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.56	0.00	0.00	0.04	0.04	0.00	0.04	0.04	109.91
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.39
Building Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.69
Coating 10/06/2014-11/06/2014	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Architectural Coating	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.36

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 4_Construction.urb924

Project Name: Major 4 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.26	0.80	0.61	0.00	0.00	0.05	0.05	0.00	0.04	0.04	117.71

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.26	0.80	0.61	0.00	0.00	0.05	0.05	0.00	0.04	0.04	117.71
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.17
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.56	0.00	0.00	0.04	0.04	0.00	0.04	0.04	110.35
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48
Building Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.05
Coating 10/06/2014-11/06/2014	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
Architectural Coating	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.37

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:35:56 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 1_Construction.urb924

Project Name: Shops 1 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.24	0.80	0.60	0.00	0.00	0.05	0.05	0.00	0.04	0.04	116.04

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.24	0.80	0.60	0.00	0.00	0.05	0.05	0.00	0.04	0.04	116.04
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.14
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.55	0.00	0.00	0.04	0.04	0.00	0.04	0.04	108.74
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16
Building Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.76
Coating 10/06/2014-11/06/2014	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
Architectural Coating	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.32

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:37:38 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 2_Construction.urb924

Project Name: Shops 2 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.23	0.80	0.60	0.00	0.00	0.05	0.05	0.00	0.04	0.04	115.58

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.23	0.80	0.60	0.00	0.00	0.05	0.05	0.00	0.04	0.04	115.58
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.14
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.55	0.00	0.00	0.04	0.04	0.00	0.04	0.04	108.30
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07
Building Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40
Coating 10/06/2014-11/06/2014	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
Architectural Coating	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.31

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:39:18 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 3_Construction.urb924

Project Name: Shops 3 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.18	0.80	0.57	0.00	0.00	0.05	0.05	0.00	0.04	0.04	111.24

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.18	0.80	0.57	0.00	0.00	0.05	0.05	0.00	0.04	0.04	111.24
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.52	0.00	0.00	0.04	0.04	0.00	0.04	0.04	104.09
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
Building Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.03
Coating 10/06/2014-11/06/2014	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Architectural Coating	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.18

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:40:31 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 4_Construction.urb924

Project Name: Shops 4 - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.20	0.80	0.58	0.00	0.00	0.05	0.05	0.00	0.04	0.04	112.53

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.20	0.80	0.58	0.00	0.00	0.05	0.05	0.00	0.04	0.04	112.53
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.08
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.53	0.00	0.00	0.04	0.04	0.00	0.04	0.04	105.34
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49
Building Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.03
Coating 10/06/2014-11/06/2014	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
Architectural Coating	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.22

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:42:40 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad A Retail_Construction.urb924

Project Name: Pad A Retail - Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.14	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	107.77

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.14	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	107.77
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.50	0.00	0.00	0.04	0.04	0.00	0.04	0.04	100.73
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
Building Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.33
Coating 10/06/2014-11/06/2014	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Architectural Coating	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.08

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:44:00 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad A Restaurant_Construction.urb924

Project Name: Pad A Restaurant- Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.14	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	107.77

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.14	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	107.77
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.50	0.00	0.00	0.04	0.04	0.00	0.04	0.04	100.73
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
Building Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.33
Coating 10/06/2014-11/06/2014	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Architectural Coating	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.08

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

9/8/2010 8:45:31 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad B_Construction.urb924

Project Name: Pad B- Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.14	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	107.55

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.14	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	107.55
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.50	0.00	0.00	0.04	0.04	0.00	0.04	0.04	100.51
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
Building Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.15
Coating 10/06/2014-11/06/2014	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Architectural Coating	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.08

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad C_Construction.urb924

Project Name: Pad C- Construction

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014 TOTALS (tons/year unmitigated)	0.15	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	108.47

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2014	0.15	0.79	0.55	0.00	0.00	0.05	0.05	0.00	0.04	0.04	108.47
Asphalt 01/06/2014-01/21/2014	0.01	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.01
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
Building 01/06/2014-11/06/2014	0.10	0.74	0.50	0.00	0.00	0.04	0.04	0.00	0.04	0.04	101.41
Building Off Road Diesel	0.10	0.73	0.48	0.00	0.00	0.04	0.04	0.00	0.04	0.04	97.83
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
Building Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87
Coating 10/06/2014-11/06/2014	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Architectural Coating	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05

Phase Assumptions

Phase: Paving 1/6/2014 - 1/21/2014 - Type Your Description Here

Acres to be Paved: 0.1

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/6/2014 - 11/6/2014 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/6/2014 - 11/6/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 1-Walmart_PassengerVehicles.urb924

Project Name: Major 1 - Walmart - Operational - Passenger Vehicles

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.23	0.33	0.42	0.00	0.00	0.00	393.31
TOTALS (tons/year, mitigated)	0.23	0.30	0.38	0.00	0.00	0.00	357.94
Percent Reduction	0.00	9.09	9.52	NaN	NaN	NaN	8.99

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	6.90	6.35	61.57	0.04	3.53	0.78	4,099.84
TOTALS (tons/year, mitigated)	5.86	5.36	51.91	0.03	2.98	0.66	3,456.14
Percent Reduction	15.07	15.59	15.69	25.00	15.58	15.38	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	7.13	6.68	61.99	0.04	3.53	0.78	4,493.15
TOTALS (tons/year, mitigated)	6.09	5.66	52.29	0.03	2.98	0.66	3,814.08
Percent Reduction	14.59	15.27	15.65	25.00	15.58	15.38	15.11

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.02	0.33	0.28	0.00	0.00	0.00	393.06
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.20						
TOTALS (tons/year, unmitigated)	0.23	0.33	0.42	0.00	0.00	0.00	393.31

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.02	0.30	0.25	0.00	0.00	0.00	357.69
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.20						
TOTALS (tons/year, mitigated)	0.23	0.30	0.38	0.00	0.00	0.00	357.94

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Free-standing discount store	6.90	6.35	61.57	0.04	3.53	0.78	4,099.84
TOTALS (tons/year, unmitigated)	6.90	6.35	61.57	0.04	3.53	0.78	4,099.84

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Free-standing discount store	5.86	5.36	51.91	0.03	2.98	0.66	3,456.14

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Free-standing discount store		58.20	1000 sq ft	185.67	10,805.99	22,605.17
					10,805.99	22,605.17

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.7	99.1	0.2
Light Truck < 3750 lbs	12.5	1.6	91.8	6.6
Light Truck 3751-5750 lbs	21.3	1.0	98.5	0.5
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	72.0	28.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	56.8	43.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Free-standing discount store				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Walmart Operations WM HDD Trucks.urb924

Project Name: Mitchell Ranch Center - Walmart Trucks

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.28	4.44	1.36	0.01	0.34	0.17	839.08

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.28	4.44	1.36	0.01	0.34	0.17	839.08

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Walmart HDD Trucks	0.28	4.44	1.36	0.01	0.34	0.17	839.08
TOTALS (tons/year, unmitigated)	0.28	4.44	1.36	0.01	0.34	0.17	839.08

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Walmart HDD Trucks		11.42	1000 sq ft	1.00	11.42	1,142.00
					11.42	1,142.00

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	0.0	0.9	98.9	0.2
Light Truck < 3750 lbs	0.0	2.5	90.1	7.4
Light Truck 3751-5750 lbs	0.0	1.0	98.5	0.5
Med Truck 5751-8500 lbs	0.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	72.0	28.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	100.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	0.0	61.4	38.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	100.0	100.0	100.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Walmart HDD Trucks				0.0	0.0	100.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Walmart Operations Non-WM HDD Trucks.urb924

Project Name: Mitchell Ranch Center- Non Walmart Trucks

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.21	0.07	0.00	0.02	0.01	39.97

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.21	0.07	0.00	0.02	0.01	39.97

Operational Unmitigated Detail Report

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Non Walmart HDD Trucks	0.01	0.21	0.07	0.00	0.02	0.01	39.97
TOTALS (tons/year, unmitigated)	0.01	0.21	0.07	0.00	0.02	0.01	39.97

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Non Walmart HDD Trucks		2.72	1000 sq ft	1.00	2.72	54.40
					2.72	54.40

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	0.0	0.9	98.9	0.2
Light Truck < 3750 lbs	0.0	2.5	90.1	7.4
Light Truck 3751-5750 lbs	0.0	1.0	98.5	0.5
Med Truck 5751-8500 lbs	0.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	72.0	28.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	100.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	0.0	61.4	38.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	20.0	20.0	20.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Non Walmart HDD Trucks				0.0	0.0	100.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 2_Operational.urb924

Project Name: Major 2 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.04	0.05	0.18	0.00	0.00	0.00	59.53
TOTALS (tons/year, mitigated)	0.04	0.05	0.17	0.00	0.00	0.00	59.53
Percent Reduction	0.00	0.00	5.56	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.04	0.94	9.07	0.01	0.63	0.14	728.36
TOTALS (tons/year, mitigated)	0.88	0.79	7.64	0.01	0.53	0.12	614.00
Percent Reduction	15.38	15.96	15.77	0.00	15.87	14.29	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.08	0.99	9.25	0.01	0.63	0.14	787.89
TOTALS (tons/year, mitigated)	0.92	0.84	7.81	0.01	0.53	0.12	673.53
Percent Reduction	14.81	15.15	15.57	0.00	15.87	14.29	14.51

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.05	0.04	0.00	0.00	0.00	59.28
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.03						
TOTALS (tons/year, unmitigated)	0.04	0.05	0.18	0.00	0.00	0.00	59.53

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.05	0.04	0.00	0.00	0.00	59.28
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.03						
TOTALS (tons/year, mitigated)	0.04	0.05	0.17	0.00	0.00	0.00	59.53

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	1.04	0.94	9.07	0.01	0.63	0.14	728.36
TOTALS (tons/year, unmitigated)	1.04	0.94	9.07	0.01	0.63	0.14	728.36

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.88	0.79	7.64	0.01	0.53	0.12	614.00

9/8/2010 9:55:01 AM

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	28.00	1,914.64	4,005.26
					1,914.64	4,005.26

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 3_Operational.urb924

Project Name: Major 3 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	28.83
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	28.83
Percent Reduction	0.00	0.00	6.25	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.50	0.45	4.37	0.00	0.30	0.07	351.17
TOTALS (tons/year, mitigated)	0.42	0.38	3.69	0.00	0.25	0.06	296.03
Percent Reduction	16.00	15.56	15.56	NaN	16.67	14.29	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.52	0.47	4.53	0.00	0.30	0.07	380.00
TOTALS (tons/year, mitigated)	0.44	0.40	3.84	0.00	0.25	0.06	324.86
Percent Reduction	15.38	14.89	15.23	NaN	16.67	14.29	14.51

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	28.58
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	28.83

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	28.58
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	28.83

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.50	0.45	4.37	0.00	0.30	0.07	351.17
TOTALS (tons/year, unmitigated)	0.50	0.45	4.37	0.00	0.30	0.07	351.17

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.42	0.38	3.69	0.00	0.25	0.06	296.03

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	13.50	923.13	1,931.11
					923.13	1,931.11

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Major 4_Operational.urb924

Project Name: Major 4 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	29.89
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	29.89
Percent Reduction	0.00	0.00	6.25	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.52	0.47	4.53	0.00	0.31	0.07	364.18
TOTALS (tons/year, mitigated)	0.44	0.40	3.82	0.00	0.26	0.06	307.00
Percent Reduction	15.38	14.89	15.67	NaN	16.13	14.29	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.54	0.49	4.69	0.00	0.31	0.07	394.07
TOTALS (tons/year, mitigated)	0.46	0.42	3.97	0.00	0.26	0.06	336.89
Percent Reduction	14.81	14.29	15.35	NaN	16.13	14.29	14.51

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	29.64
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	29.89

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	29.64
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	29.89

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.52	0.47	4.53	0.00	0.31	0.07	364.18
TOTALS (tons/year, unmitigated)	0.52	0.47	4.53	0.00	0.31	0.07	364.18

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.44	0.40	3.82	0.00	0.26	0.06	307.00

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	14.00	957.32	2,002.63
					957.32	2,002.63

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 1_Operational.urb924

Project Name: Shops 1 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	26.08
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	26.08
Percent Reduction	0.00	0.00	6.25	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.45	0.41	3.95	0.00	0.27	0.06	317.35
TOTALS (tons/year, mitigated)	0.38	0.35	3.33	0.00	0.23	0.05	267.53
Percent Reduction	15.56	14.63	15.70	NaN	14.81	16.67	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.47	0.43	4.11	0.00	0.27	0.06	343.43
TOTALS (tons/year, mitigated)	0.40	0.37	3.48	0.00	0.23	0.05	293.61
Percent Reduction	14.89	13.95	15.33	NaN	14.81	16.67	14.51

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	25.83
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	26.08

Area Source Mitigated Detail Report

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	25.83
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	26.08

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.45	0.41	3.95	0.00	0.27	0.06	317.35
TOTALS (tons/year, unmitigated)	0.45	0.41	3.95	0.00	0.27	0.06	317.35

Operational Mitigated Detail Report

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.38	0.35	3.33	0.00	0.23	0.05	267.53

9/8/2010 10:05:28 AM

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	12.20	834.24	1,745.15
					834.24	1,745.15

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

9/8/2010 10:08:38 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 2_Operational.urb924

Project Name: Shops 2 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	25.02
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	25.02
Percent Reduction	0.00	0.00	6.25	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.43	0.39	3.79	0.00	0.26	0.06	304.35
TOTALS (tons/year, mitigated)	0.37	0.33	3.19	0.00	0.22	0.05	256.56
Percent Reduction	13.95	15.38	15.83	NaN	15.38	16.67	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.45	0.41	3.95	0.00	0.26	0.06	329.37
TOTALS (tons/year, mitigated)	0.39	0.35	3.34	0.00	0.22	0.05	281.58
Percent Reduction	13.33	14.63	15.44	NaN	15.38	16.67	14.51

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	24.77
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.02	0.16	0.00	0.00	0.00	25.02

Area Source Mitigated Detail Report

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	24.77
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, mitigated)	0.02	0.02	0.15	0.00	0.00	0.00	25.02

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.43	0.39	3.79	0.00	0.26	0.06	304.35
TOTALS (tons/year, unmitigated)	0.43	0.39	3.79	0.00	0.26	0.06	304.35

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.37	0.33	3.19	0.00	0.22	0.05	256.56

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	11.70	800.05	1,673.62
					800.05	1,673.62

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 3_Operational.urb924

Project Name: Shops 3 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.01	0.15	0.00	0.00	0.00	15.07
TOTALS (tons/year, mitigated)	0.02	0.01	0.14	0.00	0.00	0.00	15.07
Percent Reduction	0.00	0.00	6.67	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.26	0.24	2.27	0.00	0.16	0.03	182.09
TOTALS (tons/year, mitigated)	0.22	0.20	1.91	0.00	0.13	0.03	153.50
Percent Reduction	15.38	16.67	15.86	NaN	18.75	0.00	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.28	0.25	2.42	0.00	0.16	0.03	197.16
TOTALS (tons/year, mitigated)	0.24	0.21	2.05	0.00	0.13	0.03	168.57
Percent Reduction	14.29	16.00	15.29	NaN	18.75	0.00	14.50

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Area Source Unmitigated Detail Report

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	14.82
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.01	0.15	0.00	0.00	0.00	15.07

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	14.82
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, mitigated)	0.02	0.01	0.14	0.00	0.00	0.00	15.07

Area Source Changes to Defaults

Operational Unmitigated Detail Report

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.26	0.24	2.27	0.00	0.16	0.03	182.09
TOTALS (tons/year, unmitigated)	0.26	0.24	2.27	0.00	0.16	0.03	182.09

Operational Mitigated Detail Report

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.22	0.20	1.91	0.00	0.13	0.03	153.50

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	7.00	478.66	1,001.31
					478.66	1,001.31

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Shops 4_Operational.urb924

Project Name: Shops 4 - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.01	0.15	0.00	0.00	0.00	18.03
TOTALS (tons/year, mitigated)	0.02	0.01	0.14	0.00	0.00	0.00	18.03
Percent Reduction	0.00	0.00	6.67	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.31	0.28	2.72	0.00	0.19	0.04	218.51
TOTALS (tons/year, mitigated)	0.26	0.24	2.29	0.00	0.16	0.03	184.20
Percent Reduction	16.13	14.29	15.81	NaN	15.79	25.00	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.33	0.29	2.87	0.00	0.19	0.04	236.54
TOTALS (tons/year, mitigated)	0.28	0.25	2.43	0.00	0.16	0.03	202.23
Percent Reduction	15.15	13.79	15.33	NaN	15.79	25.00	14.50

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	17.78
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.01	0.15	0.00	0.00	0.00	18.03

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	17.78
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, mitigated)	0.02	0.01	0.14	0.00	0.00	0.00	18.03

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.31	0.28	2.72	0.00	0.19	0.04	218.51
TOTALS (tons/year, unmitigated)	0.31	0.28	2.72	0.00	0.19	0.04	218.51

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.26	0.24	2.29	0.00	0.16	0.03	184.20

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	8.40	574.39	1,201.58
					574.39	1,201.58

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad A Retail_Operational.urb924

Project Name: Pad A Retail - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.01	0.14	0.00	0.00	0.00	7.13
TOTALS (tons/year, mitigated)	0.01	0.01	0.13	0.00	0.00	0.00	7.13
Percent Reduction	0.00	0.00	7.14	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.12	0.11	1.05	0.00	0.07	0.02	84.54
TOTALS (tons/year, mitigated)	0.10	0.09	0.89	0.00	0.06	0.01	71.27
Percent Reduction	16.67	18.18	15.24	NaN	14.29	50.00	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.13	0.12	1.19	0.00	0.07	0.02	91.67
TOTALS (tons/year, mitigated)	0.11	0.10	1.02	0.00	0.06	0.01	78.40
Percent Reduction	15.38	16.67	14.29	NaN	14.29	50.00	14.48

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.00	0.00	0.00	0.00	6.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.01	0.01	0.14	0.00	0.00	0.00	7.13

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.00	0.00	0.00	0.00	6.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, mitigated)	0.01	0.01	0.13	0.00	0.00	0.00	7.13

Area Source Changes to Defaults

Operational Unmitigated Detail Report.

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.12	0.11	1.05	0.00	0.07	0.02	84.54
TOTALS (tons/year, unmitigated)	0.12	0.11	1.05	0.00	0.07	0.02	84.54

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.10	0.09	0.89	0.00	0.06	0.01	71.27

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	3.25	222.23	464.90
					222.23	464.90

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

9/8/2010 10:17:51 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad A Restaurant_Operational.urb924

Project Name: Pad A Restaurant - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.01	0.14	0.00	0.00	0.00	7.13
TOTALS (tons/year, mitigated)	0.01	0.01	0.13	0.00	0.00	0.00	7.13
Percent Reduction	0.00	0.00	7.14	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.12	0.11	1.05	0.00	0.07	0.02	84.54
TOTALS (tons/year, mitigated)	0.10	0.09	0.89	0.00	0.06	0.01	71.27
Percent Reduction	16.67	18.18	15.24	NaN	14.29	50.00	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.13	0.12	1.19	0.00	0.07	0.02	91.67
TOTALS (tons/year, mitigated)	0.11	0.10	1.02	0.00	0.06	0.01	78.40
Percent Reduction	15.38	16.67	14.29	NaN	14.29	50.00	14.48

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.00	0.00	0.00	0.00	6.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.01	0.01	0.14	0.00	0.00	0.00	7.13

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.00	0.00	0.00	0.00	6.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, mitigated)	0.01	0.01	0.13	0.00	0.00	0.00	7.13

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.12	0.11	1.05	0.00	0.07	0.02	84.54
TOTALS (tons/year, unmitigated)	0.12	0.11	1.05	0.00	0.07	0.02	84.54

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.10	0.09	0.89	0.00	0.06	0.01	71.27

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Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	3.25	222.23	464.90
					222.23	464.90

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad B_Operational.urb924

Project Name: Pad B - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.01	0.14	0.00	0.00	0.00	6.60
TOTALS (tons/year, mitigated)	0.01	0.01	0.13	0.00	0.00	0.00	6.60
Percent Reduction	0.00	0.00	7.14	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.11	0.10	0.97	0.00	0.07	0.01	78.04
TOTALS (tons/year, mitigated)	0.09	0.09	0.82	0.00	0.06	0.01	65.79
Percent Reduction	18.18	10.00	15.46	NaN	14.29	0.00	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.12	0.11	1.11	0.00	0.07	0.01	84.64
TOTALS (tons/year, mitigated)	0.10	0.10	0.95	0.00	0.06	0.01	72.39
Percent Reduction	16.67	9.09	14.41	NaN	14.29	0.00	14.47

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.00	0.00	0.00	0.00	6.35
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.01	0.01	0.14	0.00	0.00	0.00	6.60

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.00	0.00	0.00	0.00	6.35
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, mitigated)	0.01	0.01	0.13	0.00	0.00	0.00	6.60

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.11	0.10	0.97	0.00	0.07	0.01	78.04
TOTALS (tons/year, unmitigated)	0.11	0.10	0.97	0.00	0.07	0.01	78.04

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.09	0.09	0.82	0.00	0.06	0.01	65.79

9/8/2010 10:19:10 AM

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	3.00	205.14	429.13
					205.14	429.13

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: E:\1758 Greenberg Farrow\1758.0006 Mitchell Ranch Center ISR\Modeling\URBEMIS\Mitchell Ranch_Pad C_Operational.urb924

Project Name: Pad C - Operational

Project Location: Stanislaus County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.01	0.15	0.00	0.00	0.00	8.72
TOTALS (tons/year, mitigated)	0.01	0.01	0.14	0.00	0.00	0.00	8.72
Percent Reduction	0.00	0.00	6.67	NaN	NaN	NaN	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.15	0.13	1.30	0.00	0.09	0.02	104.05
TOTALS (tons/year, mitigated)	0.13	0.11	1.09	0.00	0.08	0.02	87.71
Percent Reduction	13.33	15.38	16.15	NaN	11.11	0.00	15.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.16	0.14	1.45	0.00	0.09	0.02	112.77
TOTALS (tons/year, mitigated)	0.14	0.12	1.23	0.00	0.08	0.02	96.43
Percent Reduction	12.50	14.29	15.17	NaN	11.11	0.00	14.49

9/8/2010 10:20:24 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	8.47
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.01	0.01	0.15	0.00	0.00	0.00	8.72

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	8.47
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.13	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, mitigated)	0.01	0.01	0.14	0.00	0.00	0.00	8.72

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.15	0.13	1.30	0.00	0.09	0.02	104.05
TOTALS (tons/year, unmitigated)	0.15	0.13	1.30	0.00	0.09	0.02	104.05

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Regnl shop. center	0.13	0.11	1.09	0.00	0.08	0.02	87.71

9/8/2010 10:20:25 AM

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Regnl shop. center		68.38	1000 sq ft	4.00	273.52	572.18
					273.52	572.18

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.7	0.2	99.6	0.2
Light Truck < 3750 lbs	12.4	0.8	93.4	5.8
Light Truck 3751-5750 lbs	21.3	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.5	0.0	76.0	24.0
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	44.4	55.6
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.1	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.4	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	2.6
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

Source: NAIP for Stanislaus County (2009).

Michael Brandman Associates

NORTH

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Feet

Exhibit 3
Intersections

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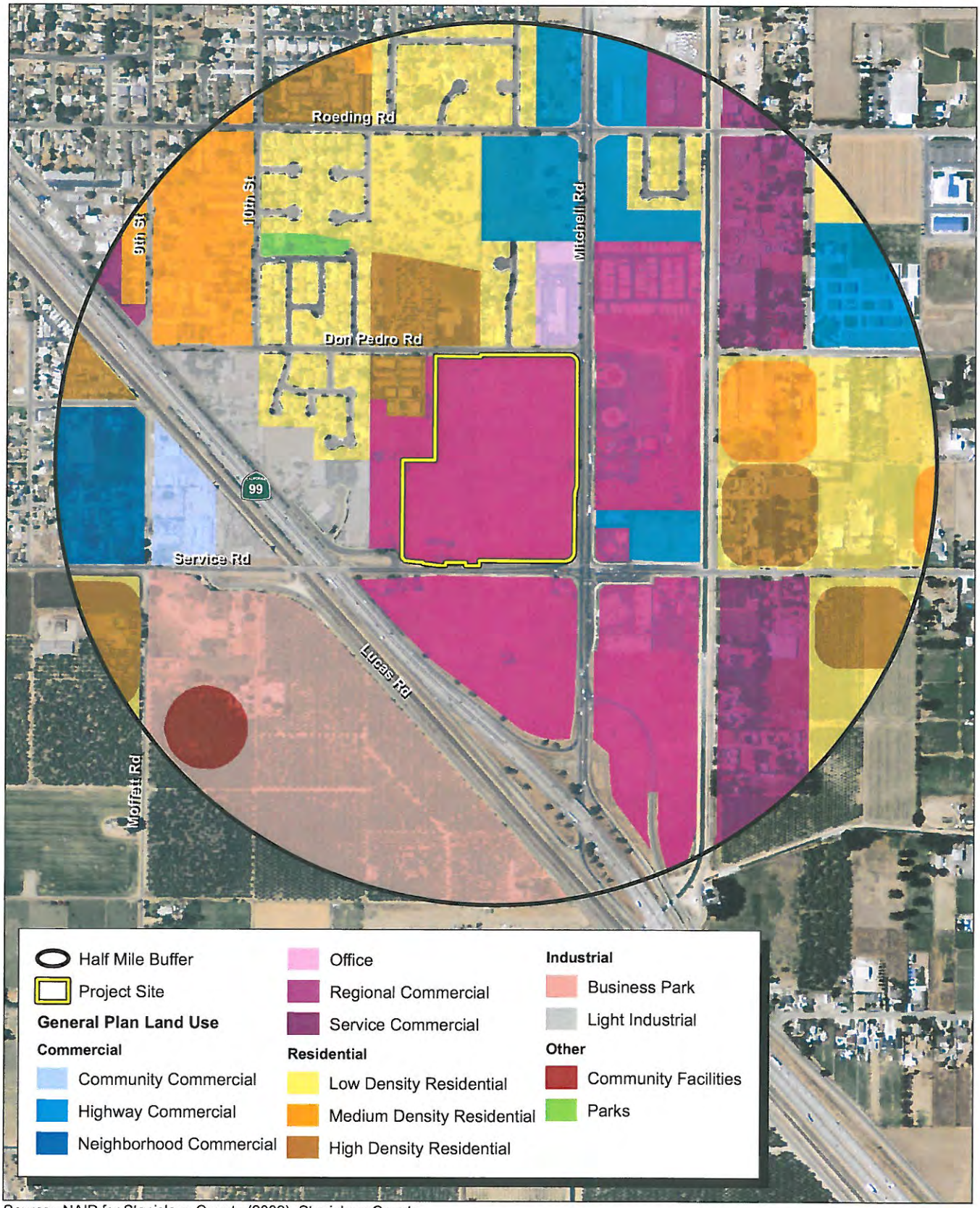
GREENBERG FARROW • MITCHELL RANCH CENTER • CERES, CALIFORNIA
AIR IMPACT ASSESSMENT APPLICATION

List of Intersections

9/8/2010

No.	Intersection Rds							
	N/S	E/W	Type	*Notes*		3	4	5
1	Mitchell Road	Roeding Road	4		1	0	1	0
2	Mullen Way	Roeding Road	3		1	1	0	0
3	Chaulet Lane	Roeding Road	3		1	1	0	0
4	Moore Road	Roeding Road	4		1	0	1	0
5	Mitchell Road	Frontier Drive	3		1	1	0	0
6	Road 1	Frontier Drive	3		1	1	0	0
7	Buffalo Way	Frontier Drive	3		1	1	0	0
8	Homestead Way	Frontier Drive	3		1	1	0	0
9	Road 1	Donner Drive	3		1	1	0	0
10	Buffalo Way	Donner Drive	3		1	1	0	0
11	Homestead Way	Donner Drive	3		1	1	0	0
12	Mitchell Road	Don Pedro Road	3		1	1	0	0
13	Mitchell Road	Service Road	4		1	0	1	0
14	Mitchell Road	Frontage Road	3		1	1	0	0
15	Moore Road	Don Pedro Road	3		1	1	0	0
16	Moore Road	Service Road	4		1	0	1	0
17	Frontage Road	Service Road	3		1	1	0	0
18	Vernal Drive	Roeding Road	3		1	1	0	0
19	Barry Court	Roeding Road	3		1	1	0	0
20	Rose Avenue	Roeding Road	3		1	1	0	0
21	East Lane	Roeding Road	3		1	1	0	0
22	East Lane	Hayes Court	3		1	1	0	0
23	East Lane	Avery Court	3		1	1	0	0
24	10th Street	Roeding Road	4		1	0	1	0
25	10th Street	Melanie Court	3		1	1	0	0
26	10th Street	Tricia Court	3		1	1	0	0
27	10th Street	Veda Drive	4		1	0	1	0
28	10th Street	Holly Circle	3		1	1	0	0
29	Larisa Lane	Veda Drive	3		1	1	0	0
30	Evalee Lane	Veda Drive	3		1	1	0	0
31	Moore Road	Simms Road	3		1	1	0	0
32	10th Street	Don Pedro Road	3		1	1	0	0
33	Evalee Lane	Don Pedro Road	4		1	0	1	0
34	Evalee Lane	Christy Lane	3		1	1	0	0
35	Timberly Lane	Don Pedro Road	3		1	1	0	0
36	Archcliff Drive	Don Pedro Road	3		1	1	0	0
37	El Camino Avenue	Don Pedro Road	3		1	1	0	0
38	Omie Lane	Don Pedro Road	3		1	1	0	0
39	Sherry Court	Christy Lane	3		1	1	0	0
40	Omie Lane	Christy Lane	3		1	1	0	0
41	9th Street	El Camino Lane	3		1	1	0	0
42	Brickit Court	El Camino Lane	3		1	1	0	0
43	Moffett Road	Service Road	4		1	0	1	0
44	Lucas Road	Service Road	3		1	1	0	0
45	Lucas Road	Joseph Road	3		1	1	0	0
46	Vernal Drive	Roswell Way	3		1	1	0	0
47	Rose Avenue	Roswell Way	3		1	1	0	0
48	Evalee Lane	Astro Drive	3		1	1	0	0
49								
			152		48	40	8	0



Source: NAIP for Stanislaus County (2009), Stanislaus County.

NORTH

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Feet

Michael Brandman Associates

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Exhibit 4
General Plan Land Use

GREENBERG FARROW • MITCHELL RANCH CENTER • CERES, CALIFORNIA
AIR IMPACT ASSESSMENT APPLICATION

General Plan Land Use

General Plan Land Use Designation	Acreage	# of Dwelling Units per acre	# of Jobs per acre	Total Dwelling Units	Total Jobs
Business Park	55.50	0	11.63	0	645
Light Industrial	12.39	0	11.63	0	144
Office	3.73	0	22.91	0	86
Community Commercial	5.85	0	13.49	0	79
Neighborhood Commercial	11.10	0	13.49	0	150
Service Commercial	37.54	0	13.49	0	506
Regional Commercial	95.12	0	14.99	0	1426
Highway Commercial	32.06	0	14.99	0	481
High Density Residential	35.07	25	0	877	0
Medium Density Residential	27.95	12	0	335	0
Low Density Residential	76.72	7	0	537	0
Community Facilities, PSF	4.49	0	0	0	0
Parks	1.46	0	0	0	0
Total				1749	3517
Jobs to Housing Ratio	*2.0*				

Source: City of Ceres General Plan Land Use Element

Land Use Category	Employees/Acre
Regional Retail	14.99
Other Retail/Svc.	13.49
Low Rise Office	22.91
High-Rise Office	116.32
Hotel/Motel	11.04
R & D/Flex Space	18.13
Light Manufacturing	11.63
Heavy Manufacturing	17.05
Warehouse	10.63
Government Office	16.23

Source: Job Creation estimates from Melodee Schwamb, Corporate Locations Project Manager, Fresno Economic Development Corporation (EDC)

Low Density Residential (LDR)

This designation provides opportunities for single family residential use on lots typically ranging in size from 5,000 to 7,000 square feet. Residential densities within this designation may not exceed 7.0 du/gross acre. Housing types permitted in this designation include traditional detached single family dwellings, patio homes, zero lot line homes, attached single family homes (townhouses and condominiums), and mobile home/manufactured home subdivisions or mobile home parks. Residential developments on properties designated LDR will typically consist of detached single family dwellings at suburban to urban densities.

Medium Density Residential (MDR)

This designation provides opportunities for detached single family, attached single family, and multiple family residential uses at relatively high densities. For detached single family housing, lot sizes in this designation will typically range in size from 3,000 to 5,000 square feet. For other housing types, particularly attached single family and multiple family housing, lot size is far less important than overall density. Residential densities within this designation range from a minimum of 7.0 to a maximum of 12 du/gross acre. Housing types permitted in this designation include traditional single family dwellings, patio homes, zero lot line homes, townhouses, condominiums, duplexes, triplexes, apartments, and mobile home/manufactured home subdivisions or parks. Residential developments on properties designated MDR will typically consist of a mixture of attached and detached single family dwellings, condominiums, townhouses, and low-density garden apartments at urban densities.

High Density Residential (HDR)

This designation provides opportunities for attached single family and multiple family residential uses at relatively high densities. For attached single family and multiple family housing at these densities, lot size is far less important than overall density. Residential densities within this designation range from a minimum of 12 to a maximum of 25 du/gross acre. Housing types permitted in this designation include single family dwellings, patio homes, zero lot line homes, townhouses, condominiums, duplexes, triplexes, apartments, and mobile home/manufactured home parks. Residential developments on properties designated HDR will typically consist of a mixture of attached single family dwellings and apartments at townhouse-apartment densities.

Commercial Land Use Designations

Office (O)

This designation provides for medical, professional, administrative, general office, and limited commercial service uses such as restaurants, dry cleaners, and other similar uses that are intended to serve the employees and clientele of the office uses and the immediate surrounding areas. Residential development is permitted at densities of 5 to 25 du/gross acre, to include residential uses allowed in the LDR, MDR, and HDR designations when found to be compatible with existing and future uses. Development in this

designation shall not exceed an FAR of 1.0. Parking structures shall be excluded in calculating gross floor area.

Neighborhood Commercial (NC)

This designation provides for neighborhood retail and service uses such as supermarkets, pharmacies, dry cleaners, video stores, and other uses that generally serve nearby residential areas and carry products or offer services used by households on a regular basis. Office uses and business services may also be allowed provided that the overall character of the area retains its neighborhood retail and service orientation. Development in this designation shall not exceed an FAR of 0.5. Residential development, particularly on the second floor or back of stores, is permitted at densities consistent with the High Density Residential designation.

In older areas, these uses have been located along major streets in "strip centers." In newly developing areas, Neighborhood Commercial areas should be designed as freestanding, integrated neighborhood shopping centers with a site area of from 1 to 5 acres and anchored by a supermarket.

Community Commercial (CC)

This designation provides for a full range of retail and service uses, including retail stores, food and drug stores, apparel stores, specialty shops, motor vehicle sales and service, home furnishings, durable goods, real estate offices, restaurants, entertainment uses, florists, hotels/motels, and other similar uses that serve a community wide market. Development in this designation shall not exceed an FAR of 0.5.

In older areas, many of these uses have been located along major streets in "strip centers." In newly developing areas, many of the uses in the category tend to locate in freestanding, integrated shopping centers that can be distinguished by the scale and scope of their development.

Highway Commercial (HC)

This designation provides for uses designed to serve motorists traveling along State Route 99 at or near interchanges that are convenient and safe for such uses. This designation is also intended to provide locations for uses that depend on high visibility from the freeway. Allowable uses in this designation include service stations, hotels/motels, restaurants, and other similar uses primarily oriented toward visitors and travelers. Development in this designation shall not exceed an FAR of 0.5.

Service Commercial (SC)

This designation provides for the heavy and wholesale commercial uses that do not need highly visible locations, or in locations where noise levels or other conditions may limit the suitability for other commercial uses. Service Commercial uses can serve as a buffer between the freeway and residential or retail-oriented commercial areas. Allowable uses in this designation include repair facilities, distributing uses, sales of building materials, motor

vehicle sales, and storage-oriented uses. Development in this designation shall not exceed a FAR of 0.5.

Downtown Commercial/Residential (DCR)

This designation provides for a full range of retail and service uses, including apparel stores, restaurants, specialty shops, entertainment uses, bookstores, travel agencies, hotels/motels, and other similar uses serving both a community-wide market and larger daytime downtown employment population. It also provides for banks, savings and loans, financial, medical, and professional offices, and other general office uses. The Downtown Commercial/Residential designation also applies to the older residential neighborhoods Downtown, that are generally single family residential in character. This designation provides for single and multi-family residential uses at density from 5.0 to 25.0 units per gross acre. Residential development as a mixed use in conjunction with nonresidential development at densities consistent with the High Density Residential designation is permitted and encouraged. Nonresidential development in this designation shall not exceed an FAR of 3.0

Regional Commercial (RC)

This designation provides for region-serving commercial uses, including large-scale shopping centers, wholesale "club" type stores, factory outlets, and other commercial uses including retail stores, food and drug stores, apparel stores, specialty shops, motor vehicle sales and service, home furnishings, durable goods, real estate offices, restaurants, entertainment uses, florists, hotels/motels, and other similar uses that serve a community wide and/or regional market. Where appropriate, residential uses on second floors will be permitted by discretionary approval. Development in this designation shall generally not exceed an FAR of 0.5. In select cases, an FAR of up to 5.0 will be permitted, where adequate traffic access and adequate fire response can be provided.

Industrial Land Use Designations

Business Park (BP)

This designation provides for limited industrial uses, office centers, research and development facilities, medical and institutional uses, warehousing and distributing, "back-office" uses, and other similar uses located in a low intensity, landscaped setting with high design and development standards. Incidental employee-serving retail/service, and ancillary on-site retail may also be permitted. Development in this designation shall not exceed an FAR of 0.3.

Light Industrial (LI)

This designation provides for light industrial and heavy commercial uses, including light manufacturing and fabricating, contractors yards and offices, motor vehicle service and repair, wholesale uses, lumber yards, hardware stores, other similar industrial and heavy commercial uses, offices, and recreational uses. Incidental employee-serving retail and services may also

be permitted. Development in this designation shall not exceed an FAR of 0.5.

General Industrial (GI)

This designation provides for large-scale, extensive types of industrial/ manufacturing uses, including manufacturing, food processing, motor vehicle service and repair, contractors yards, feed and fuel facilities, truck yards and terminals, warehousing and storage uses, wholesale uses, solid waste management and recycling facilities, construction supplies and building material facilities, offices, and recreational uses. Although the uses in this designation are oriented to industrial activities and uses, incidental employee-serving retail/service and on-site specialty retail uses may also be permitted. Sites adjacent to rail lines, major streets, and good freeway access are desirable for most of the uses in this designation. Development in this designation shall not exceed an FAR of 0.65.

Other Land Use Designations

Commercial Recreation (CR)

This designation provides for publicly and privately-operated recreational uses, including golf courses, arcades, miniature golf courses, amusement parks, and sports complexes. Supporting and accessory uses such as single and multi-family dwellings, clubhouses, restaurants, specialty retail sales, and hotels and motels will also be permitted by discretionary approval. Development in this designation shall not exceed an FAR of 0.20.

Community Facilities (CF)

This designation is applied to the city's major public and private facilities and institutional uses. Most common are public safety facilities (i.e., fire stations), which are labeled Community Facility-Public Safety Facility for clarity (CF-PSF). The Land Use Diagram shows the specific locations of *existing* major community facilities. Except for sites that have been acquired, the Land Use Diagram shows only the general location of future public or institutional uses in the area where they will be needed. Selection of specific sites is the responsibility of the respective governmental agencies or private institutions serving the Ceres area.

The designation on the Land Use Diagram of any future public or institutional site that has not been acquired shall not be construed to limit the existing or future use of the designated land in any way. The predominant land use designation surrounding any property designated for a future community facilities use shall be used to determine the potential use of the property prior to its acquisition by a governmental agency or private institution.

Schools (S)

This designation is applied to existing and proposed public schools. Schools are further labeled as elementary schools (ES), junior high schools (JHS), and high schools (HS). The Land Use Diagram shows the specific locations of *existing* schools. Except for sites that have been acquired, the General Plan Land Use Diagram shows only the general location of future elementary schools in the areas where they may be needed.

The designation on the General Plan Land Use Diagram of any future school site that has not been acquired shall not be construed to limit the existing or future use of the designated land in any way. The predominant land use designation surrounding any property designated for a future school shall be used to determine the potential use of the property prior to its acquisition by a public school district.

Parks (P)

This designation is applied to existing and proposed public parks. The Land Use Diagram shows the specific locations of *existing* parks. Except for sites that have been acquired, the General Plan Land Use Diagram shows only the general location of future parks in the areas where they may be needed.

The designation of any future park site on the General Plan Land Use Diagram that has not been acquired shall not be construed to limit the existing or future use of the designated land in any way. The predominant land use designation surrounding any property designated for a future park shall be used to determine the potential use of the property prior to its acquisition by the City of Ceres.

Given their small size, some of the mini-park sites may not be large enough to be displayed on the Land Use Diagram. This shall not prevent these sites from being considered to have been appropriately classified.

Residential Reserve (RR)

This designation is applied to those properties within the Planning Area to be considered for development with residential uses beyond the time frame of the General Plan (2015). This land is intended to generally remain in agricultural, open space, or existing rural residential uses through the time frame of this General Plan. Limited unincorporated development consistent with County zoning of these areas is permissible; however, no substantial urban development or annexation may occur on lands designated as Residential Reserve before the General Plan is amended to specify a primary land use designation for the property. Allowable uses shall include those uses specified under the Agriculture (A) designation, underlying County zoning, and existing rural residential uses.

Industrial Reserve (IR)

This designation is applied to those properties within the Planning Area to be considered for development with industrial uses beyond the time frame

4.6. City of Ceres

Planning and Policy Context

The following summarizes past planning efforts and establishes a policy framework to guide future transportation decisions and capital improvement programming. This undertaking is intended to promote regional planning, offer opportunities to coordinate infrastructure improvements, and to incorporate past planning efforts into the Current Plan.

Ceres General Plan (1997)

The General Plan devotes significant attention to Non-Motorized transportation in the Land Use and Community Design and Transportation and Circulation elements. A bicycle circulation map is included as Figure 2-2 in the Plan. The Plan states that "Improving the ability for Ceres residents and workers to walk or bike not only reduces automobile trips, with benefits for air quality, but it also promotes greater community interaction. This is one of the small-town qualities that the General Plan seeks to preserve and enhance."

Several Land Use and Community Design policies apply to designing new residential and commercial development to promote bicycling and walking. Transportation and Circulation policies promote connectivity and walking and bicycling on residential streets, bicycle parking, and development of a comprehensive bicycle network. Additionally, the Public Facilities and Services element includes a policy to encourage siting schools in areas with safe and convenient pedestrian and bicycle access. Similarly, the Recreational and Cultural Resources element includes a policy to provide access to neighborhood parks via trials, bikeways, and sidewalks. The Recreational and Cultural Resources element encourages the use of alternative modes by requiring new development to provide adequate pedestrian and bicycle facilities.

Proposed implementation programs include development of residential design guidelines to promote pedestrian and bicycle-friendly development; review of local street width requirements to identify opportunities for narrower, more pedestrian-friendly streets; revision of the Zoning Ordinance and development standards to incorporate bicycle parking standards; negotiating with the Turlock Irrigation District to use canal rights-of-way for pedestrian pathways and Class I bikeways; and including provisions for funding non-automotive transportation in capital improvement planning.

Mitchell Road Specific Plan (1995)

The Mitchell Road Specific Plan includes limited provisions for Non-Motorized transportation. As stated in the Appendix, "Specific Plan Design Guidelines provide for pedestrian walkways along major streets and connector streets, which connect developments through natural open space areas," and "The Design Guidelines encourage bicycle lanes along secondary roadways and canals, in addition to the development of courtyards, atriums, and other outdoor gathering and eating areas."

Existing Conditions

Located along Highway 99, Ceres is home to over 34,000. The City's is nearly 7 square miles of flat terrain. Existing bicycle facilities include over 13 miles of bikeways. The majority of Ceres' bikeways, over nine miles, are Class III facilities. The remaining bikeways are both Class I and Class II facilities.

Proposed Improvements

Proposed Class I facilities in Ceres include an east-west path along the canal south of Gondring Road, a north-south path along Moore Road, connecting to an extension of the Hatch Road path to the east. A proposed Class I path along the railroad corridor adjacent to South 7th Street would connect into downtown Modesto.

Class II bike lanes are proposed on many of Ceres' major cross-town roads, including Whitmore Avenue, Service Road, Crows Landing Road, Blaker Road/Richland Avenue, Central Avenue, and Esmar Road/Boothe Road, as well as El Camino Avenue and Herndon Road (parallel to State Route 99).

No Class III bicycle routes are proposed in Ceres.

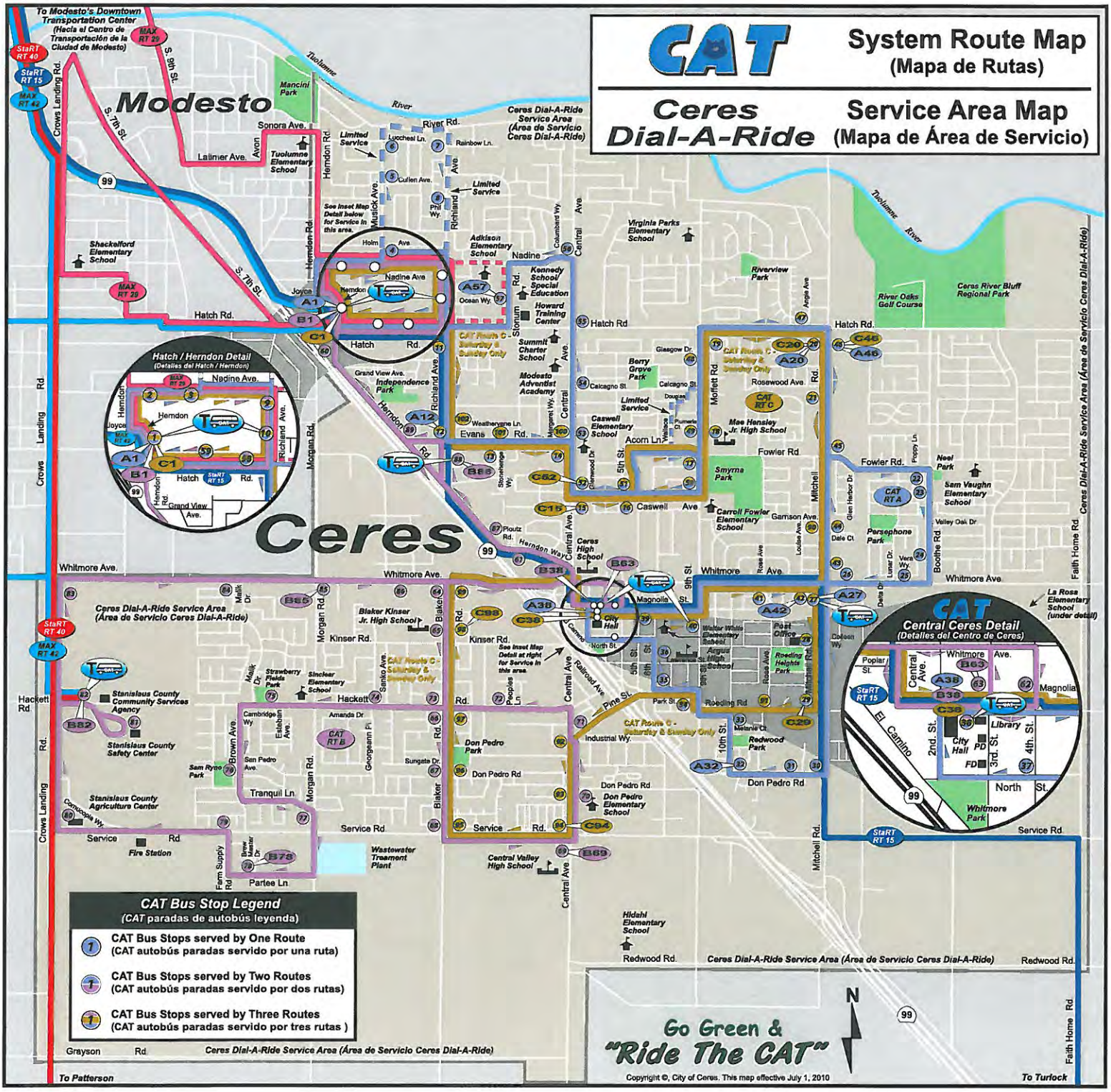
Table 4-3 and **Figure 4-4** include details for the Ceres bikeway network.

Table 4-3: Ceres Existing and Proposed Bikeway Network

Segment Name	From	To	Bikeway Class	Length (Miles)	Status	Primary Segment	Cost
Boothe Rd.	E Hatch Rd.	Rhone Dr.	II	0.25	Existing		Existing
Boothe Rd.	Just North of Whitehaven Ave.	Whitmore Ave.	II	0.33	Existing		Existing
Calcagno St.	Central Ave.	Lynley Dr.	III	0.34	Existing		Existing
Calcagno St.	Lynley Dr.	Running Ln.	III	0.11	Existing		Existing
Central Ave.	E Whitmore Ave.	River Rd.	III	1.83	Existing		Existing
Charlottesville Ln.	Central Ave.	Mitchell Rd.	I	1.01	Existing		Existing
E Hatch Rd.	Charlottesville Ln.	Eastgate Blv.	I	0.52	Existing		Existing
E Hatch Rd.	Herndon Rd.	Central Ave.	I	0.94	Existing		Existing
E Service Rd.	Blaker Rd.	Central Ave.	II	0.51	Existing		Existing
E Whitmore Ave.	Ceres City Limits	Mitchell Rd.	III	2.53	Existing		Existing
Fowler Rd.	Glen Ridge Dr.	Glen Harbor Dr.	II	0.08	Existing		Existing
Fowler Rd.	Moffett Rd.	Mitchell Rd.	III	0.50	Existing		Existing
Helen Perry Rd.	Boothe Rd.	School Parking Lot	II	0.13	Existing		Existing
Lunar Dr.	FowlerRd.	E Whitmore Ave.	III	0.45	Existing		Existing
Richland Ave.	River Rd.	Nadine Ave.	II	0.53	Existing		Existing
Rose Ave.	Galsgow Dr.	Roeding Rd.	III	1.42	Existing		Existing
W Whitmore Ave.	S Carpenter Rd.	Ceres City Limits	III	2.11	Existing		Existing
		Total Existing		**13.60**			
10th St.	Roeding Rd.	Don Pedro Rd.	II	0.25	Proposed		$7,100
6th St.	E Whitmore Ave.	Park St.	II	0.42	Proposed		$11,900
Blaker Rd.	E Whitmore Ave.	Ceres City Limits	II	1.60	Proposed		$45,000
Boothe Rd.	Rhone Dr.	Just North of Whitehaven Ave.	II	0.39	Proposed		$11,100
Bystrum Rd.	River Rd.	Joyce Ave.	II	1.21	Proposed		$34,200
Canal	Blaker Rd.	Mitchell Rd.	I	1.56	Proposed		$1,298,200
Canal	Crows Landing Rd.	Blaker Rd.	I	1.52	Proposed		$1,264,300
Central Ave.	E Service Rd.	Pine St.	II	0.38	Proposed		$10,700
Central Ave.	River Rd.	SR 99	II	0.17	Proposed		$4,800
Crows Landing Rd.	E Service Rd.	Crows Landing Rd.	II	0.51	Proposed	16A	$14,300
E Hatch Rd.	Eastgate Blv.	Faith Home Rd.	I	0.35	Proposed		$290,100
E Hatch Rd.	Mitchell Rd.	Charlottesville Ln.	I	0.14	Proposed		$118,800
E Service Rd.	Central Ave.	Moore Rd.	II	1.15	Proposed		$32,300
E Service Rd.	Crows Landing Rd.	Blaker Rd.	II	1.51	Proposed		$42,700
E Whitmore Ave.	Ceres City Limits	Faith Home Rd.	II	1.00	Proposed		$28,200
El Camino	E Whitmore Ave.	E Service Rd.	II	1.43	Proposed		$40,300
Fowler Rd.	Glen Harbor Dr.	Boothe Rd.	II	0.30	Proposed		$8,400
Fowler Rd.	Mitchell Rd.	Glen Ridge Dr.	II	0.03	Proposed		$1,000

Segment Name	From	To	Bikeway Class	Length (Miles)	Status	Primary Segment	Cost
Giddings St.	Paramount Ave.	Richland Ave.	II	0.21	Proposed		$5,900
Glasgow Dr.	Central Ave.	Moffett Rd.	II	0.50	Proposed		$14,000
Grand View Ave.	Herndon Rd.	Paramount Ave.	II	0.21	Proposed		$6,000
Hackett Rd.	Morgan Rd.	Central Ave.	II	1.01	Proposed		$28,500
Helen Perry Rd.	School Parking Lot	Clarendon Ct.	II	0.45	Proposed		$12,600
Herndon Rd.	Joyce Ave.	E Whitmore Ave.	II	1.46	Proposed		$41,000
Herndon Rd.	River Rd.	Herndon Ct.	III	0.90	Proposed		$11,400
Joyce Ave.	Bystrum Rd.	Herndon Rd.	II	0.09	Proposed		$2,500
Magnolia St.	Central Ave.	Moffett Rd.	III/II	0.50	Proposed		$14,000
Magnolia St.	Moffett Rd.	Rose Ave.	II	0.28	Proposed		$7,900
Mitchell Rd.	Class I	River Rd.	I	0.25	Proposed		$207,200
Mitchell Rd.	River Rd.	E Hatch Rd.	II	0.35	Proposed		$9,900
Moffett Rd.	River Rd.	E Whitmore Ave.	II	1.50	Proposed		$42,400
Moore Rd.	E Hatch Rd.	Service Rd.	I	2.00	Proposed		$1,670,800
Morgan Rd.	E Whitmore Ave.	Ceres City Limits	II	1.60	Proposed		$45,100
Paramount Ave.	Giddings St.	Grand View Ave.	II	0.03	Proposed		$900
Pine St.	Central Ave.	6th St.	II	0.38	Proposed		$10,800
Richard Wy.	Richland Ave.	Central Ave.	II	0.50	Proposed		$14,200
Richland Ave.	Nadine Ave.	SR 99	II	0.89	Proposed		$25,000
River Rd.	Central Ave.	Mitchell Rd.	II	1.27	Proposed		$35,700
Roeding Rd.	10th St.	Rose Ave.	II	0.15	Proposed		$4,200
		Total Proposed		**28.44**			**$5,473,400**

Figure 4-4: Ceres Existing and Proposed Bikeway Network


CAT
System Route Map
(Mapa de Rutas)
Ceres Dial-A-Ride
Service Area Map
(Mapa de Área de Servicio)
Modesto
Ceres
Hatch / Herndon Detail
(Detalles del Hatch / Herndon)
Central Ceres Detail
(Detalles del Centro de Ceres)
CAT Bus Stop Legend
(CAT paradas de autobús leyenda)
CAT Bus Stops served by One Route
(CAT autobús paradas servido por una ruta)
CAT Bus Stops served by Two Routes
(CAT autobús paradas servido por dos rutas)
CAT Bus Stops served by Three Routes
(CAT autobús paradas servido por tres rutas)
Ceres Dial-A-Ride Service Area (Área de Servicio Ceres Dial-A-Ride)
Go Green &
"Ride The CAT"
Copyright ©, City of Ceres. This map effective July 1, 2010
To Modesto's Downtown Transportation Center
(Hacia el Centro de Transportación de la Ciudad de Modesto)
To Patterson
To Turlock

CAT Route A - Hatch / Mitchell / Whitmore / Magnolia

Monday - Friday Timetable, Bus runs every 60 minutes *(Lunes-Viernes tabla de horario, Autobús corre cada 60 Minutos)*

To Magnolia / City Hall / Library							To Herndon & Hatch		
Herndon Rd. & Hatch Rd. (A1)	Richland & Evans (A12)	Mitchell Rd. & Hatch (Food 4 Less) (A20)	Mitchell Rd. & Whitmore (A27)	Tenth St. & Don Pedro (A32)	Magnolia / City Hall / Ceres Library (A38)	Whitmore & Mitchell Rd. (A42)	Mitchell Rd. & Hatch (Wal Mart) (A46)	Stonum Rd. (Howard Training Center) (A57)	Herndon Rd. & Hatch Rd. (A1)
6:00am	6:08am	6:16am	6:21am	6:25am	6:29am	6:34am	6:37am	6:47am	6:50am
7:00am*	7:08am	7:16am	7:21am	7:25am	7:29am	7:34am	7:37am**	7:47am	7:50am
8:00am	8:08am	8:16am	8:21am	8:25am	8:29am	8:34am	8:37am	8:47am	8:50am
9:00am	9:08am	9:16am	9:21am	9:25am	9:29am	9:34am	9:37am	9:47am	9:50am
10:00am	10:08am	10:16am	10:21am	10:25am	10:29am	10:34am	10:37am	10:47am	10:50am
11:00am	11:08am	11:16am	11:21am	11:25am	11:29am	11:34am	11:37am	11:47am	11:50am
12:00pm	**12:08pm**	**12:16pm**	**12:21pm**	**12:25pm**	**12:29pm**	**12:34pm**	**12:37pm**	**12:47pm**	**12:50pm**
1:00pm	**1:08pm**	**1:16pm**	**1:21pm**	**1:25pm**	**1:29pm**	**1:34pm**	**1:37pm**	**1:47pm**	**1:50pm**
2:00pm	**2:08pm**	**2:16pm**	**2:21pm**	**2:25pm**	**2:29pm**	**2:34pm**	**2:37pm****	**2:47pm**	**2:50pm**
3:00pm*	**3:08pm**	**3:16pm**	**3:21pm**	**3:25pm**	**3:29pm**	**3:34pm**	**3:37pm**	**3:47pm**	**3:50pm**
4:00pm	**4:08pm**	**4:16pm**	**4:21pm**	**4:25pm**	**4:29pm**	**4:34pm**	**4:37pm**	**4:47pm**	**4:50pm**
5:00pm	**5:08pm**	**5:16pm**	**5:21pm**	**5:25pm**	**5:29pm**	**5:34pm**	**5:37pm**	**5:47pm**	**5:50pm**
6:00pm	**6:08pm**	**6:16pm**	**6:21pm**	**6:25pm**	**6:29pm**	**6:34pm**	**6:37pm**	**6:47pm**	**6:50pm**

* Limited Service to Bus Stops #4, #5, #6, #7, #8 this trip. (Servicio Limitado en paradas de autobús numeros 4, 5, 6, 7, 8 de este viaje.)

** This trip will travel via Wallace Ave. and Acorn Dr. bypassing Mae Hensley Jr. High, bus stops #18 and #49. (Este viaje viajará via la avendia de Wallace y Acorn pasando la escuela Mae Hensley, en paradas de autobús numeros 18 y 49)

CAT Route B - Herndon / Service / Hackett / Crows Landing Rd.

Monday - Friday Timetable, Bus runs every 60 minutes *(Lunes-Viernes tabla de horario, Autobús corre cada 60 Minutos)*

To Hackett / Crows Landing Rd. (Community Service Agency)							To Herndon & Hatch		
Herndon Rd. & Hatch Rd. (B1)	Magnolia & Third St. (Northside) (B63)	Blaker Rd & Kinser Rd. (Blaker Kinser J.H.S.) (B65)	Service Rd. & Central Ave. (Central Valley H.S.) (B69)	Partee Ln. & Brew Master Dr. (B78)	Hackett Rd. (Community Service Agency) (B82)	Whitmore Ave. & Morgan Rd. (B85)	Magnolia / City Hall / Ceres Library (B38)	Richland Ave. at Stanislaus Recovery Resources (B88)	Herndon Rd. & Hatch Rd. (B1)
6:00am	6:12am	6:18am	6:25am	6:35am	6:39am	6:42am	6:46am	6:50am	6:55am
7:00am	7:12am	7:18am	7:25am	7:35am	7:39am	7:42am	7:46am	7:50am	7:55am
8:00am	8:12am	8:18am	8:25am	8:35am	8:39am	8:42am	8:46am	8:50am	8:55am
9:00am	9:12am	9:18am	9:25am	9:35am	9:39am	9:42am	9:46am	9:50am	9:55am
10:00am	10:12am	10:18am	10:25am	10:35am	10:39am	10:42am	10:46am	10:50am	10:55am
11:00am	11:12am	11:18am	11:25am	11:35am	11:39am	11:42am	11:46am	11:50am	11:55am
12:00pm	**12:12pm**	**12:18pm**	**12:25pm**	**12:35pm**	**12:39pm**	**12:42pm**	**12:46pm**	**12:50pm**	**12:55pm**
1:00pm	**1:12pm**	**1:18pm**	**1:25pm**	**1:35pm**	**1:39pm**	**1:42pm**	**1:46pm**	**1:50pm**	**1:55pm**
2:00pm	**2:12pm**	**2:18pm**	**2:25pm**	**2:35pm**	**2:39pm**	**2:42pm**	**2:46pm**	**2:50pm**	**2:55pm**
3:00pm	**3:12pm**	**3:18pm**	**3:25pm**	**3:35pm**	**3:39pm**	**3:42pm**	**3:46pm**	**3:50pm**	**3:55pm**
4:00pm	**4:12pm**	**4:18pm**	**4:25pm**	**4:35pm**	**4:39pm**	**4:42pm**	**4:46pm**	**4:50pm**	**4:55pm**
5:00pm	**5:12pm**	**5:18pm**	**5:25pm**	**5:35pm**	**5:39pm**	**5:42pm**	**5:46pm**	**5:50pm**	**5:55pm**

Saturday - CAT Route C - Hatch / Mitchell / Whitmore / Magnolia / Hackett / Service

Timetable, Bus runs every 60 minutes *(Sábado tabla de horario, Autobús corre cada 60 Minutos)*

To Magnolia / City Hall / Library							To Herndon & Hatch		
Herndon Rd. & Hatch Rd. (C1)	Caswell & Central Ave. (C16)	Mitchell Rd. & Hatch (Food 4 Less) (C20)	Mitchell Rd. & Roeding (C29)	Service Rd. & Central Ave. (C94)	Blaker Rd. & Kinser Rd. (C98)	Magnolia / City Hall / Ceres Library (C38)	Mitchell Rd. & Hatch (Wal Mart) (C46)	Caswell & Central Ave. (C52)	Herndon Rd. & Hatch Rd. (C1)
10:00am	10:08am	10:14am	10:18am	10:23am	10:27am	10:31am	10:37am	10:43am	10:50am
11:00am	11:08am	11:14am	11:18am	11:23am	11:27am	11:31am	11:37am	11:43am	11:50am
12:00pm	**12:08pm**	**12:14pm**	**12:18pm**	**12:23pm**	**12:27pm**	**12:31pm**	**12:37pm**	**12:43pm**	**12:50pm**
1:00pm	**1:08pm**	**1:14pm**	**1:18pm**	**1:23pm**	**1:27pm**	**1:31pm**	**1:37pm**	**1:43pm**	**1:50pm**
2:00pm	**2:08pm**	**2:14pm**	**2:18pm**	**2:23pm**	**2:27pm**	**2:31pm**	**2:37pm**	**2:43pm**	**2:50pm**
3:00pm	**3:08pm**	**3:14pm**	**3:18pm**	**3:23pm**	**3:27pm**	**3:31pm**	**3:37pm**	**3:43pm**	**3:50pm**
4:00pm	**4:08pm**	**4:14pm**	**4:18pm**	**4:23pm**	**4:27pm**	**4:31pm**	**4:37pm**	**4:43pm**	**4:50pm**
5:00pm	**5:08pm**	**5:14pm**	**5:18pm**	**5:23pm**	**5:27pm**	**5:31pm**	**5:37pm**	**5:43pm**	**5:50pm**

Sunday - CAT Route C - Hatch / Mitchell / Whitmore / Magnolia / Hackett / Service

Timetable, Bus runs every 60 minutes *(Domingo tabla de horario, Autobús corre cada 60 Minutos)*

To Magnolia / City Hall / Library							To Herndon & Hatch		
Herndon Rd. & Hatch Rd. (C1)	Caswell & Central Ave. (C16)	Mitchell Rd. & Hatch (Food 4 Less) (C20)	Mitchell Rd. & Roeding (C29)	Service Rd. & Central Ave. (C94)	Blaker Rd. & Kinser Rd. (C98)	Magnolia / City Hall / Ceres Library (C38)	Mitchell Rd. & Hatch (Wal Mart) (C46)	Caswell & Central Ave. (C52)	Herndon Rd. & Hatch Rd. (C1)
10:00am	10:08am	10:14am	10:18am	10:23am	10:27am	10:31am	10:37am	10:43am	10:50am
11:00am	11:08am	11:14am	11:18am	11:23am	11:27am	11:31am	11:37am	11:43am	11:50am
12:00pm	**12:08pm**	**12:14pm**	**12:18pm**	**12:23pm**	**12:27pm**	**12:31pm**	**12:37pm**	**12:43pm**	**12:50pm**
1:00pm	**1:08pm**	**1:14pm**	**1:18pm**	**1:23pm**	**1:27pm**	**1:31pm**	**1:37pm**	**1:43pm**	**1:50pm**
2:00pm	**2:08pm**	**2:14pm**	**2:18pm**	**2:23pm**	**2:27pm**	**2:31pm**	**2:37pm**	**2:43pm**	**2:50pm**
3:00pm	**3:08pm**	**3:14pm**	**3:18pm**	**3:23pm**	**3:27pm**	**3:31pm**	**3:37pm**	**3:43pm**	**3:50pm**

Mitigation Measures

Mixed Use/Affordable

		(Data Required)	Source of Requirement
Local Serving Retail	X	(Selected or Not Selected)	
	3517	Jobs	
Jobs to Housing Ratio	1749	DU	
	2.0		

Intersection Density

Intersections	Number	Nodes
3-Way	40	120
4-Way	8	32
5 - Way		0
Total	48	152

Area equals 0.79
Nodes/SqM **192**

Building Design

Energy Efficiency	9%	(% Above Title 24)	
Electrical Landscape Equip	3%	(% Electrical Equip - Use 3% if unknown)	
Wood Stoves	N/A	(# Wood Stoves)	
Wood Fireplaces	N/A	(# Fireplaces)	
Shower/Locker Facilities	N/A	(Selected or Not Selected)	Lockers only
Preferential Parking Space	N/A	(Selected or Not Selected)	
Parking Space Reduction	N/A	(No. Spaces Provided)	

Bike Lane Coverage (in map inches)

Arterials/Collectors	Length	Bike Length
Mitchell Road	5	3.75
Service Road	6	6
El Camino	6	6
Moore Road	5.5	5.5
	22.5	21.25

94% Coverage

Bicycle / Pedestrian

Bike Lanes	94%	(% Arterials/Collectors with Class I, II)	
Bike Storage	X	(Selected)	
Sidewalks	100%	(% on one or both sides)	
Street Design	192	(# Nodes/SqMile)	

Cheat Sheet

1	Mile	=	5,280 ft
0.5	Mile	=	2,640 ft
0.25	Mile	=	1,320 ft
1	Acre	=	43,560 SF
1	Sq Mile	=	640 Acres

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Department.	
	PS	**Don Pedro Road/Driveway 2** **MM 4.13.4b:** If El Camino Avenue is realigned in the future, Don Pedro Road should be restriped to provide a two-way left-turn lane to allow vehicles entering this driveway to pull out of the through lane. *Timing/Implementation: Mitigation shall occur as part of the approval of the realignment of El Camino Avenue.* *Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division and Public Works Department.*	LS
	PS	**Service Road/Right-In/Right-Out/Left-Out Driveway 6 (Westernmost Service Road Driveway)** **MM 4.13.4c:** This driveway shall be restricted to right-in/right-out operations with the installation of a raised median on Service Road. At such time as the interchange improvements are installed, the right-out access at this location shall be removed and the median modified accordingly. When this occurs, the westerly driveway (6) will become right-in only. *Timing/Implementation: Mitigation shall occur at the City Engineer's discretion at such time as the median is constructed on Service Road or when the interchange is constructed.* *Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division and Public Works Department.*	LS
Impact 4.13.5: Development of the proposed Mitchell Ranch Center project could result in inadequate parking capacity for project patrons and employees.	LS	None required.	LS
Impact 4.13.6: Development of the proposed Mitchell Ranch Center project may conflict with adopted policies, plans, or programs	PS	**MM 4.13.6:** In development of the final site plan, the project applicant shall:	LS

N –No Impact
PS - Potentially Significant
LCC – Less than Cumulatively Considerable

LS – Less Than Significant
CC – Cumulatively Considerable
SU – Significant and Unavoidable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
supporting alternative transportation (e.g., bus turnouts, bicycle racks).		• Consult with Ceres Area Transit and City staff regarding the final location of transit amenities prior to approval of the site plan. • Provide pedestrian connectivity between building entrances and planned transit stops. • Ensure pedestrian connectivity to transit and other planned pedestrian facilities with development of any sound walls proposed within the project site. • Construct sidewalks wide enough to comfortably accommodate two-way pedestrian travel (minimum of 5 feet). • Consult with City of Ceres staff to determine the type of bicycle facility that should be accommodated on Service Road along the project frontage and provide sufficient right-of-way. • Orient bicycle parking for both patrons and employees of the project. *Timing/Implementation: Mitigation shall be completed prior to site plan approval.* *Enforcement/Monitoring: City of Ceres Development Services Department and Public Works Department.*	
Impact 4.13.7: The proposed project may cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or reduction in level of service), either during the plus project condition, or the cumulative plus project condition.	CC	**#4 - Service Road/Central Avenue** **MM 4.13.7a:** The project applicant shall contribute its fair share toward the construction of improvements that would result in acceptable intersection operations, including construction of a third eastbound and a third westbound through lane (on Service Road), construction of a southbound right-turn-only lane on Central Avenue, and construction of a second westbound left-turn lane on Service Road and associated receiving lanes. The transition from three lanes to two lanes should begin 300 feet from the centerline of the Service Road/Central Avenue intersection and the lane drop should occur over 600 feet. *Timing/Implementation: Prior to issuance of a building permit.*	SU

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 4.2.1: Implementation of the proposed project, even with mitigation, has the potential to result in violations or contributions to existing violations of air quality standards and could, therefore, conflict with one or more applicable air quality plan.	PS	None feasible.	SU
Impact 4.2.2: Construction of the proposed Mitchell Ranch Center project would result in short-term emissions of criteria air pollutants from construction equipment operation and soil disturbances, potentially violating or contributing to an existing violation of one or more air quality standards. This impact is **potentially significant.**	PS	**MM 4.2.2a:** The following measures shall be implemented, in addition to the requirements of SJVAPCD Regulation VIII, at the project site during all construction activities: • Limit traffic speeds on unpaved roads to 15 miles per hour (mph); • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent; • Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site; • Install wind breaks at windward side(s) of construction areas; • Suspend excavation and grading activity when winds exceed 15 mph; and • Limit area subject to excavation, grading, and other construction activity at any one time. Soil exposure shall not exceed an area in which improvements can be completed during a single construction season. • The applicant shall use periodic watering for short-term stabilization of disturbed surface area and haul roads to minimize visible fugitive dust emissions. Watering, with complete coverage, shall occur at least three times a day, preferably in the mid-morning, afternoon and after work is done for the day. *Timing/Implementation: Mitigation shall be implemented throughout project construction phase.* *Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division*	LS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		MM 4.2.2b: Pollutant emissions shall be minimized by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications, by not allowing construction equipment to be left idling for more than five minutes (per California law). Contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board (CARB) (diesel fuel with sulfur content of 15 ppm by weight or less). *Timing/Implementation: Mitigation shall be implemented throughout project construction phase.* *Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division*	
		MM 4.2.2c: Graded site surfaces shall be stabilized upon completion of grading when subsequent development is delayed or expected to be delayed more than 30 days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate visible fugitive dust emissions. *Timing/Implementation: Mitigation shall be implemented throughout project construction phase.* *Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division*	
		MM 4.2.2d: Contractor agreements shall specify that existing power sources (e.g., power poles) or clean-fuel generators shall be used rather than temporary power generators. *Timing/Implementation: Mitigation shall be implemented throughout project construction phase.* *Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division*	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		MM 4.2.2e: During construction of the proposed project, only low-VOC paints and coatings as defined in SJVAPCD Rule 4601 shall be used. *Timing/Implementation: Mitigation shall be implemented throughout project construction phase.* Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Divisions	
Impact 4.2.3: The existing structures on the project site could contain asbestos materials. Demolition of these structures could result in the emission of airborne asbestos fibers, which are considered a hazardous air pollutant, potentially violating applicable air quality standards.	LS	None required.	LS
Impact 4.2.4: Operation of the proposed project would result in long-term emissions of criteria air pollutants from mobile and area sources that could violate or substantially contribute to an existing violation of one or more air quality standards.	PS	**MM 4.2.4a:** All buildings on the project site shall be designed and constructed to exceed minimum statewide energy requirements (Title 24). Measures may include, but are not limited to, the following: • Incorporate skylights into building designs to utilize natural daylight • Utilize computer-controlled daylight sensors and electronic dimming ballasts • Use high-efficiency light bulbs in all lighting fixtures • Use light-emitting diodes (LEDs) in exterior signage • Use energy-efficient appliances and heating, ventilation, and air conditioning (HVAC) systems • Use low-emission water heaters and/or central water heating systems • Increase building insulation • Use automated controls for HVAC systems or centralized energy management systems *Timing/Implementation: Prior to issuance of building permits* *Enforcement/Monitoring: City of Ceres Development Services*	LS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Department – Building Division	
		MM 4.2.4b: All buildings on the project site shall utilize Energy Star compliant (highly reflective) and high emissivity roofing (emissivity of at least 0.9 when tested in accordance with ASTM 408) for a minimum of 75 percent of the roof surface to reduce energy demands associated with air conditioning and to minimize the urban heat island effect. *Timing/Implementation:* *Prior to issuance of building permits* *Enforcement/Monitoring:* *City of Ceres Development Services Department – Planning and Building Divisions*	
Impact 4.2.5: Implementation of the proposed project would not be anticipated to contribute to localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards.	LS	None required.	LS
Impact 4.2.6: Delivery trucks entering and leaving the project site will result in low levels of diesel particulate emissions in the vicinity of the project site.	LS	None required.	LS
Impact 4.2.7: Implementation of the proposed Mitchell Ranch Center project would not be anticipated to result in an increased exposure of sensitive receptors to localized concentrations of air pollutants that would exceed applicable standards.	LS	None required.	LS
Impact 4.2.8: Receptors located in the vicinity of the proposed project may be exposed to odorous emissions.	PS	**MM 4.2.8:** Signage shall be provided on-site that prohibits the idling of trucks, including the use of auxiliary power units, for more than five minutes. Further, the proposed project shall pay for parking restrictions on the south side of Don Pedro Road as directed by the City of Ceres. These restrictions will include designating the south side of Don Pedro Road between Mitchell Road and the northwestern property corner of the proposed project as a "no parking" zone through the use of signs and/or curb painting.	LS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Timing/Implementation: Mitigation shall be completed prior to the issuance of a certificate of occupancy for Major 1. *Enforcement/Monitoring: City of Ceres Development Services Department and City of Ceres Public Works Department.*	
Impact 4.2.9: Implementation of the proposed project would individually result in significant emissions of criteria air pollutants and would therefore result in a **cumulatively considerable** impact to the existing regional air quality conditions.	CC	None feasible.	SU
Impact 4.2.10: Implementation of the proposed Mitchell Ranch Center project would result in the emission of greenhouse gases to the atmosphere, potentially contributing to global climate change and the associated consequences of climate change.	LS	None required.	LS
Impact 4.2.11: Implementation of the proposed project, in addition to existing, approved, proposed and reasonably foreseeable development projects in the San Joaquin Air Basin, would result in the emission of greenhouse gases in the atmosphere, potentially contributing to global climate change and the associated consequences of climate change. In addition, the proposed project as designed would result in emissions exceeding the 29 percent below business as usual threshold.	CC	None feasible.	SU
4.3 Biological and Natural Resources			
Impact 4.3.1: Implementation of the proposed Mitchell Ranch Center project could result in adverse effects, either directly or through habitat modifications that may affect species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulation, or by the CDFG or USFWS.	PS	**Migratory Birds or Raptors:** **MM 4.3.1:** If construction activities occur during the nesting seasons for raptors and migratory birds (typically March 1 through August 31), the project applicant shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of the construction area (no less than 500 feet outside project boundaries) no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or CDFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as	LS

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Get Smart About
WAL★MART
www.walmartfacts.com
A periodic fact sheet produced and distributed by Wal-Mart Stores, Inc.

Wal-Mart's Energy Efficient Stores Save Resources, Positively Impact the Environment

At Wal-Mart, we know that being an efficient and profitable business and being a good steward of the environment are goals that can work together. And we truly believe that corporations can develop and implement practices that are **good for the environment and good for business. Take energy use:** Who better than Wal-Mart to make a kilowatt of electricity go twice as far or a gallon of diesel take our trucks twice the distance? Who better than Wal-Mart to stretch our energy dollars farther than anyone ever has or to help lower our energy bills and gas prices for years to come? We're doing our part to conserve energy in our stores and to ensure that energy-saving innovations in our new stores set the precedent for our future ones.

Here's how:

- Today, 90 percent of the facilities we build from the ground up include a daylight harvesting system (skylights, electronic dimming ballasts, computer controlled daylight sensors, etc). Nationwide, we have approximately 2100 stores, Supercenters, Sam's Clubs, and Neighborhood Markets with this system in place (over 333,000,000 sq. ft.), resulting in an **annual savings of approximately 600,627,600 KWH.** Put another, way, that's enough power to supply approximately 53,390 homes each year.

- Since most of Wal-Mart Supercenters and Wal-Mart stores are open 24 hours, we utilize our state-of-the-art Energy Management System to dim sales floor lighting to about 75% illumination during the evening and night hours. While barely noticeable to our customers and associates, this program saves a substantial amount of energy. When this program is fully implemented at the end of 2006, Wal-Mart will save another 32,300 KWH per location, per year. This equals another annual savings of 44,000,000 KWH, or **enough energy to power an additional 3,860 U.S. homes each year.**

- All new retail facilities utilize T-8 fluorescent lamps and electronic ballasts, which comprise the most efficient lighting system on the market. We are aggressively retrofitting all older stores and upgrading them with this same technology. Doing so **reduces the energy load of a single store by approximately 15-20%. At least 90% of our existing stores with older systems (T-12 or HID) have undergone this retrofit.**

- We also utilize "low mercury" lamps, the bulbs of which, **unlike all other fluorescent lamps, are not considered to be hazardous** material and can be disposed of in any landfill. However, we have chosen to voluntarily recycle these lamps out of concern for the environment.

- Centralized Energy Management – **The heating, air conditioning, refrigeration and lighting systems of all U.S. Wal-Mart retail stores are monitored and/or controlled from our home office** in Bentonville 24 hours per day, seven days a week. These energy management systems enable Wal-Mart to monitor energy usage, analyze refrigeration temperatures, and observe HVAC and lighting performance. It also allows us to adjust lighting, temperature and/or refrigeration set points from a central location.

- We use LED lighting in all of our internally-illuminated exterior building signage at nearly all new construction locations. Also, we replace older, existing signs with LED technology, which can provide over 70% more energy-efficient operation than fluorescent illumination. **With life of LEDs as long as 100,000 hours, using LEDs provides an extended life span of 12 to 20-plus years.** This significantly reduces the need to manufacture and dispose of fluorescent lamps.

- We install occupancy sensors in non-sales areas in our new stores. These sensors detect activity in a room and **automatically turn off the lights** when the space is unoccupied.

- Wal-Mart utilizes **high efficiency heating, ventilation and air-conditioning (HVAC) units.** Our units have a weighted Energy Efficiency Ratio of 11.25. This is a 10% increase over the industry standard, weighted average, efficiency guideline (ASHRAE 90-1). These units are more efficient than required by the most stringent U.S. energy code (California's Title 24).

- In most areas of the country, Wal-Mart retail stores have "white" membrane roofs. The high solar reflectivity of the white membrane roofs results in **lowering the "cooling load" of an individual store by about 8%.**

- Approximately 70% of the hot water needs for our Supercenters, Sam's Clubs and Neighborhood Markets is generated by "reclaiming" the "waste" heat from our refrigeration equipment. **This savings is enough to provide hot water to over 30,000 U.S. homes.**

- We actively dehumidify our buildings, allowing us to operate them at a higher temperature and use **less energy.** It also allows the refrigeration systems to **operate more efficiently.**

Comparisons to Standard Energy Codes:

- Compared to ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers) 90.1 – 2001 our lighting system is **40% more efficient than the baseline minimum.** (This is what the Energy Policy Act of 2005 uses as the benchmark.)

- Compared to ASHRAE 90.2 – 2004 and California Title 24 our lighting system is **24% more efficient than the baseline minimum.**

- Our overall building (all systems) **is 9% more efficient than the most stringent of all U.S. energy codes,** California Title 24.

Other Sustainability-Focused Initiatives Underway at Wal-Mart:

- Specifications for all new U.S. Wal-Mart retail facilities now provide for the inclusion of up to 25% fly ash in the exterior concrete mixes. Additionally, up to 40% of the mix can be a combination of fly ash and ground granulated blast furnace slag. Fly ash is a waste product from the coal-fired electrical process, and slag is a waste product from steel production. Therefore, by incorporating both, we are reducing the amount of a natural resource (cement) that we use, **and replacing it with waste products that would otherwise populate landfills.**

- **ACRES for America –** Wal-Mart has committed $35 million for the next 10 years to conserve at least one acre of priority wildlife habitat for every acre developed for company use. Acres for America will permanently conserve at least one acre of priority wildlife habitat for every developed acre of Wal-Mart's current footprint, as well as the company's future development over the next 10 years.

- The restroom sinks in our stores use sensor-activated, low-flow faucets. The low-flow faucets, because they regulate flow, **reduce water usage by 84%,** while the sensors, which regulate the amount of time the faucets flow, **save approximately 20%** in water usage over similar, manually operated systems.

- Recycled products: As just one example, since 2002 Wal-Mart has incorporated via just one item -- recycled plastic baseboards -- **nearly 4,000,000 lbs. of recycled plastic** into our products.

We at Wal-Mart are doing our part to live up to our energy efficiency and other sustainability goals and to strive to reach our fullest potential in this arena. Doing so reduces our dependence on oil, saves money, and reduces greenhouse gas emissions. Wal-Mart is vigorously working to do all these things...**and to continually do them better.**

For more information about Wal-Mart's energy-saving initiatives, please visit www.walmartstores.com.

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Michael Brandman Associates

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925.830.2733

Memo

Date: September 8, 2010

To: San Joaquin Valley Air Pollution Control District
Attn: Dr. Daniel Barber,

From: Dave Mitchell

Subject: **Mitchell Ranch Trip Length Analysis**

MBA was contracted to prepare a trip length analysis for the proposed Mitchell Ranch Center. As discussed in the URBEMIS User's Manual, and supported by the SJVAPCD, project-specific data should be used to refine the base URBEMIS assumptions when such information is available. The purpose of this analysis is to calculate a project-specific trip length for customer trips based on population distribution within the project's market and services area. The methodology and results are presented below. The analysis results in a weighted average trip length of 2.61 miles.

Methodology:

1. **Determine Approximate Market Area.**
   The Mitchell Ranch Center project consisted of a proposal to construct a retail center, anchored by a Walmart with eleven other shops and pads totaling 299,830 square feet on 26.3 acres. An Urban Decay Study was prepared to determine the Trade Area and potential impacts of the proposed project. The Primary Trade Area has been defined as the City of Ceres. A Secondary Trade Area has been defined as the remainder of Stanislaus County. Using this data a Market Area was determined for the proposed project that accounts for the existence of other similar stores within the area.

2. **Overlay Market Area on Geographic Population Data**
   The 2000 Census Block population data was used for geographic distribution of population within the market area. See attached exhibit for the approximate market area. Adjustments were made to the population data to account for lack of census data for the entire market area. Please refer to the attached spreadsheet for more detail.

3. **Calculate Population Distribution within Market Area**
   Half-mile buffer zones were created in GIS, and were clipped to the market area. It was assumed that within each census block, the known population would be equally distributed over the census block's area. For census blocks in two or more buffer zones, the percentage of census block within each buffer area was used to allocate the population to the buffer zones. Therefore, the population of a census block with 60 percent of its area within one buffer zone, and 40 percent within another, would be allocated as 60/40.

   MBA examined the General Plans within the market area to determine if any significant shift in density should be expected in the future. The growth areas are primarily focused in the existing urban areas and similar growth rates are anticipated throughout the market area. This indicates that as population increases the relative weighting of population is expected to remain relatively stable. For this reason, MBA concludes that the trip length is valid accounting for planned growth.

4. Calculate the Weighted Average Trip Length
The population allocation per buffer zone was used to calculate a weighted average distance. The population of each buffer zone, represented as percent of total population, was multiplied against the trip length distance for that buffer zone. The analysis indicates that an average trip length for shopping is 2.61 miles.

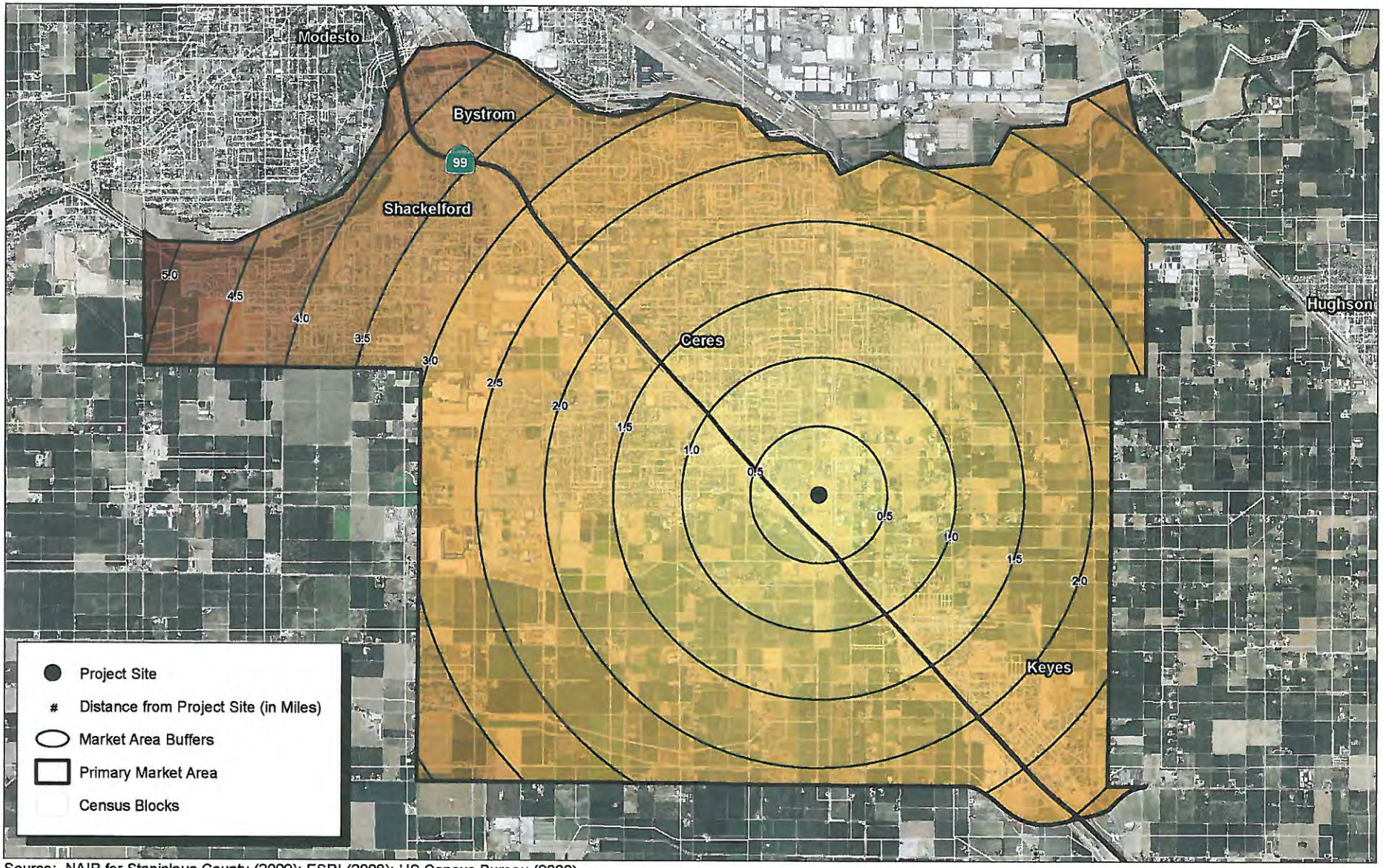
Results:

Table 1: Population Weighted Trip Length

Distance (Miles)	Total Estimated Population	Percentage of Population	Maximum Distance (in Miles)	Weighted Distance (in Miles)
0 - 0.5	2,470	3%	0.5	0.02
0.5 - 1	5,782	8%	1	0.08
1 - 1.5	10,122	14%	1.5	0.21
1.5 - 2	11,370	15%	2	0.31
2 - 2.5	11,106	15%	2.5	0.38
2.5 - 3	10,741	15%	3	0.44
3 - 3.5	8,205	11%	3.5	0.39
3.5 - 4	9,251	12%	4	0.50
4 - 4.5	4,963	7%	4.5	0.30
4.5 - 5	3	0%	5	0.00
5 - 5.5	1	0%	5.5	0.00
Total	74,013	100%		**2.61**

Source: Michael Brandman Associates, 2010

Attachments:
Market Area Graphic
Population Weighted Trip Length Analysis Spreadsheet
Urban Decay Study Excerpts



Source: NAIP for Stanislaus County (2009); ESRI (2008); US Census Bureau (2000).

NORTH

1 0.5 0 1 Miles

Michael Brandman Associates

17580006 • 08/2010 | TLA_primary.mxd

Primary Market Area Population for the Ceres Walmart Store

GREENBERG FARROW • MITCHELL RANCH CENTER • CERES, CALIFORNIA
TRIP LENGTH ANALYSIS

Mitchell Ranch Center
Trip Length Analysis

Distance (Miles)	Population	Area (Sq Mtr) with Empty Census Blocks	Total Area Square Meter	Percentage Increase	Total Estimated Population	Percentage of Population	Maximum Distance (in Miles)	Weighted Distance (in Miles)
0 - 0.5	2071	1641211	2032842	119.27%	2470	3%	0.5	0.02
0.5 - 1	5156	5357806	6098525	112.15%	5782	8%	1	0.08
1 - 1.5	8198	7777773	10164209	123.48%	10122	14%	1.5	0.21
1.5 - 2	9169	10814207	14229892	124.00%	11370	15%	2	0.31
2 - 2.5	7955	9014604	14926434	139.61%	11106	15%	2.5	0.38
2.5 - 3	7659	6742260	11283045	140.24%	10741	15%	3	0.44
3 - 3.5	6141	4141762	6238496	133.61%	8205	11%	3.5	0.39
3.5 - 4	6153	1870408	3766460	150.34%	9251	12%	4	0.50
4 - 4.5	2743	468644	2460318	180.95%	4963	7%	4.5	0.30
4.5 - 5	2	115059	1244116	190.75%	3	0%	5	0.00
5 - 5.5	0	16235	299159	194.57%	1	0%	5.5	0.00
Total	55246	47959971	72743496	16	74013	100%		**2.61**

Notes: There were 1,014 Census Blocks in the Market Area, however due to discrepancies in the Census Bureau's website, only 699 census blocks matched the Market Area. In order to correct this discrepancy, the population was increased by the percentage difference in the total area of the buff and that of the matched up census blocks in the buffer area.

POPULATION AND EMPLOYMENT OVERVIEW

This section presents background information on current and projected demographic and economic conditions in Ceres and surrounding communities as well as Stanislaus County as a whole. Developing an economic and demographic profile of these areas will help in identifying key factors influencing future retail sales in the area, and to assess the potential impacts of the Proposed Project and any other planned retail projects on existing retail outlets and centers. Data sources considered include but are not limited to the U.S. Census Bureau, the California Employment Development Department (EDD), the County of Stanislaus, the City of Ceres, the California State Department of Finance, and Claritas, a private vendor providing estimates of current and future demographic conditions.

Definition of Trade Area

A trade area is the geographic region that encompasses most of a retail outlet's customers. For the Proposed Project, the Primary Trade Area (PTA) has been defined as the City of Ceres. A Secondary Trade Area (STA) has been defined as the remainder of Stanislaus County. These Trade Area definitions acknowledge that the majority of shoppers will be drawn from Ceres, but that because of the lack of similar superstores in nearby communities, the project is likely to draw a substantial number of shoppers from beyond Ceres itself. The Primary and Secondary Trade Areas for the project (as shown in Figures 1a and 1b) have been defined taking into account several factors, as discussed below.

First, there is an existing Wal-Mart in Ceres, which is slated for closure when the Mitchell Ranch Supercenter opens, based on information provided by the applicant. The existing store, because of its location, is likely attracting shoppers from Modesto who might not be as drawn to Mitchell Ranch because of its greater distance relative to the existing Ceres and Modesto Wal-Marts. Thus, the Trade Area for the new store will not necessarily be the same as that for the existing Wal-Mart in Ceres.

Second, the boundary between Ceres and Modesto is very irregular, and the area directly south of the Tuolumne River consists of a patchwork of unincorporated areas and incorporated portions of Ceres and Modesto. In fact, some of the competing outlets within the City of Ceres have Modesto mailing addresses. To the west of Highway 99, there is a substantial retail strip along Crow's Landing Road which is in both Modesto and unincorporated Stanislaus County, and which likely attracts shoppers from Ceres, especially the portion of Ceres west of Highway 99 which is significantly under-retailed. While the entire area south of the Tuolumne River as it traverses the area from east to west could reasonably be included in the Primary Trade Area, the availability of reliable retail sales data only at the citywide level has led BAE to limit that area solely to the City of Ceres to make the analysis more transparent. However, BAE acknowledges that the delimitation between the Primary and Secondary Trade Area represents a compromise based on the realistic limitations of the data available, and must take into account the realities of how these area definitions are imperfect. As a result, the demographic analysis and the consideration of capture from the Secondary Trade Area will look more closely at these areas

near but not part of Ceres in light of the potential of their residents to be strongly attracted by the Supercenter and other retail offerings at Mitchell Ranch.

Third, the Proposed Project is located at the southern end of Ceres, and is easily accessible from unincorporated Keyes and the City of Turlock. Neither of these locales has a superstore, and in fact they are prohibited by ordinance in Turlock. Thus the project is likely to attract shoppers from the south that wish to shop in a superstore-type environment.

In Modesto, there are plans for a "mini-Supercenter" in a 100,000 square-foot space at the north end of the City, offering a mix of groceries and general merchandise. Beyond Modesto and Ceres, the closest superstores, existing or planned, are to the north in Stockton (with an existing Wal-Mart Supercenter) and Tracy (where an expansion to superstore size of an existing Wal-Mart is currently under review), and to the south in Atwater, where a Super Target recently opened. To the east and west of Ceres, there are no nearby locales with the population necessary to support such a store.

Figure 1a: Primary Trade Area and Ceres Periphery

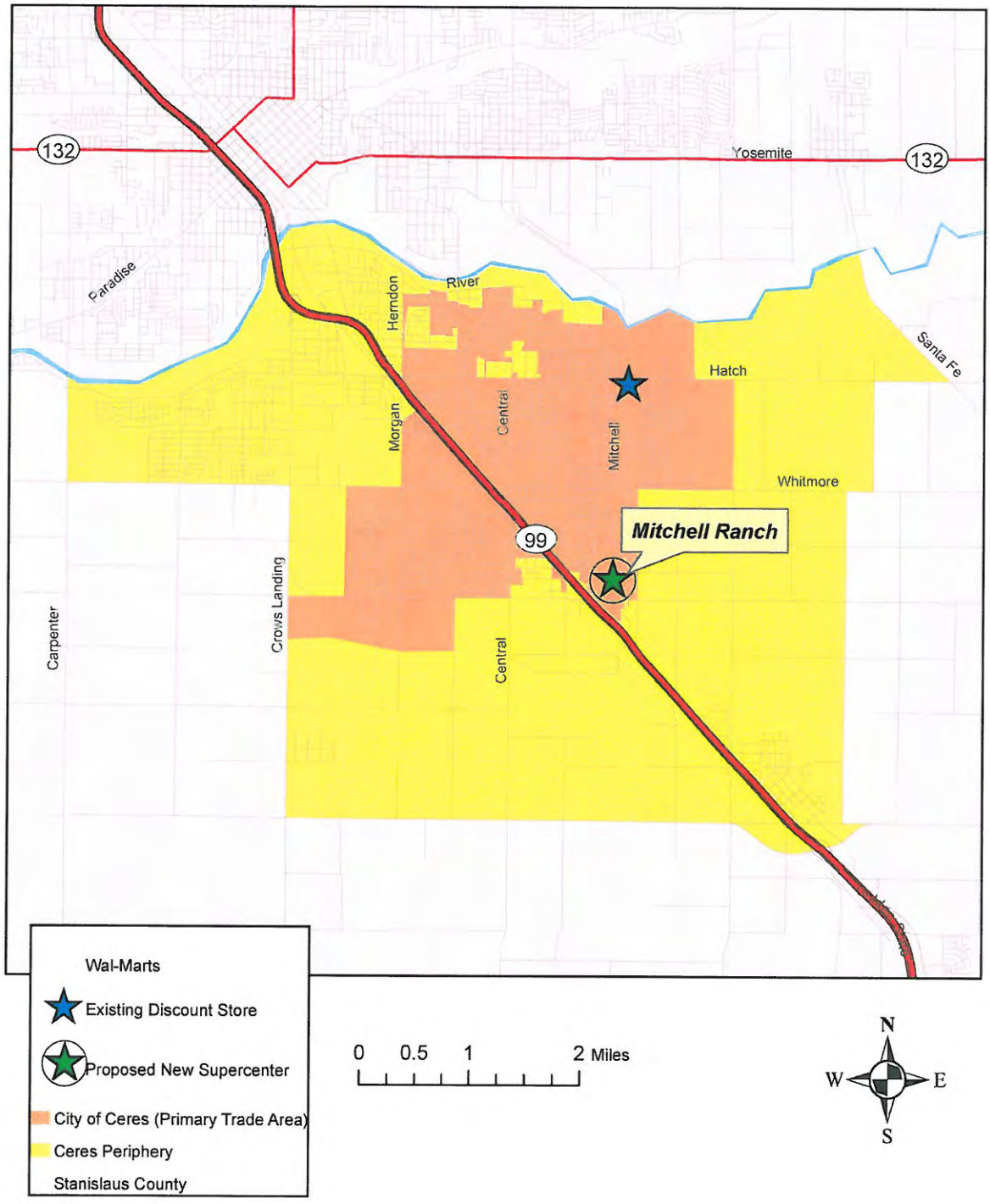


Figure 1b: Primary Trade Area, Ceres Periphery, and Remainder of Secondary Trade Area