

EXHIBIT 1

**Application for CEQA Streamlining Under the “Jobs and Economic
Improvement through Environmental Leadership Act”
(Public Resources Code Section 21178 et seq.)**

This application was prepared in accordance with the Governor’s Guidelines for Streamlining Judicial Review under the California Environmental Quality Act (CEQA), which is provided on the Governor’s Office of Planning and Research Webpage (http://opr.ca.gov/s_californiajobs.php). This application includes the necessary information to enable the Governor to determine whether the project satisfies the statutory requirements for CEQA streamlining.

PROJECT INFORMATION

Project Title: McCoy Solar Energy Project

Project Applicant: McCoy Solar, LLC

Project Location: Unincorporated portion of Riverside County, California

Project Description: The proposed McCoy Solar Energy Project (MSEP or Project) would be an up-to 750 megawatt (MW) net alternating current solar power generating installation located in an unincorporated portion of Riverside County. The Project will utilize photovoltaic (PV) technology for the generation of solar energy. The entire 750 MW Project would be comprised of two power units – Unit 1 with a capacity of 250 MW and Unit 2 with a capacity of up to 500 MW. The Project would be developed over an area of approximately 4,315 acres of federal land managed by the Bureau of Land Management (BLM) and 477 acres of private land, plus an approximately 15.5-mile long transmission line right-of-way.

CONSISTENCY WITH STATUTORY REQUIREMENTS FOR CEQA STREAMLINING

The following information is provided to illustrate that the Project satisfies the statutory requirements for CEQA streamlining as defined by the criteria set forth in the Governor’s Guidelines for Streamlining Judicial Review under CEQA (Public Resources Code (PRC) Section 21178 et seq.).

1. The Project meets the criteria set forth in PRC Section 21180(b)(2).

PRC Section 21180(b)(2) A clean renewable energy project that generates electricity exclusively through wind or solar, but not including waste incineration or conversion.

The Project will be an up-to 750 megawatt (MW) net alternating current solar power generating PV installation located in an unincorporated portion of Riverside County. The entire 750 MW project would be comprised of two power units – Unit 1 with a capacity of 250 MW and Unit 2 with a capacity of up to 500 MW.

2. The Project meets the requirements of PRC Section 21181.

PRC Section 21181 This chapter does not apply to a project if the applicant fails to notify a lead agency prior to the release of the draft environmental impact report for public comment that the applicant is electing to proceed pursuant to this chapter. The lead agency shall notify the Secretary of the Natural Resources Agency if the applicant fails to provide notification pursuant to this section.

Because the MSEP is located on both federal and private lands, a joint Environmental Impact Statement and Environmental Impact Report (EIS/EIR) is being prepared by the U.S. Bureau of Land Management (BLM) as the NEPA lead and Riverside County as the CEQA lead.

Riverside County has been notified that the Project intends to qualify for certification under Jobs and Economic Improvement through Environmental Leadership Act and Riverside County is planning on including the requisite public notification information in the Draft EIR.

3. The Project entails a minimum investment requirement of PRC Section 21183(b).

PRC Section 21183(b) The project will result in a minimum investment of one hundred million dollars (\$100,000,000) in California upon completion of construction.

McCoy Solar, LLC's level of investment in California is expected to exceed one hundred million dollars (\$100,000,000) during Unit 1 construction, with additional California investment for Unit 2 expected to be the same as or higher than for Unit 1.

4. The prevailing and living wage requirements of PRC Section 21183(b) will be satisfied.

PRC Section 21183(b) The project creates high-wage, highly skilled jobs that pay prevailing wages and living wages and provide construction jobs and permanent jobs for Californians, and helps reduce unemployment.

PRC Section 21183(b) will be satisfied. The project will create high-wage, highly skilled jobs for construction professionals including carpenters, electricians, and heavy equipment operators that pay prevailing wages and living wages and provide permanent jobs for Californians, and helps reduce unemployment.

The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) is expected to range between 43 and 600 over an approximate 46-month period. The average on-site construction workforce would consist of approximately 341 construction, supervisory, support, and construction management personnel. Experience has shown that special circumstances could arise that warrant an increased number of up to 750 on-site workers for a short period of time.

Approximately 20 permanent, full-time personnel would be employed at the solar plant site during daytime working hours assuming both units are operational. Temporary personnel would be employed, as needed, during seasonal periods when panel washing is required. The plant electricians and instrumentation technicians would perform activities such as the tightening of mechanical fasteners, replacement of damaged or exposed wiring, tracker drive maintenance or fluid replenishment, or PCS maintenance such as filter replacement, equipment testing, or minor equipment repair. Occasionally there will be a need to replace a PV panel. Currently the life of the Project is anticipated to be 30 years.

5. The project will not result in any net additional greenhouse gas (GHG) emissions pursuant to PRC Section 21183(c).

PRC Section 21183(c) The project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

An Air Quality and Greenhouse Gas Study was prepared for the proposed Project and is included as Attachment A (Air Quality and Greenhouse Gas Study) to this application. As discussed in the Air Quality and Greenhouse Gas Study, combining the total construction and operation GHG emissions, the proposed Project will emit the following:

12,672 tonnes CO₂e during construction + 6,480 (216 x 30 years¹) tonnes CO₂e during operation, for a Project total of 19,152 tonnes of CO₂e of greenhouse gases.

As discussed in the Air Quality and Greenhouse Gas Study prepared for the Project, the proposed 750 MW solar Project will result in the displacement of GHG intensive forms of energy production, and therefore, result in an overall net reduction in GHG emissions. However, to ensure the Project meets the requirements of PRC Section 21183(c) and goes above and beyond standard GHG emission mitigation of renewable energy sites, McCoy Solar, LLC would secure voluntary carbon credits totaling 19,152 tonnes CO₂e. Securing these carbon credits will offset the GHG emissions generated during construction and operation of the Project; and therefore, the Project will not result in any net additional GHG emissions, as required by PRC Section 21183(c).

The voluntary carbon credits would be secured from NextEra Energy Resources, LLC or from a similar type of voluntary credit generator. In 2010, NextEra Energy Resources submitted the Capricorn Ridge 4 wind project to the Voluntary Carbon Standard (VCS, now called the Verified Carbon Standard) to generate carbon offset credits. The 112.5 MW project is located in Sterling and Coke counties in West Texas. The Project Design Document (PDD) was validated by a qualified third party, First Environment. First Environment also verified the creation of the Verified Carbon Units (VCUs) for the renewable generation from the project for periods from January 1, 2010 through September 30, 2010, accounting for over 100,000 tonnes of carbon credits. The majority of these VCUs have been sold in the voluntary carbon offset market, with the remaining VCUs still residing in NextEra Energy Resources' NYSE Blue (APX) registry account. McCoy Solar, LLC would secure 19,152 tonnes of these remaining VCUs or similar carbon offsets to mitigate the construction and operations of MSEP.

6. There will be a binding agreement between the project proponent and the lead agency establishing the requirements set forth in PRC sections 21183(d), (e), and (f).

PRC Section 21183(d) The project applicant has entered into a binding and enforceable agreement that all mitigation measures required pursuant to this division to certify the project under this chapter shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency or another agency designated by the lead agency. In the case of environmental mitigation measures, the applicant agrees, as an ongoing obligation, that those measures will be monitored and enforced by the lead agency for the life of the obligation.

PRC Section 21183(e) The project applicant agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner

¹ Assumed life of the Project

Application for CEQA Streamlining

specified by the Judicial Council, as provided in the Rules of Court adopted by the Judicial Council pursuant to subdivision (f) of Section 21185.

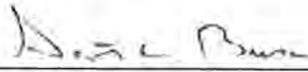
PRC Section 21183(f) The project applicant agrees to pay the costs of preparing the administrative record for the project concurrent with review and consideration of the project pursuant to this division, in a form and manner specified by the lead agency for the project

An EIS/EIR is being prepared for the proposed Project pursuant to the National Environmental Policy Act (NEPA) and CEQA. Prior to approval of the Project, the EIR/EIR must be certified by the lead agency (Riverside County) and a mitigation monitoring and reporting plan must be adopted. It is expected that mitigation measures resulting from this application for CEQA streamlining will be included in the mitigation monitoring and reporting plan and/or as conditions of project approval. The applicant will be required to implement all mitigation measures contained in the mitigation monitoring and reporting plan and adhere to all conditions of project approval set forth by Riverside County and the BLM.

McCoy Solar, LLC agrees to pay the costs described in PRC sections 21183 (e) & (f), should such costs arise.

Name of Applicant Representative: Scott Busa, Executive Director, McCoy Solar, LLC

Signature of Applicant Representative: _____



Date: 1/11/2012

Attachments

Attachment A – Air Quality and Greenhouse Gas Study (PRC Section 21183(c))

Attachment A

Air Quality and Greenhouse Gas Technical Report

McCoy Solar Energy Project

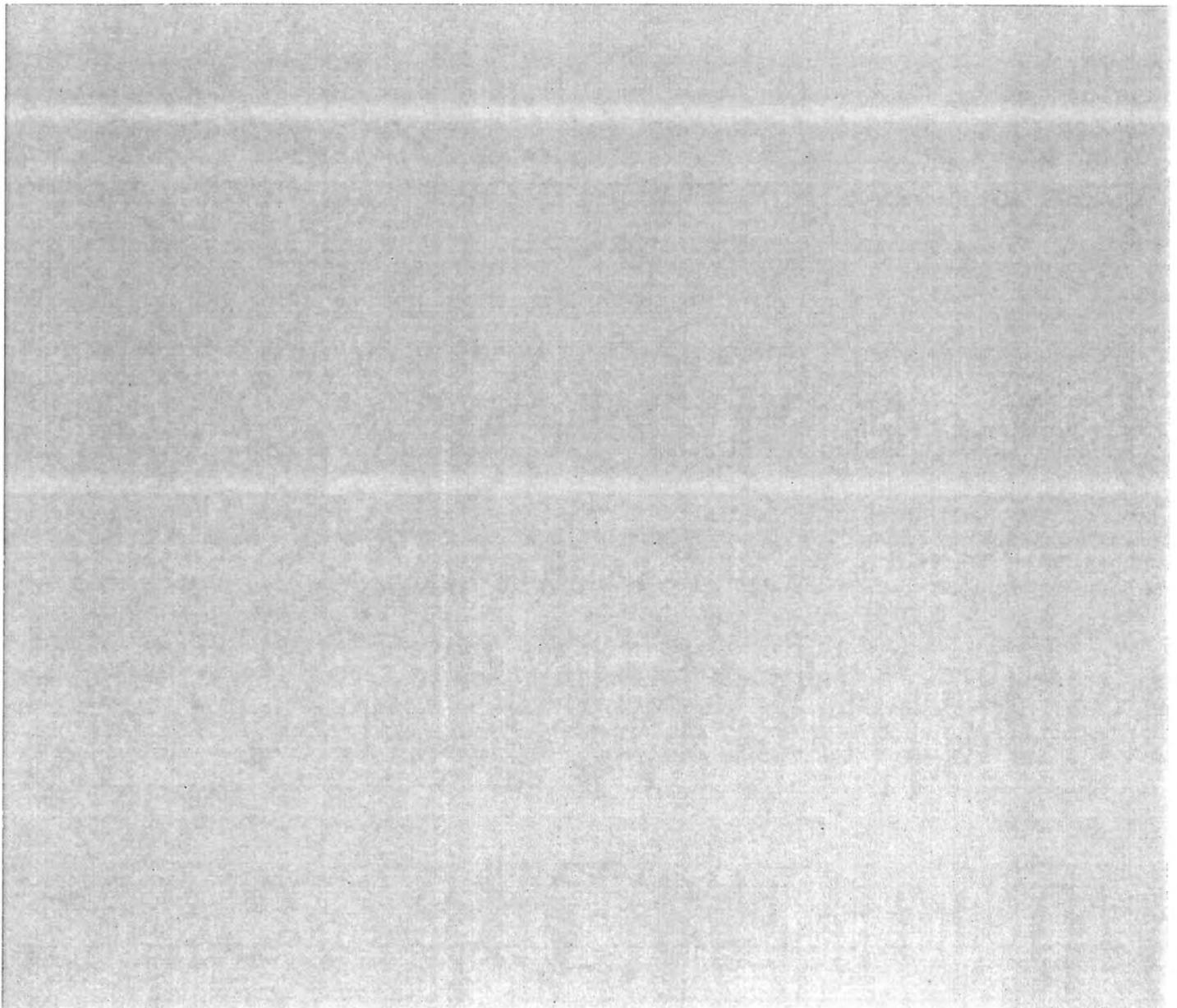


Environment

Prepared for:
McCoy Solar, LLC

Prepared by:
AECOM
Camarillo, CA
60225618-300
December 2011

Air Quality and Greenhouse Gas Technical Report McCoy Solar Energy Project Riverside County, California





Environment

Prepared for:
McCoy Solar, LLC

Prepared by:
AECOM
Camarillo, CA
60225618-300
December 2011

Air Quality and Greenhouse Gas Technical Report McCoy Solar Energy Project Riverside County, California

Prepared By Snigdha Mehta

Sean Wazlaw

Reviewed By Sara J. Head, Vice President

Contents

1.0 Introduction	1-1
2.0 Project Overview	2-1
3.0 Air Quality	3-1
3.1 Project Construction	3-1
3.1.1 Construction Emissions Estimation Methodology and Assumptions	3-1
3.1.2 Construction Emissions Estimates and Impacts.....	3-4
3.1.3 Applicant Proposed Construction Mitigation Measures.....	3-6
3.2 Project Operation.....	3-7
3.2.1 Operation Emissions Estimation Methodology and Assumptions	3-7
3.2.2 Operation Emissions Estimates and Impacts.....	3-9
3.2.3 Applicant Proposed Operation Mitigation Measures.....	3-9
3.3 General Conformity Analysis.....	3-10
3.4 Impacts to Sensitive Receptors.....	3-11
3.5 Cumulative Impacts	3-11
4.0 Health Risk Due To Diesel Particulate Matter	4-1
5.0 Greenhouse Gases	5-1
5.1 Project Construction	5-1
5.1.1 Construction GHG Emissions Estimation Methodology and Assumptions	5-1
5.1.2 Construction GHG Emissions Estimates and Impacts	5-2
5.2 Project Operation.....	5-3
5.2.1 Operation GHG Emissions Estimation Methodology and Assumptions	5-4
5.2.2 Operation GHG Emissions Estimates and Impacts.....	5-5
5.3 Total GHG Emissions	5-5
5.4 Displacement of GHGs.....	5-6
6.0 References	6-1

List of Tables

Table 1 – Annual Construction Emissions.....	3-5
Table 2 – Maximum Daily Construction Emissions.....	3-5
Table 3 – Annual Operation Emissions.....	3-9
Table 4 – Maximum Daily Operation Emissions.....	3-9
Table 5 – DPM Emissions During Construction of MSEP Units 1 and 2.....	4-1
Table 6 – Project Construction GHG Emissions.....	5-3
Table 7 – Annual GHG Emissions from Project Operations.....	5-5
Table 8 – Total Annual Amortized GHG Emissions.....	5-6

List of Figures

Figure 1 – Receptors Within 6 Miles of MSEP.....	3-12
--	------

List of Attachments

Attachment 1 – Construction Emissions

- Attachment 1A – Construction Equipment Emissions
- Attachment 1B – Construction Fugitive Dust
- Attachment 1C – Construction Vehicle Emissions
- Attachment 1D – Summary of Criteria Pollutant Emissions
- Attachment 1E – Summary of Construction GHG Emissions

Attachment 2 – Operation Emissions

- Attachment 2A – Operation Equipment
- Attachment 2B – Operation Vehicles
- Attachment 2C – Summary of Operation Criteria Pollutants
- Attachment 2D – Summary of Operation GHG Emissions

1.0 Introduction

McCoy Solar, LLC (Applicant) is proposing to construct and operate the McCoy Solar Energy Project (MSEP or Project), a photovoltaic solar facility in the Riverside County portion of the Mojave Desert Air Basin of California. During both construction and operation of the Project, criteria pollutants and greenhouse gas (GHG) emissions would be generated due to equipment and vehicle use. The purpose of this technical study is to analyze the potential air quality and GHG impacts that could occur during construction and operation of the Project. In addition, an analysis of potential health risks associated with emissions of diesel particulate matter is provided.

The emissions and impacts discussions in this report are divided into four sections, as follows:

- Project Overview
- Air Quality (Criteria Pollutants)
- Health Risks due to Diesel Particulate Matter
- Greenhouse Gases

The content and methodologies presented in this technical report are based on guidance provided by the United States Department of the Interior's Bureau of Land Management (BLM) and their third party contractor during a telephone conference call held on October 17, 2011 with the Applicant and its consultants.

This technical report concludes that impacts to air quality, health risks and climate change from GHG emissions from the McCoy Solar Energy Project will be insignificant.

2.0 Project Overview

The proposed Project would be an up-to 750 megawatt (MW) net alternating current solar power generating installation located in an unincorporated portion of Riverside County. The entire 750 MW Project would be comprised of two power units – Unit 1 with a capacity of 250 MW and Unit 2 with a capacity of up to 500 MW. The Project would be developed over an area of approximately 4,315 acres of BLM land and 477 acres of private land (not including the transmission line right-of-way).

Key components of the proposed Project are:

- The solar plant site, which would include all facilities that create a footprint in and around the field of solar panels, including facilities such as:
 - The solar field (consisting of two solar power plants identified as Unit 1 and Unit 2)
 - Two on-site substations (the MSEP Unit 1 and Unit 2 Substations);
 - Shared (Unit 1 and Unit 2) operations and maintenance (O&M) facility; and
 - Other site improvements such as a temporary laydown area, perimeter and access roads, fencing and site security, drainage improvements, water treatment and lighting.
- An approximately 15.5-mile long (including approximately 2 miles within the solar plant site boundary), double-circuit, overhead 230 kilovolt (kV) generation-tie (gen-tie) line;
- 230 kV switchyard located near the Colorado River Substation (CRS) to connect the MSEP with the 230 kV CRS proposed by SCE;
- Two telecommunications lines (primary and redundant); and
- An SCE-owned and operated distribution line.

Construction activities would include site preparation; construction of the solar array, O&M building and MSEP Substations; construction of the gen-tie line and telecommunications lines; construction of the switchyard; and distribution line installation. The construction of Unit 1 of the MSEP would include the access road, water treatment system, initial gen-tie (consisting of the support towers and first circuit), parking area, and the first 125 arrays of 2 MW blocks.

Unit 1 and associated linear facilities (e.g., gen-tie and access roads) would be constructed first, followed by the construction of Unit 2. Construction of Unit 1 and associated linear facilities is expected to take approximately 24 months and construction of Unit 2 is expected to take approximately 22 months. While it's possible that there may be some delay between the time Unit 1 is fully operational and the time construction is commenced on Unit 2, for the purposes of this evaluation, it is assumed that construction of Unit 2 would commence upon Unit 1 becoming fully operational, hence a total construction period for Units 1 and 2 of 46 months.

The proposed Project would operate year-round, generating electricity during daylight hours when electricity demand is at its peak. The Project would provide for the annual electricity needs of approximately 264,000 residences.

3.0 Air Quality

The following section is an analysis of criteria pollutant air quality impacts associated with construction and operation of the proposed Project. Descriptions of Applicant-proposed mitigation measures that would reduce construction- and operation-generated air quality emissions are included in this section. The estimation methodology and assumptions used to analyze potential air quality impacts were discussed and approved by the BLM and Riverside County, as well as the third-party Environmental Impact Statement/Environmental Impact Report consultant, based on a conference call on October 17, 2011.

3.1 Project Construction

3.1.1 Construction Emissions Estimation Methodology and Assumptions.

Construction of the Project would generate criteria pollutant emissions similar to those associated with any large industrial construction project. On-site emissions would arise primarily from vehicles and equipment. On-site fugitive dust emissions would also be generated during site preparation, earthwork and construction. Off-site emissions would occur from construction worker vehicles driving to and from the work site, as well as material delivery and waste removal trucks. The construction-related emissions are transient in nature.

Construction emissions were estimated using the project-specific information provided by the Applicant's engineering contractor (WorleyParsons). The data provided by WorleyParsons includes the overall construction schedule of 46 months assumed to occur from March 2013 through December 2016, divided into different phases of construction for each unit and the duration of each phase. The proposed Project would be constructed in six broad phases: 1) Phase 1 - Mobilization; 2) Phase 2 - Civil Improvements; 3) Phase 3 - Photovoltaic Panel Construction; 4) Phase 4 - Office/Structure Building Construction; 5) Phase 5 - Transmission Line Construction; and 6) Phase 6 - System Testing and Commissioning. For each of these phases of each unit, WorleyParsons also provided the following information:

- A list of the different types of construction equipment and vehicles to be used;
- The number of pieces of each type of equipment and number of vehicles;
- Daily usage rates in terms of hours per day per piece of equipment and miles per day per vehicle; and
- The power rating of each type of equipment used.

The data provided by WorleyParsons related to project construction are summarized in **Attachments 1-A, 1-B and 1-C**.

3.1.1.1 Methodology for Criteria Pollutant Emissions from Construction Equipment

The combustion of fuel to provide power for the operation of various equipment used for the construction activities results in the generation of criteria pollutant emissions - carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur oxides (SO_x), respirable particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}).

Criteria pollutant emissions from off-road construction equipment use were estimated using the Urban Emissions (URBEMIS) 2007 Version 9.2.4 computer model, in accordance with the Mojave Desert Air Quality Management District (MDAQMD) guidelines (personal communication with Chris Anderson, Air Quality Engineer, MDAQMD, November 7, 2011). URBEMIS is designed to model construction emissions for land use development projects and allows for the input of project-specific information. Emissions from equipment used during each of the six construction phases were modeled separately in the Construction module of URBEMIS. The Construction module can estimate emissions from seven construction stages: demolition, mass site grading, fine site grading, trenching, building construction, architectural coating, and paving. Exhaust emissions from the equipment were modeled using the module's building construction stage. Fugitive VOC emissions from asphalt paving were modeled using the module's paving stage. For each phase of construction, the model defaults for the type of equipment used, number of pieces of equipment, power rating and daily usage rate were replaced by project-specific information provided by WorleyParsons. The default load factors for off-road equipment were modified to reflect the revised load factors proposed by the California Air Resources Board (ARB) in *The Amendments to the Regulations for In-Use Off-Road Diesel-Fueled Fleets and Off-Road Large Spark Ignition Engine Fleet Requirements* (2010). URBEMIS derives the emission factors and load factors for in-use off-road equipment from ARB's OFFROAD2007 model. Recent studies have indicated that the OFFROAD2007 model over-predicts these load factors by about 33 percent. Therefore, the default load factors in URBEMIS were replaced with the revised load factors proposed by ARB in these amendments.

As the duration of each phase and year of activity are different for both units, emissions for each unit were calculated with the emissions model separately. Details of the calculations and model input and output are provided in **Attachment 1-A Construction Equipment Emissions**.

A summary of all criteria pollutant emissions during construction is provided in **Attachment 1-D Summary of Criteria Pollutant Emissions**.

3.1.1.2 Methodology for Fugitive Dust Emissions from Construction Activities

Earthmoving activities such as excavation, filling, grading, and vehicle travel during construction of the proposed Project would generate fugitive dust emissions, including PM10 and PM2.5 emissions. Wind entrainment of fugitive dust can occur when stockpiled soils or recently disturbed soils are not adequately treated or covered.

A particular issue related to the generation of fugitive dust from disturbance of the soils in this area of the Colorado Desert (part of the larger Sonoran Desert) stems from the typical formation of "desert pavement", which will add to the wind blown fugitive dust if the pavement is disturbed. Desert pavement is a common feature on the MSEP plant site, increasing in both area and particle size on the upper bajada of the southwestern portion of the solar plant site. Closer to the mountains, cobbly, well-developed desert pavement, which contains very little vegetation, dominates the landscape. Desert pavements are areas with rock fragments of pebble to cobble size that cover an underlying layer of sand, silt, or clay. Desert pavement areas typically have little or no vegetation cover. When undisturbed, the extent to which desert pavement reduces wind erosion and resulting fugitive dust depends on the density of the rock fragments covering the underlying soil. Desert pavements seem to form from two different processes (McAuliffe 2000). On rocky alluvial fans, fine dust settling out of the air accumulates between and below the surface layer of rocks, eventually forming a relatively thin silt and clay layer that separates the surface rocks from the main part of the alluvial fan. Desert pavement also can form on sandy soils that contain significant amounts of gravel and rock fragments. In such situations, wind and water erosion can remove most of the sand and fine sediments from the

surface, leaving the remaining rock fragments as the predominant surface layer. Desert pavement is covered with closely packed, interlocking angular or rounded rock fragments of pebble and cobble size. The rock fragments are covered with a dark varnish typically due to manganese oxides. Several theories have been proposed for their formation. The more common theory is that they are formed by the gradual removal of the sand, dust, and other fine-grained material by the wind and intermittent rain, leaving only the larger fragments behind. However, this does not continue indefinitely because, once the pavement has been formed, it can act as a barrier to further erosion (Wood et al. 2002).

Maximum daily fugitive particulate matter emissions during construction were modeled separately using the mass site grading stage in the Construction module of URBEMIS. To estimate fugitive dust emissions, URBEMIS uses the methodology developed for the South Coast Air Quality Management District (SCAQMD) by Midwest Research Institute. That four-tiered methodology allows for more refined estimates based on the level of detail known for the construction project. The first tier (default level of detail) was selected for this Project. The default worst-case emission factor for fugitive dust provided by URBEMIS for this tier is 38.2 pounds per acre-day per acre disturbed. For the proposed Project, an average control efficiency rating of 68 percent was assumed for various dust mitigation measures and was applied to the worst-case fugitive emission factor, resulting in an emission factor of 12.2 pounds per day per acre disturbed. The 68 percent control efficiency rating is consistent with the control efficiency ratings provided in the SCAQMD California Environmental Quality Act (CEQA) Handbook for various dust control measures, including, the application of water and/or dust suppressants on unpaved roads, and exposed and stockpiled soils, use of enclosures and minimum freeboard on haul trucks, and limiting vehicle speeds on unpaved roadways. In URBEMIS, this emission factor is multiplied by the maximum daily acreage disturbed to estimate the maximum daily fugitive dust emissions. The site area (acres) disturbed daily during each month of different phases of construction was provided by WorleyParsons. These data are summarized in **Attachment 1-B Construction Fugitive Dust**.

URBEMIS estimates the annual fugitive dust emissions during a calendar year by multiplying the maximum daily fugitive dust emissions by the number of working days in that year. However, this calculation results in an overestimate of annual fugitive dust emissions as the maximum daily fugitive dust emissions does not occur every day. Therefore, in order to provide a more accurate estimate of annual fugitive dust emissions, the annual fugitive dust emissions were calculated outside of URBEMIS using the estimated daily acreage to be disturbed during each month instead of the maximum daily acreage to be disturbed during the construction phase. Monthly fugitive dust emissions were calculated by multiplying the 12.2 pounds per day per acre disturbed emission factor by the daily acreage disturbed in each construction month and the number of working days per month. Annual fugitive dust emissions were estimated as a sum of monthly emission during the calendar year. Details of the calculations and model input and output are provided in **Attachment 1-B Construction Fugitive Dust**.

3.1.1.3 Methodology for Criteria Pollutant Emissions from Motor Vehicles

The combustion of fuel in motor vehicle engines results in the generation of CO, VOC, NO_x, SO_x, PM₁₀, and PM_{2.5} emissions. Motor vehicle brake and tire wear results in the generation of PM₁₀ and PM_{2.5} emissions. Emissions from motor vehicles used during construction were estimated outside of URBEMIS.

Emissions from motor vehicles were calculated by multiplying the vehicle-miles-traveled (VMT) by each type of vehicle used during the construction phase by emission factors in pounds (lb)/VMT. CO, VOC, NO_x, SO_x and PM₁₀ emission factors were compiled by running the ARB's EMFAC2007

(version 2.3) Burden Model (ARB, 2007) for the MDAQMD jurisdiction during calendar year 2013. Daily emissions by vehicle class (light-duty truck, heavy, heavy-heavy duty diesel vehicle, etc.) from the Burden model were divided by the daily mileage traveled by vehicles within the class from the Burden model to calculate the emission factors. The emission factors account for the emissions from start, running and idling exhaust. In addition, the VOC emission factors take into account diurnal, hot soak, running and resting emissions, and the PM10 emission factors account for exhaust, brake wear and tire wear emissions separately.

PM2.5 emission factors were calculated by multiplying the PM10 emission factors by the mass fraction of PM2.5 emissions in motor vehicle exhaust, brake wear and tire wear PM10 emissions, provided in SCAQMD's "Final-Methodology to Calculate Particulate Matter (PM) 2.5 and PM2.5 Significance Thresholds" (2006).

The motor vehicle emission factors from the Burden model and the calculated PM2.5 emission factors are listed in **Table 1-A of Attachment 1-C Construction Vehicle Emissions**. The motor vehicle emission factors for the specific vehicles to be used during construction of the Project are listed in **Table 2 of Attachment 1-C Construction Vehicle Emissions**.

Monthly VMT were estimated from data provided by WorleyParsons, which include the number of motor vehicles to be operated each day for each phase of construction, the daily round-trip distance travelled by each vehicle and an average of 22 working days per month. These data are provided in **Tables 3 through 8 of 1-C Construction Vehicle Emissions**. Monthly emissions were calculated by multiplying the monthly VMT by the vehicle emission factors. Emissions from both on-site and off-site vehicles were estimated. On-site vehicles include water trucks, service trucks, concrete trucks, etc. Off-site vehicles include mainly worker-commute cars, and equipment and material delivery trucks, including trucks delivering PV panels. Different types of equipment and material would be delivered to the site from different regions within California, Arizona and Nevada resulting in different round-trip distances. For the purposes of comparing criteria pollutant emissions to the MDAQMD thresholds, off-site vehicle emissions were estimated from the point of entry into the Mojave Desert Air Basin (MDAB).

Monthly vehicle emissions from different phases of construction are provided in **Attachment 1-C Construction Vehicle Emissions, Tables 3 through 8**. A summary of monthly vehicle emissions is provided in **Attachment 1-C Construction Vehicle Emissions, Table 9**. Construction of the Project was assumed to occur from March 2013 through December 2016, and emissions during each calendar year were estimated by summing the emissions during the months of construction during that year.

A summary of all criteria pollutants emissions is provided in **Attachment 1-D Summary of Criteria Pollutant**.

3.1.2 Construction Emissions Estimates and Impacts.

Table 1 shows the estimated annual criteria pollutant emissions within the MDAB generated each calendar year during the Project's 46 months of construction using the methodologies described above. These estimates only account for reduction from dust control measures such as application of water and/or dust suppressants, and no other reductions were assumed. Accordingly, the annual emissions reported in **Table 1** for VOC, NO_x, CO, and SO_x are unmitigated. As shown in **Table 1**, the annual emissions for all pollutants within the MDAB are well below their respective Mojave Desert Air Quality Management District (MDAQMD) CEQA thresholds (2009). Therefore, the impacts from the proposed Project's construction on an annualized basis will be less than significant.

Table 1 – Annual Construction Emissions

Construction Year	Annual Emissions (tons/year)					
	VOC	NOx	CO	SOx	PM10 ^a	PM2.5 ^a
Year 2013	1.49	9.88	10.10	0.01	11.08	2.65
Year 2014	1.70	9.06	15.00	0.02	4.35	1.26
Year 2015	1.71	8.78	15.51	0.02	11.24	2.67
Year 2016	1.92	8.39	20.33	0.03	4.14	1.19
MDAQMD CEQA Threshold	25	25	100	25	15	15.0
Significant Impact (Yes/No)	No	No	No	No	No	No
a. PM10 and PM2.5 emissions include mitigation from various dust control measures; other pollutant emissions do not account for reductions from mitigation measures						

Table 2 shows the calculated maximum daily criteria pollutant emissions that would be generated within the MDAB during the Project's construction. No mitigation measures, except the dust control measures such as application of water and/or dust suppressants, were assumed. Accordingly, the maximum daily emissions reported in Table 2 for VOC, NOx, CO, and SOx are unmitigated. As shown in Table 2, the maximum daily emissions for all pollutants, except PM10, are well below their respective MDAQMD CEQA thresholds (2009). Note that the PM10 and PM2.5 emissions shown in Tables 1 and 2 include fugitive dust emissions.

Table 2 – Maximum Daily Construction Emissions

	Maximum Daily Emissions (lb/day)					
	VOC	NOx	CO	SOx	PM10 ^a	PM2.5 ^a
Maximum Daily Emissions (All Years)	22.3	131	217	0.29	119	29.3
MDAQMD CEQA Threshold (lb/day)	137	137	548	137	82	82
Significant Impact (Yes/No)	No	No	No	No	Yes	No
a. PM10 and PM2.5 emissions include mitigation from various dust control measures; other pollutant emissions do not account for reductions from mitigation measures						

The PM10 emissions and their impacts can be reduced further by implementing various dust control measures proposed below by the Applicant. These dust control measures are discussed in the following section (Section 3.1.3).

The annual and maximum daily PM10 and PM2.5 emissions shown in **Tables 1 and 2** above include both combustion-generated emissions and fugitive dust. Annual PM10 and PM2.5 emissions and maximum daily PM2.5 emissions would not exceed the applicable MDAQMD CEQA thresholds. However, as shown in **Table 2**, the estimated 119 pounds per day of PM10 emissions would exceed the 82 lb/day threshold for maximum daily PM10 emissions. Fugitive dust sources contribute 112.4 pounds out of the 119 pounds of total maximum daily PM10 emissions. By implementing the additional dust control measures listed in the following section, such as frequent watering of disturbed areas during grading, increased use of soil stabilizers on roads both during and after construction, gravel ramps and street sweeping to reduce accumulation of dirt, etc. AECOM estimates that the overall dust control efficiency could be increased from 68 percent to approximately 80 percent¹. The increased dust control efficiency will reduce the fugitive dust emissions from 112.4 pounds per day to 70.3 pounds per day, resulting in a total of 77 pounds per day of PM10 emissions. Therefore, by implementing the dust control measures listed below, the impacts due to PM10 emissions can be reduced to a less than significant level.

The desert pavement located on the project site is of the mature variety, and therefore, is not subject to a great deal of wind erosion. Because of the natural deterrent effect on wind erosion caused by desert pavement terrain, efforts to minimize the disruption of desert pavement will be taken during MSEP construction. For instance, vehicle and equipment use will be constrained to the active construction areas and roads.

3.1.3 Applicant Proposed Construction Mitigation Measures.

The Applicant proposes to implement the following mitigation measures to reduce construction-generated air quality impacts to a less than significant level. Similar mitigation measures were approved for the adjacent Blythe Solar Power Project, a solar thermal project. The construction of a PV project will typically cause fewer emissions than the construction of a solar thermal project, hence these measures are considered to be conservative.

1. The main access roads through the facility to the unit substation areas shall be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction in the unit substation areas.
2. All unpaved construction roads and unpaved operation and maintenance site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be both as efficient or more efficient for fugitive dust control as ARB-approved soil stabilizers, and shall not increase any other environmental impacts including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project and linear construction sites shall be watered as frequently as necessary during grading; and after active construction activities shall be stabilized with a nontoxic soil stabilizer or soil weighting agent, or alternative

¹ Based on *Table 11-4, Mitigation for PM10 Emissions – Construction of the South Coast Air Quality Management District's CEQA Air Quality Handbook (1993)*. Although 80% is not shown in this table for a specific set of measures, it is assumed that multiple measures together could achieve this control efficiency. A similar approach has been accepted by the CEC and BLM for other projects, e.g., the nearby Blythe Solar Power Project, approved in 2010.

approved soil stabilizing methods. The frequency of watering can be reduced or eliminated during periods of precipitation.

3. No vehicle shall exceed 10 miles per hour on unpaved areas within the site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
4. Visible speed limit signs shall be posted at the site entrance(s).
5. All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.
6. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
7. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.
8. All construction vehicles shall enter the construction site through the treated entrance roadways.
9. All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
10. At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads enroute from the construction site or construction staging areas shall be swept as needed (less during periods of precipitation) on days when construction activity occurs or on any other day when dirt or runoff resulting from the construction site activities is visible on the public paved roadways.
11. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or shall be treated with appropriate dust suppressant compounds.
12. All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
13. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this measure shall remain in place until the soil is stabilized or permanently covered with vegetation.
14. The disruption of desert pavement shall be minimized to the extent feasible.

3.2 Project Operation

3.2.1 Operation Emissions Estimation Methodology and Assumptions.

Operation-related criteria pollutant emissions, including fugitive dust, would be generated from on-site equipment and on-site and off-site vehicle use.

3.2.1.1 Methodology for Emissions from On-site Equipment

Off-road equipment on the Project site during operation will consist of two 35-horsepower diesel-powered emergency generators. The operation of the generators would result in the generation of VOC, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} emissions. According to the California Airborne Toxic Control

Measure (ATCM) for Stationary Compression Ignition (CI) § 93115.9, these generators were assumed to be 2008-2012 model year engines and will comply with the interim Tier 4 off-road compression ignition engines exhaust emissions standards per California Code of Regulations Title 13, Division 3, Chapter 9, Article 4, Section 2423. The emission factors used for calculating emissions were assumed to be equal to these exhaust standards. Emissions from these diesel generators were estimated for a maximum of 1 hour per day and 50 hours per year of regular testing and maintenance operation. As the duration of emergency use cannot be predicted, emissions during possible emergency use were not included. Details of the calculations and model input and output are provided in **Attachment 2-A Operation Equipment**.

3.2.1.2 Methodology for Motor Vehicle Emissions during Operation

Emissions from both on-site and off-site motor vehicles used during operation were modeled using the Operation module in URBEMIS. On-site vehicles used during operation include vehicles used for panel washing and other maintenance. Off-site vehicles include employee traffic and delivery trucks. The combustion of fuel in off-site and on-site vehicles would generate VOC, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} emissions. Motor vehicle brake and tire wear and travel on paved roads with entrained road dust results in PM₁₀ and PM_{2.5} emissions.

Vehicles traveling on the project site for periodic panel washing and other maintenance activities could increase the entrainment of dust over current conditions. Note, however, that although new fugitive dust emissions are predicted from the operation of the proposed Project according to calculations and assumptions provided herein, the proposed Project may reduce overall fugitive dust emissions in the region. By its nature, a solar energy project must keep dust to a minimum through the use of dust control measures, as a film of dust on the panels will reduce their efficiency for energy production. Dust control is achieved by a combination of soil stabilizers, water from the panel washing, and compaction of the driving surface over time. Therefore, the emissions estimates and impact analyses for PM₁₀ and PM_{2.5} should be considered very conservative.

Emissions were modeled for the year 2017, the first year when the Project would become fully operational. As the proposed land use is not one of the default land uses in URBEMIS, a user-defined land use was created, along with daily trip rate, trip length and vehicle characteristics based on the information provided by WorleyParsons. Details of the calculations and model input and output are provided in **Attachment 2-B Operation Vehicles**.

3.2.1.3 Methodology for Fugitive Dust Emissions during Operation

Section 3.1 included a discussion of disturbance of desert pavement as a potential source of fugitive dust during construction. If the desert pavement is disturbed (e.g., by vehicles traversing it), the loosened particles could become airborne during windy conditions. Therefore, the proposed measure to avoid disturbance of the desert pavement during construction would also be implemented during operation to maintain the desert pavement and minimize fugitive dust emissions due to wind erosion during operation. As noted above, by its nature, a solar project needs to minimize fugitive dust emissions that could decrease the efficiency of the panels during operation.

A summary of criteria pollutant emissions during operation is provided in **Attachment 2-C Summary of Operation Criteria Pollutant Emissions**.

3.2.2 Operation Emissions Estimates and Impacts.

Tables 3 and 4 show the annual and maximum daily criteria pollutant emissions generated each year during the Project's operation, respectively. These emission estimates do not account for reductions from mitigation measures. The annual and maximum daily emissions of all pollutants are below their respective MDAQMD CEQA thresholds. Therefore, the impacts from the proposed Project's operation would be less than significant. As previously discussed, the fugitive dust emissions predicted in this analysis of operational impacts should be considered a conservative estimate. This is because the use of soil stabilizers, panel washing, and compaction of the driving surface over time may result in a net reduction of fugitive dust in the project area.

Table 3 – Annual Operation Emissions

Source	Maximum Annual Emissions (tons/year)									
	VOC	NOx	CO	SOx	PM10 Exhaust	PM10 Dust	Total PM10	PM2.5 Exhaust	PM2.5 Dust	PM2.5
On Site Equipment	0.001	0.021	0.016	0.000	0.001	0.000	0.001	0.001	0.000	0.001
On Site Vehicles	0.000	0.030	0.020	0.000	0.000	7.730	7.730	0.000	0.770	0.770
Off Site Vehicles	0.020	0.070	0.430	0.000	0.010	0.190	0.200	0.010	0.030	0.040
Total Emissions	0.02	0.12	0.47	0.00	0.01	7.92	7.93	0.01	0.80	0.81
MDAQMD CEQA Threshold	25	25	100	25	---	---	15	---	---	15
Significant Impact (Yes/No)	No	No	No	No	---	---	No	---	---	No

Table 4 – Maximum Daily Operation Emissions

Source	Maximum Daily Emissions (pounds/day)									
	VOC	NOx	CO	SO2	PM10 Exhaust	PM10 Dust	Total PM10	PM2.5 Exhaust	PM2.5 Dust	PM2.5
On-Site Equipment	0.04	0.82	0.63	0.00	0.03	0.00	0.03	0.03	0.00	0.03
On-Site Vehicles	0.01	0.16	0.13	0.00	0.01	42.32	42.33	0.01	4.23	4.24
Off-Site Vehicles	0.14	0.50	2.46	0.01	0.05	1.02	1.07	0.03	0.17	0.20
Total Emissions	0.19	1.48	3.22	0.01	0.09	43.34	43.43	0.07	4.40	4.47
MDAQMD CEQA Threshold	137	137	548	137	---	---	82	---	---	82
Significant Impact (Yes/No)	No	No	No	No	---	---	No	---	---	No

As discussed above in Section 3.1.2, because of the natural deterrent effect on wind erosion caused by desert pavement terrain, efforts to minimize the disruption of desert pavement will be taken during

MSEP construction. Disturbance of desert pavement during operation of the proposed Project is not anticipated as vehicle and equipment use will be constrained to previously disturbed areas and roads. Therefore, no adverse effects related to the disruption of desert pavement during operation of the MSEP would occur. As required by Mitigation Measure 2 below, all areas in the project and linear sites that were disturbed during construction will be stabilized with a nontoxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods. Such stabilizing methods will be applied to desert pavement and will be implemented throughout the life of the project as necessary.

3.2.3 Applicant Proposed Operation Mitigation Measures.

Although Tables 3 and 4 show that criteria pollutant emissions during operation of the MSEP will be less than significant, the Applicant proposes to implement the following mitigation measures which will further reduce the emissions. Similar mitigation measures were approved for the adjacent Blythe Solar Power Project, a solar thermal project. Operation of a PV project will typically cause fewer emissions than the operation of a solar thermal project, hence these measures are considered to be conservative.

1. The main access roads through the facility to the unit substation areas shall be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, and delivery areas for operations materials (chemicals, replacement parts, etc.) shall be paved or treated prior to taking initial deliveries.
2. All unpaved operation and maintenance site roads shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be both as efficient or more efficient for fugitive dust control as ARB approved soil stabilizers, and shall not increase any other environmental impacts including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. After construction activities, all disturbed areas in the project and linear sites shall be stabilized with a nontoxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods.
3. No vehicle shall exceed 10 miles per hour on unpaved areas within the site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
4. Visible speed limit signs shall be posted at the site entrance(s).
5. All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
6. The disruption of desert pavement shall be minimized to the extent feasible.

3.3 General Conformity Analysis

Federal actions are subject to conformity determinations as per the requirements set forth in Mojave Desert Air Quality Management District (MDAQMD) Rule 2002. The rule lists the de-minimis limits for applicability for projects located in nonattainment and maintenance areas. The proposed Project would be located in the portion of the Mojave Desert Air Basin (MDAB) in Riverside County. The Riverside County portion of the MDAB is designated as attainment/unclassified for federal air quality standards for all criteria pollutants. Since the area is neither nonattainment nor maintenance for any criteria pollutant, the provisions of this rule and thus, the requirements for a General Conformity determination are not applicable.

Although General Conformity requirements do not apply in this area, the de minimis levels can be used as mass emissions indicators for adverse annual emissions.

The conformity thresholds for maintenance areas (locations that currently meet federal air quality standards but which violated the standards in prior years), are generally 100 tons per year (tpy) per pollutant. As can be seen in **Table 1** (construction) and **Table 3** (operation), annual MSEP emissions will be well below the 100 tpy threshold; with at most 20 tons per year of CO during construction and 8 tons per year of PM10 during operation.

3.4 Impacts to Sensitive Receptors

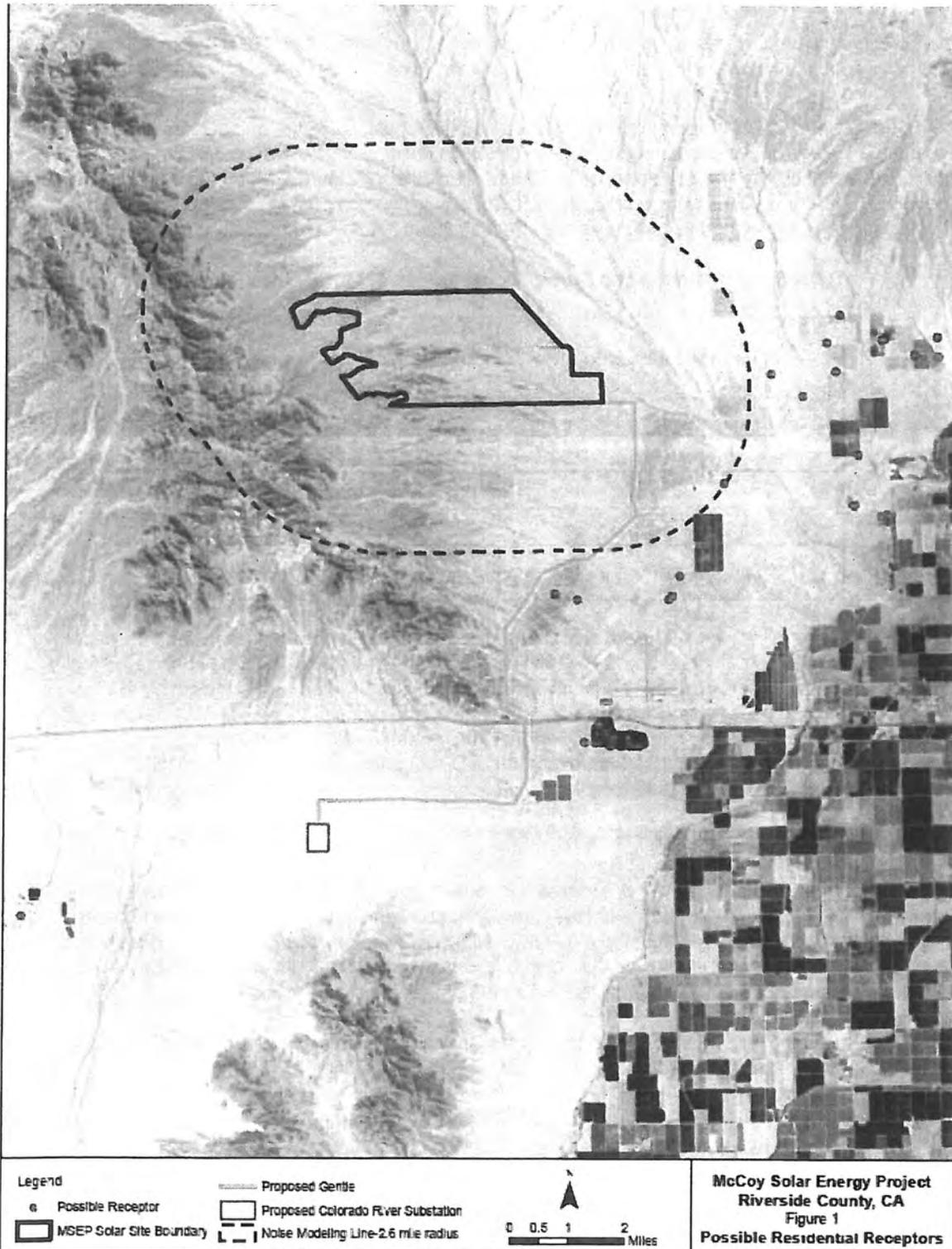
One of the criteria identified by the CEQA Guidelines (Appendix G) to determine whether implementation of the Project would result in significant air quality impacts is the exposure of nearby sensitive receptors to substantial pollutant concentrations. As stated in Appendix G of the CEQA Guidelines, the significance thresholds established by the applicable air district may be relied upon to make this determination. Sensitive receptors are defined as land uses where sensitive population groups are likely to be located (e.g., children, the elderly, the acutely ill, and the chronically ill). These land uses include residences, schools, childcare centers, retirement homes, convalescent homes, medical care facilities, and recreational facilities. The MDAQMD CEQA guidelines specify that industrial projects within 1,000 feet of existing or planned sensitive receptor land uses must be evaluated for this criterion. As shown in Figure 1, there are no sensitive receptors in proximity to the Project site (within 1,000 feet). In fact, the nearest residence is over two and half miles from the MSEP site boundary. Therefore, the air quality impacts of the Project with respect to sensitive receptors would be less than significant.

3.5 Cumulative Impacts

Cumulative impacts result from the proposed Project's incremental effect, together with other closely related past, present and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Public Resource Code § 21083; California Code of Regulations, Title 14, §§ 15064(h), 15130, 15355.)

It is expected that the BLM will compile a list of all the projects to be included in the cumulative impacts assessment. In addition to the receptors in proximity of the Project site, receptors farther than 1,000 feet of the Project site could be subject to cumulative impacts from nearby projects occurring concurrently with the Project. As shown in Figure 1, the closest sensitive receptor is 2.6 miles from the Project boundary and there are several sensitive receptors beyond 2.6 miles and within 6 miles of the Project boundary. As discussed above, operation of the Project would not generate pollutant emissions that exceed applicable thresholds. The potential for a cumulative air quality impact to occur depends on the location and nature of proposed and pending projects in the area. Given that the Project's operation impacts would be less than significant, it is expected that the Project's contribution to a cumulative impact, if identified based on the list of proposed and pending projects, would not be significant. As previously discussed, emissions generated during construction of the Project would be less than significant with the incorporation of mitigation measures proposed by the Applicant. As with cumulative operation impacts, cumulative impacts related to construction also depend on the location and nature of proposed and pending projects in the area. Given that the Project's mitigated construction emissions would be below thresholds and would only occur during temporary construction activities, it is anticipated that the Project's contribution to a cumulative construction impact, if identified, would not be significant.

Figure 1 – Receptors Within 6 Miles of MSEP



4.0 Health Risk Due To Diesel Particulate Matter

In 1990, the State of California administratively listed under Proposition 65 the particulates formed in the exhaust of diesel-powered equipment and vehicles as a chemical known to the State to cause cancer. **Table 5** shows the annual emissions of Diesel Particulate Matter (DPM) during construction of the MSEP. DPM emissions were calculated as PM10 emissions from diesel-powered equipment and vehicles using the methodology discussed in Section 3 above for PM10 emissions.

Table 5 – DPM Emissions During Construction of MSEP Units 1 and 2

Year of Construction	DPM Emissions (tons/year)
2013	0.54
2014	0.58
2015	0.54
2016	0.58
Maximum Annual Value	0.58

MDAQMD CEQA requirements for health risk assessments categorize project sites by land use type and define the distance from the project site within which sensitive receptors must be considered for increased health risk. The worst case potential impact radius is associated with "Any industrial project", requiring that sensitive receptors within 1,000 feet of the project be considered. Though solar projects are not specifically identified in the categories, this worst case radius was assumed as the criterion for determining potential risks from exposure to DPM during construction. Using the associated definition of sensitive receptors, which include residences, schools, daycare centers, playgrounds and medical facilities, it was determined that the closest sensitive receptor is located over 2.5 miles (13,200 feet) from the project site.

MDAQMD does not present any additional screening tools beyond the above impact radii for the determination of potential health risks. Although the closest sensitive receptor is more than 13 times farther away from the project site than the MDAQMD defined radius for potential health risk, a second screening analysis was performed using the construction screening tables developed by the Bay Area Air Quality Management District and provided in Table 2 of their toxics screening document: (http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/CEQA_Construction_Screening_Approach.ashx?la=en). This methodology was chosen as it was seen as the most applicable screening approach available to this situation.

The maximum area where heavy construction activities will occur at a single time, conservatively assuming simultaneous construction of Units 1 and 2, would be 56 acres (23.2 acres for Unit 1, 32.8 acres for Unit 2). Using the Industrial Project type on the table, which is the most conservative, and rounding up to the next highest area for the construction, which is 137.7 acres, the minimum offset distance from the project fence line to ensure that a sensitive receptor would have a less-than-

significant impact from DPM emissions is 500 meters (1,640 feet) for cancer risk and 35 meters (115 feet) for chronic non-cancer risk. Again, the nearest sensitive receptor is far beyond the distance at which impacts from DPM might be expected to cause an increased health risk.

In both screening analyses, the nearest sensitive receptor is many times farther away from the project site than the defined radius at which a potential increase in health risk might occur. Therefore, emissions of DPM from MSEP construction are not expected to cause significant health risks at any sensitive receptor in the vicinity of the project.

5.0 Greenhouse Gases

This section provides an analysis of greenhouse gas (GHG) impacts associated with construction and operation of the proposed Project.

GHGs of concern include the following compounds:

- Carbon dioxide (CO₂)
- Nitrous oxide (N₂O)
- Methane (CH₄)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆).

Only the first three of these six GHGs are combustion source related and will be emitted by the equipment and vehicles used for the Project. A small amount of SF₆ may be emitted from the equipment associated with the transmission lines during Project operation. The project is not expected to have any emissions of HFCs or PFCs. The primary GHG of concern for this project is CO₂, as the emission rates of CH₄, N₂O, and SF₆ are orders of magnitude less than CO₂.

5.1 Project Construction

GHG emissions will be generated by the equipment used for construction activities and from both on-site and off-site motor vehicles.

5.1.1 Construction GHG Emissions Estimation Methodology and Assumptions

This section presents the methodology and assumptions used to estimate GHG emissions from construction of the Project.

5.1.1.1 Methodology for GHG Emissions from Construction Equipment

The combustion of fuel to provide power for the operation of various equipment results in the generation of GHGs.

The CO₂ emissions from off-road equipment use were estimated using the same methodology described above for criteria pollutants from construction equipment. The methodology employs the URBEMIS model, which calculates only CO₂ emissions. Emissions of N₂O and CH₄ were calculated outside of URBEMIS using the CO₂ emissions calculated by URBEMIS and CO₂, N₂O and CH₄ emission factors obtained from The Climate Registry Default Emission Factors (2011) for diesel fuel combustion. Emission factors for CO₂ are in units of kilograms per gallon and emission factors for N₂O and CH₄ are provided in terms of grams per mile. These factors were converted to grams per gallon units by assuming a fuel efficiency of 20 miles per gallon for cars and light trucks and 8.0 miles per gallon for medium and heavy trucks. Emissions of N₂O and CH₄ were then calculated as a product of CO₂ emissions and the ratio of the N₂O or CH₄ emission factors to the CO₂ emission factor.

N₂O and CH₄ emissions were multiplied by their respective global warming potentials and added to the CO₂ emissions to obtain CO₂-equivalent (CO₂e) emissions. Details of the calculations, including a summary of GHG emissions, are provided in **Attachment 1-E Summary of Construction GHG Emissions**.

5.1.1.2 Methodology for Motor Vehicle GHG Emissions

The combustion of fuel in motor vehicle engines would also generate GHG emissions. During construction, GHG emissions would be generated by motor vehicles within the Mojave Desert Air Basin (i.e., construction worker trips to and from the project site and deliveries of construction materials from points within the MDAB). It is currently undecided where the PV panels will be obtained for the McCoy project, e.g., they could come from Arizona or be imported through the Port of Long Beach. In order to provide a conservative estimate of GHG emissions anywhere within California, GHG emissions outside of the MDAB were estimated based on an assumed round trip for delivery of PV panels from the Port of Long Beach. The GHG emissions due to these PV panel delivery trips were broken down into the round trip miles outside the MDAB from Long Beach to the air basin boundary, and within the MDAB related to round trips from the boundary to the Project site. Vehicle miles traveled per vehicle type for each phase of construction were provided by WorleyParsons and are included in **Tables 5 through 10 of Attachment 1-E Summary of Construction GHG Emissions**.

GHG emissions from motor vehicles used during construction were estimated outside of URBEMIS using the same methodology described above for criteria pollutants from construction vehicles. Since the EMFAC2007 model provides emission factors for only CO₂ emissions, emission factors for N₂O and CH₄ for different vehicle types were obtained from the ARB's Regulation for The Mandatory Reporting of Greenhouse Gas Emissions, Appendix A, Table 8. GHG emission factors were calculated as CO₂e in kilograms per mile by multiplying the N₂O and CH₄ emission factors by their respective global warming potential and adding them to the CO₂ emission factors. CO₂e emission factors are provided in **Attachment 1-C Construction Vehicle Emissions, Tables 1-A and 2**. Monthly GHG emissions from vehicles used during different phases of construction are provided in **Attachment 1-C Construction Vehicle Emissions, Tables 3 through 8**. A summary of monthly GHG emissions from vehicles is provided in **Table 2 of Attachment 1-E Summary of Construction GHG Emissions**.

A summary of all construction GHG emissions is provided in **Attachment 1-E Summary of Construction GHG Emissions**.

5.1.2 Construction GHG Emissions Estimates and Impacts

Table 6 shows GHG emissions generated by Project construction activities. As noted above, the GHG emissions are broken down between those which will be generated within the MDAB and GHG emissions from Project construction activities (e.g., delivery of PV panels) outside of the MDAB. As shown in **Table 6**, the Project's construction would generate an estimated 10,209 CO₂e tonnes² within the MDAB and another 2,463 tonnes outside of the MDAB, for a total of 12,672 CO₂e tonnes within California.

² A tonne is a metric ton (MT) which equals 1,000 kilograms or 1.102 short tons.

Table 6 – Project Construction GHG Emissions

	GHG Emissions within the MDAB	GHG Emissions outside the MDAB	Total GHG Emissions within California
Total 2013 CO ₂ e Emissions (Tonnes)	1,945	362	2,307
Total 2014 CO ₂ e Emissions (Tonnes)	2,500	627	3,127
Total 2015 CO ₂ e Emissions (Tonnes)	2,567	549	3,116
Total 2016 CO ₂ e Emissions (Tonnes)	3,197	925	4,122
Total CO₂e Emissions (Tonnes)	10,209	2,463	12,672

Notes:

a. Emission Factors obtained from 2011 The Climate Registry Default Emission Factors—Released January 14, 2011. <http://www.theclimateregistry.org/downloads/2009/05/2011-Emission-Factors.pdf>

b. All vehicles were assumed to be gasoline vehicles. Emission factors for CH₄ and N₂O are the maximum factors of various vehicle types and control technologies.

There are no adopted, enforceable federal or state regulations applicable to MSEP construction GHG emissions, nor is there a quantitative threshold over which construction GHG emissions are considered "significant" under CEQA. Nevertheless, there is guidance from regulatory agencies on how the significance of such emissions should be assessed. For example, the most recent guidance from ARB staff recommends a "best practices" threshold for construction emissions (2008). Best practices include the implementation of all feasible methods to control construction-related GHG emissions. As the "best practices" approach is currently recommended by the state agency primarily responsible not only for air quality standards but also for GHG regulation, it has been used here to assess the GHG emissions from MSEP construction.

Best practices to reduce GHG emissions include:

- operational measures, such as limiting equipment and vehicle idling time and shutting down equipment when not in use;
- regular preventive maintenance to prevent emission increases due to engine problems; and
- use of newer, more fuel efficient or low-emitting diesel engines meeting federal/state emissions standards for construction equipment, whenever available.

The measures described above would directly and indirectly minimize the emissions of GHGs during the Project's construction and they are in accordance with current best practices. Because these measures will be implemented for MSEP, the GHG impacts from construction activities would not be significant.

5.2 Project Operation

Direct operation-related GHG emissions would be generated by equipment and vehicle use. GHGs would also be released as fugitive sulfur hexafluoride (SF₆) emissions from electrical components such as circuit breakers that use SF₆ to provide electrical insulation. Indirect GHG emissions would be generated due to electricity use.

5.2.1 Operation GHG Emissions Estimation Methodology and Assumptions

This section presents the methodology and assumptions used to estimate GHG emissions from operation of the Project.

5.2.1.1 Methodology for GHG Emissions from On-Site Equipment

GHG emissions would be generated during the testing and maintenance of two on-site 35-horsepower diesel-powered emergency generators. GHG emissions from the diesel generators were calculated using the estimated annual fuel usage and emission factors obtained from The Climate Registry Default Emission Factors (2011) for diesel fuel combustion. Annual fuel usage is based on 50 hours per year of operation, power rating of diesel engine, and the Brake Specific Fuel Consumption, heating value and density of diesel.

Details of the fuel usage calculations are provided in **Attachment 2-A Operation Equipment**.

A summary of GHG emissions is provided in **Attachment 2-D Summary of Operation GHG Emissions**.

5.2.1.2 Methodology for GHG Emissions from Motor Vehicles

The CO₂ emissions from motor vehicles used during operation were estimated using the same methodology described above for GHG emissions from construction phase motor vehicles. Details of the calculation are provided in **Attachment 2-C Operation GHG**.

5.2.1.3 Methodology for GHG Emissions from Other GHG Sources

Other sources of GHG emissions during the Project's operation would include indirect emissions from electricity use and fugitive SF₆ emissions.

Electric power would be drawn from the grid for day-to-day operation of the facility including the on-site operations and maintenance building and other areas. GHG emissions from electricity use were estimated by multiplying the expected annual electricity consumption provided by WorleyParsons by the CO₂, N₂O and CH₄ emission factors obtained from The Climate Registry Default Emission Factors (2011). N₂O and CH₄ emissions were multiplied by their respective global warming potential and added to the CO₂ emissions to obtain CO₂e emissions. Details of the calculation are provided in **Attachment 2-D Operation GHG**.

Emissions of SF₆ could occur due to equipment failure or leakage from electrical equipment such as circuit breakers that contains SF₆. The calculations for SF₆ emissions were based on the conservative assumptions that there will be two 230 kV circuit breakers and two 34.5 kV circuit breakers installed for each of the two power units. The 230 kV breakers were assumed to contain 270 lbs of SF₆, while the 34.5 kV breakers were assumed to contain approximately 100 lbs of SF₆. Each of the circuit breakers will be hermetically sealed to prevent the escape of SF₆ into the atmosphere. It should be noted that emissions of SF₆ from a hermetically sealed circuit breaker can only occur due to equipment failure as there is no ability for the user to refill or extract SF₆ due to the factory seal. The CARB Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (Subchapter 10, Article 4, Subarticle 3.1 §95351 (a)(9)) defines hermetically sealed circuit breakers as "designed to be gas-tight and sealed for life". Nonetheless, an assumed leak rate of 0.5% was used for estimates to provide a conservative upper bound estimate of SF₆ release. It was also assumed that SF₆ is weighted at a Global Warming Potential (GWP) of 23,900 based on a 100-year time horizon,

which is consistent with state, federal, and international standards. Details of the calculation are provided in **Attachment 2-D Operation GHG**.

5.2.2 Operation GHG Emissions Estimates and Impacts

As shown in **Table 7**, operation of the proposed Project would generate an estimated total of 216 CO₂e tonnes of GHGs annually.

Table 7 – Annual GHG Emissions from Project Operations

Annual GHG Emissions from Project Operations (Tonnes/year)	
Fossil Fuel Combustion	112
Indirect Electricity Use	24
Fugitive Sulfur Hexafluoride Emission	80
Total Annual Operation GHG	216

MSEP is exempt from the SB 1368 Emission Performance Standard (EPS) requirement of 0.500 tonnes of CO₂e per megawatt-hour [MT CO₂e/MWh] (this is the equivalent of 1,100 pounds CO₂/MWh). Regardless, MSEP has an estimated GHG emission rate of 0.0001 tonnes CO₂e/MWh, well below the GHG EPS.

5.3 Total GHG Emissions

Combining the total construction and operation GHG emissions discussed above, MSEP will emit the following:

12,672 tonnes CO₂e during construction + 6,480 (216 x 30 years³) tonnes CO₂e during operation, for a Project total of 19,152 tonnes of CO₂e of greenhouse gases.

As noted above, MDAQMD has not established a CEQA significance threshold for construction or operation-related GHG emissions. However, the SCAQMD has adopted a threshold for industrial projects of 10,000 CO₂e tonnes per year for the sum of annual operational GHG emissions and total construction GHG emissions amortized over 30 years. As shown in **Table 8**, for the MSEP, the sum of annual operational GHG emissions, without considering the potential reductions from displacement of gas-fired generation, and amortized construction GHG emissions is 638 CO₂e tonnes per year, which is well below the SCAQMD CEQA significance threshold of 10,000 CO₂e tonnes per year.

Therefore, the operation-related GHG emissions from the proposed Project would not have significant climate change impacts.

³ Assumed MSEP life

Table 8 – Total Annual Amortized GHG Emissions

30-year Amortized Construction Emissions ¹ (Tonnes/year)	422
Total Annual Operation GHG Emissions (Tonnes/year)	216
Amortized Construction + Annual Operation (Tonnes/year)	638
SCAQMD CEQA GHG Threshold	10,000
Significant Impact (Yes/No)	No

5.4 Displacement of GHGs

The proposed renewable source of energy could displace electricity generated by fossil fuel combustion and provide low-GHG electricity to consumers. The reduction in GHG emissions by electricity displacement was estimated by assuming that the solar power displaces electricity generated by dispatchable natural-gas fired combined-cycle power plants and that the Project has a capacity factor of 26 percent. Natural gas energy requirements for generation by combined-cycle power plants and emission factors from The Climate Registry were used to estimate the displaced emissions.

Net GHG emissions due to the proposed Project were estimated as the difference between GHG emissions generated by the Project and GHG emissions prevented/displaced by the Project. Details of the calculations are provided in **Attachment 2-D Summary of Operation GHG Emissions**.

Assuming that the renewable energy produced by the Project would displace gas-fired generation, the project would displace an estimated 639,061 tonnes of GHGs annually, resulting in a net reduction of 638,846 tonnes per year.

6.0 References

- Anderson, Chris, Air Quality Engineer, MDAQMD. Personal communication on November 7, 2011.
- Bay Area Air Quality Management District. 2010. *Screening Tables for Air Toxics Evaluation During Construction*, Table 2. May 2010. Available: http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/CEQA_Construction_Screening_Approach.ashx?la=en. Accessed: October 2011.
- California Air Resources Board. 2010. *Amendments to the Regulations for In-Use Off-Road Diesel-Fueled Fleets and Off-Road Large Spark Ignition Engine Fleet Requirements*. December 16, 2010. Available: www.arb.ca.gov/regact/2010/offroadlsi10/offroadlsi10.htm. Proposed load factors are available in Appendix D, Table D-7 on page D-10. Accessed: October 2011.
- California Air Resources Board. 2007. EMFAC2007 (version 2.3) Burden Model. Available: http://www.arb.ca.gov/msei/onroad/latest_version.htm. Accessed: October 2011.
- California Air Resources Board, Preliminary Draft Staff Proposal. 2008. Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act, pp. 9. October 24, 2008.
- California Air Resources Board. 2010. *Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear*. Subchapter 10, Article 4, Subarticle 3.1 §95351 (a)(9)).
- California Office of Planning and Research. 2011. *California Environmental Quality Act Statutes and Guidelines*.
- The Climate Registry. 2011. Default Emission Factors. Available: <http://www.theclimateregistry.org/downloads/2009/05/2011-Emission-Factors.pdf>. Accessed October 2011.
- The Climate Registry. 2009. *Electric Power Sector Protocol for the Voluntary Reporting Program*, Version 1.0. June 2009. Available: http://www.theclimateregistry.org/downloads/2009/05/Electric-Power-Sector-Protocol_v1.0.pdf. Accessed: October 2011.
- McAuliffe, J. R. 2000. Desert Soils. In S. J. Phillips and P. W. Comus (eds.), *A Natural History of the Sonoran Desert*, pp. 87-104. Arizona-Sonora Desert Museum Press, Tucson AZ & University of California Press, Berkeley CA.
- McCoy Solar, LLC. 2011. McCoy Solar Energy Project Description.
- Mojave Desert Air Quality Management District. 1996. Rule 2002, General Federal Actions Conformity, adopted October 26, 1994. Available at: <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=202>. Accessed: October 2011.

- Mojave Desert Air Quality Management District. 2009. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. February 2009. Available: <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1456>. Accessed October 2011.
- South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*.
- South Coast Air Quality Management District. 2006. Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, Appendix A. October 2006. Available: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html. Accessed October 2011.
- South Coast Air Quality Management District. 2010. Overview Off-Road Engines Mitigation Measure Tables, Table II. May 2010. Available at: http://www.aqmd.gov/ceqa/handbook/mitigation/offroad/Off-Road_MM_Overview.pdf
- Tetra Tech EC, Inc. 2011. Traffic Impact Analysis. McCoy Solar Energy Project, Riverside, California. November 2011.
- URBEMIS 2007, Version 9.2.4. Accessed: October 2011.
- Wood, Y.A., Graham, R.C., Wells, S.G. 2002. Surface mosaic map unit development for a desert pavement surface. *Journal of Arid Environments* 52, 305–317.

Attachment 1

Construction Emissions

Attachment 1-A

Construction Equipment Emissions

Table 1.1 - Construction Equipment Numbers

Equipment/Vehicle Type Construction Equipment	ARB Offroad Category	Unit 2 Daily Equipment Number												Unit 1 Average Daily Equipment Number	Unit 2 Average Daily Equipment Number	Revised Load Factor			
		Month 34 Dec-15	Month 35 Jan-16	Month 36 Feb-16	Month 37 Mar-16	Month 38 Apr-16	Month 39 May-16	Month 40 Jun-16	Month 41 Jul-16	Month 42 Aug-16	Month 43 Sep-16	Month 44 Oct-16	Month 45 Nov-16				Month 46 Dec-16		
Generator	Generator Sets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	---
Skip Loader	Rubber Tired Loaders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	0.36
Track Trencher	Trenchers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	0.5
Phase 2- Grading and Earthwork																			
Dozer Cat D6R	Crawler Tractors	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	0.43
Generator	Generator Sets	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2.1	2.0	---
Scraper Cat 623	Scrapers	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2.0	2.0	0.48
Deere 210LE Skip Loader	Rubber Tired Loaders	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	0.36
Cat 140H Grader	Graders	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2.0	2.0	0.41
Roller/Vibrator/compactor/other	Rollers	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.9	1.0	0.38
Cat BG600D Paver	Pavers	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.42
Phase 3 - PV Panel Construction																			
Generator	Generator Sets	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	2.0	---
Air Compressor	Air Compressors	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	2.0	---
Dozer Cat D6R	Crawler Tractors	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.0	0.43
Deere 210LE Skip Loader	Rubber Tired Loaders	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.0	0.36
Telehandler	Rough Terrain Forklifts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	2.0	0.4
Track Trencher	Trenchers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.0	0.5
Cat 553T Pipelayer	Other Construction Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.0	0.42
Phase 4 - Substation, Building and Water Tank Construction																			
Generator	Generator Sets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	---
Air Compressor	Air Compressors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	---
Skip Loader	Rubber Tired Loaders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	0.36
Crane - Boom Truck	Cranes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	1.0	0.29
Phase 5 - Offsite Linear																			
Dozer Cat D6R	Crawler Tractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	---	0.43
Generator	Generator Sets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	---	---
Cat 140H Grader	Graders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	---	0.41
Roller/Vibrator/compactor/other	Rollers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	---	0.38
Phase 6 - Testing and Commissioning																			
Roller/Vibrator/compactor/other	Rollers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	1.0	0.38
Cat BG600D Paver	Pavers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	1.0	0.42

Table 1.2 - Acreage Paved with Asphalt

Quantity of Acres Paved	Daily Acreage Paved with Asphalt																
	Month 1 Mar-13	Month 2 Apr-13	Month 3 May-13	Month 4 Jun-13	Month 5 Jul-13	Month 6 Aug-13	Month 7 Sep-13	Month 8 Oct-13	Month 9 Nov-13	Month 10 Dec-13	Month 11 Jan-14	Month 12 Feb-14	Month 13 Mar-14	Month 14 Apr-14	Month 15 May-14	Month 16 Jun-14	
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Daily	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0
Total Monthly	0	0	0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0	0	0	0	0	0	0

Table 1.2 - Acreage Paved with Asphalt

Asphalt Paving		Daily Acreage Paved with Asphalt													
Quantity of Acres Paved		Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46
		Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Phase 1	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 6	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0
Total Daily	Acres/day	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0
Total Monthly	Acres/Month	0	0	0	0	0	0	0	0	0	0	0	11	11	0

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCoy\McCoy Construction Emissions\11-7-2011\1. Construction\1-A Construction Equipment\Unit 1 - Phase 1 - Fencing and Mobilization\Unit 1 Phase 1 Daily.urb924

Project Name: McCoy Unit 1 Phase 1 - Fencing and Mobilization

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Building 03/01/2013-04/30/2013	0.03	0.15	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	13.58
Building Off Road Diesel	0.03	0.15	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	13.58
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 4 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\11-7-2011\1. Construction\1-A Construction Equipment\Unit 2. Phase 1 - Fencing and Mobilization\Unit 1 Phase 1 Daily.urb924

Project Name: McCoy Unit 1 Phase 1 - Fencing and Mobilization

Project Location: California State-wide

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

off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Time Slice	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
me Slice 3/1/2013-4/30/2013 Live Days: 43	1.32	7.16	4.71	0.00	0.00	0.61	0.61	0.00	0.56	0.56	611.73
Building 03/01/2013-04/30/2013	1.32	7.16	4.71	0.00	0.00	0.61	0.61	0.00	0.56	0.56	631.73
Building Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 3/1/2013 - 4/30/2013 - Default Building Construction Description

off-Road Equipment:

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 4 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\11-7-2011\1. Construction\1-A Construction Equipment\Unit 1\2. Phase 1 - Fencing and Mobilization\Unit 1 Phase 1 Daily.urb924

Project Name: McCoy Unit 1 Phase 1 - Fencing and Mobilization

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 3/1/2013-4/30/2013 Active Days: 43	1.12	7.16	4.71	0.00	0.00	0.61	0.61	0.00	0.56	0.56	611.73
Building 03/01/2013-04/30/2013	1.32	7.16	4.71	0.00	0.00	0.61	0.61	0.00	0.56	0.56	631.73
Building Off Road Diesel	1.32	7.16	4.71	0.00	0.00	0.61	0.61	0.00	0.56	0.56	631.73
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 3/1/2013 - 4/30/2013 - Default Building Construction Description

Off-Road Equipment:

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 4 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mentas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\1. Construction\1-A Construction Equipment\Unit 3. Phase 2 - Grading and Earthwork\Unit 1 Phase 2 Grading Daily.urb924

Project Name: McCoy Unit 1 Phase 2 - Grading and Earthwork

Project Location: California State-wide

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

off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10_Dust	PM10_Exhaust	PM10_Total	PM2.5_Dust	PM2.5_Exhaust	PM2.5_Total	CO2
13	0.51	3.88	1.65	0.00	0.00	0.16	0.16	0.00	0.15	0.15	451.09
Building 05/01/2013-04/30/2014	0.46	3.79	1.62	0.00	0.00	0.16	0.16	0.00	0.15	0.15	432.71
Building Off Road Diesel	0.46	3.79	1.62	0.00	0.00	0.16	0.16	0.00	0.15	0.15	432.71
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt 06/01/2013-12/31/2013	0.05	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.38
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.01	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.38
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.22	1.72	0.76	0.00	0.00	0.07	0.07	0.00	0.07	0.07	212.65
Building 05/01/2013-04/30/2014	0.22	1.72	0.76	0.00	0.00	0.07	0.07	0.00	0.07	0.07	212.65
Building Off Road Diesel	0.22	1.72	0.76	0.00	0.00	0.07	0.07	0.00	0.07	0.07	212.65
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 6/1/2013 - 12/31/2013 - Default Paving Description

age: 2

1/7/2011 1:59: 9 PM

res to be Paved: 31

ff-Road Equipment:

hase: Building Construction 5/1/2013 - 4/30/2014 - Default Building Construction Description

ff-Road Equipment:

Crawler Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

1 Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

3 Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

9 Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Scrapers (365 hp) operating at a 0.48 load factor for 8 hours per day

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\1. Construction\11-A Construction Equipment\Unit 13, Phase 2 - Grading and Earthwork\Unit 1 Phase 2 Grading Daily.urb924

Project Name: McCoy Unit 1 Phase 2 - Grading and Earthwork

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 5/1/2013-5/31/2013 Active Days: 23	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building 05/01/2013-04/30/2014	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Off Road Diesel	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 6/3/2013-12/31/2013 Active Days: 152	5.91	44.51	17.90	0.00	0.01	1.81	1.82	0.00	1.71	1.71	5,171.11
Asphalt 06/01/2013-12/31/2013	0.62	1.24	0.44	0.00	0.01	0.05	0.05	0.00	0.04	0.05	241.82
Paving Off-Gas	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.09	1.24	0.44	0.00	0.01	0.05	0.05	0.00	0.04	0.05	241.82
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 05/01/2013-04/30/2014	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Off Road Diesel	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2014-4/30/2014 Active Days: 86	5.00	39.96	17.58	0.00	0.00	1.67	1.67	0.00	1.53	1.53	4,945.29
Building 05/01/2013-04/30/2014	5.00	39.96	17.58	0.00	0.00	1.67	1.67	0.00	1.53	1.53	4,945.29
Building Off Road Diesel	5.00	39.96	17.58	0.00	0.00	1.67	1.67	0.00	1.53	1.53	4,945.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 6/1/2013 - 12/31/2013 - Default Paving Description

Equipment: 31

Off-Road Equipment:

1/7/2011 1:51:22 PM

Phase: Building Construction 5/1/2013 - 4/30/2014 - Default Building Construction Description
Off-Road Equipment:

Crawler Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

.1 Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

.3 Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

.9 Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Scrapers (365 hp) operating at a 0.48 load factor for 8 hours per day

Urbemis 2007 Version 9.2.4

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\1. Construction\1-A Construction Equipment\Unit
13. Phase 2 - Grading and Earthwork\Unit 1 Phase 2 Grading Daily.urb924

Project Name: McCoy Unit 1 Phase 2 - Grading and Earthwork

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

11/7/2011 1:59:27 PM

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10_Dust	PM10_Exhaust	PM10_Total	PM2.5_Dust	PM2.5_Exhaust	PM2.5_Total	CO2
Time Slice 5/1/2013-5/31/2013 Active Days: 23	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building 05/01/2013-04/30/2014	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Off Road Diesel	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 6/3/2013-12/31/2013 Active Days: 152	5.93	44.54	18.90	0.00	0.01	1.86	1.87	0.00	1.71	1.71	5,187.11
Asphalt 06/01/2013-12/31/2013	0.62	1.24	0.44	0.00	0.01	0.05	0.05	0.00	0.04	0.05	241.82
Paving Off-Gas	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.09	1.24	0.44	0.00	0.01	0.05	0.05	0.00	0.04	0.05	241.82
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 05/01/2013-04/30/2014	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Off Road Diesel	5.31	43.30	18.47	0.00	0.00	1.81	1.81	0.00	1.67	1.67	4,945.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2014-4/30/2014 Active Days: 86	5.00	39.96	17.58	0.00	0.00	1.67	1.67	0.00	1.53	1.53	4,945.29
Building 05/01/2013-04/30/2014	5.00	39.96	17.58	0.00	0.00	1.67	1.67	0.00	1.53	1.53	4,945.29
Building Off Road Diesel	5.00	39.96	17.58	0.00	0.00	1.67	1.67	0.00	1.53	1.53	4,945.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 6/1/2013 - 12/31/2013 - Default Paving Description

Acres to be Paved: 31

Off-Road Equipment:

Phase: Building Construction 5/1/2013 - 4/30/2014 - Default Building Construction Description

Off-Road Equipment:

Crawler Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Roller Treaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Scrapers (365 hp) operating at a 0.48 load factor for 8 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions\11-7-2011\1. Construction 1-A Construction Equipment\Unit 14. Phase 3 - PV Construction\Unit 1 Phase 3 PV Construction Daily.ur924

Project Name: Unit 1 Phase 3 PV Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 7/1/2013-12/31/2013 Active Days: 132	3.57	1.54	11.9	0.00	0.00	1.51	1.51	0.00	1.39	1.39	1,367.19
Building 07/01/2013-02/28/2015	3.57	21.54	12.92	0.00	0.00	1.51	1.51	0.00	1.39	1.39	2,367.29
Building Off Road Diesel	3.57	21.54	12.92	0.00	0.00	1.51	1.51	0.00	1.39	1.39	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2014-12/31/2014 Active Days: 261	3.32	20.14	12.66	0.00	0.00	1.38	1.38	0.00	1.27	1.27	1,367.19
Building 07/01/2013-02/28/2015	3.32	20.14	12.66	0.00	0.00	1.38	1.38	0.00	1.27	1.27	2,367.29
Building Off Road Diesel	3.32	20.14	12.66	0.00	0.00	1.38	1.38	0.00	1.27	1.27	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2015-2/27/2015 Active Days: 42	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	1,367.19
Building 07/01/2013-02/28/2015	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Off Road Diesel	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 3/2/2015-3/31/2015 Active Days: 22	0.57	0.90	0.33	0.00	0.01	0.03	0.04	0.00	0.03	0.03	228.32
Asphalt 03/01/2015-03/31/2015	0.57	0.90	0.33	0.00	0.01	0.03	0.04	0.00	0.03	0.03	228.32
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.07	0.90	0.33	0.00	0.01	0.03	0.04	0.00	0.03	0.03	228.32
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 3/1/2015 - 3/31/2015 - Default Paving Description
 Acres to be Paved: 4.4

Phase: Building Construction 7/1/2013 - 2/28/2015 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 8 hours per day

Crawler Tractors (185 hp) operating at a 0.43 load factor for 4 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 8 hours per day

Other Equipment (310 hp) operating at a 0.42 load factor for 6 hours per day

Rough Terrain Forklifts (99 hp) operating at a 0.4 load factor for 8 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 8 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Url: emis 2007 Version 9.2.4

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 11-7-2011\1. Construction Equipment Unit
4. Phase 3 - PV Construction\Unit 1 Phase 3 PV Construction Daily.uri 924

Project Name: Unit 1 Phase 3 PV Construction

Project Location: California State - Slide

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

Off-Road Vehicle Emissions Based on: On: ROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NO _x	CO	SO ₂	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO ₂
me Slice 7/1/2013-12/31/2013 Active Days: 132	3.57	1.54	1.9	0.00	0.00	1.51	1.51	0.00	1.39	1.39	1,367.19
Building 07/01/2013-02/28/2015	3.57	21.54	12.92	0.00	0.00	1.51	1.51	0.00	1.39	1.39	2,367.29
Building Off Road Diesel	3.57	21.54	12.92	0.00	0.00	1.51	1.51	0.00	1.39	1.39	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
me Slice 1/1/2014-12/31/2014 Active Days: 261	3.32	20.14	12.66	0.00	0.00	1.38	1.38	0.00	1.27	1.27	1,367.19
Building 07/01/2013-02/28/2015	3.32	20.14	12.66	0.00	0.00	1.38	1.38	0.00	1.27	1.27	2,367.29
Building Off Road Diesel	3.32	20.14	12.66	0.00	0.00	1.38	1.38	0.00	1.27	1.27	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
me Slice 1/1/2015-2/27/2015 Active Days: 42	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	1,367.19
Building 07/01/2013-02/28/2015	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Off Road Diesel	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
me Slice 3/2/2015-3/31/2015 Active Days: 22	0.57	0.90	0.33	0.00	0.01	0.03	0.04	0.00	0.03	0.03	228.32
Asphalt 03/01/2015-03/31/2015	0.57	0.90	0.33	0.00	0.01	0.03	0.04	0.00	0.03	0.03	228.32
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.07	0.90	0.33	0.00	0.01	0.03	0.04	0.00	0.03	0.03	228.32
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 3/1/2015 - 3/31/2015 - Default Paving Description
 Acres to be Paved: 4.4

Off-Road Equipment:

Phase: Building Construction 7/1/2013 - 2/28/2015 - Default Building Construction Description

Off-Road Equipment:

- Air Compressors (25 hp) operating at a 0.48 load factor for 8 hours per day
- Crawler Tractors (185 hp) operating at a 0.43 load factor for 4 hours per day
- Generator Sets (30 hp) operating at a 0.74 load factor for 8 hours per day
- Other Equipment (310 hp) operating at a 0.42 load factor for 6 hours per day
- Rough Terrain Forklifts (99 hp) operating at a 0.4 load factor for 8 hours per day
- Roller Loaders (78 hp) operating at a 0.36 load factor for 8 hours per day
- Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\10-18-2011\1. Construction\1-A Construction Equipment\Unit 1\5. Phase 4 - Bldg Construction\Unit 1 Phase 4 Bldg Const Daily.ur 924

Project Name: Unit 1 Phase 4 - Building and Substation Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
14	0.02	0.14	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.23
Building 02/01/2014-04/30/2014	0.02	0.14	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.23
Building Off Road Diesel	0.02	0.14	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.23
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 2/1/2014 - 4/30/2014 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 6 hours per day

Cranes (250 hp) operating at a 0.29 load factor for 6 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 10-18-2011\1. Construction\1-A Construction
 Equipment\Unit 1.5. Phase 4 - Bldg Construction\Unit 1 Phase 4 Bldg Const Daily.ur_924

Project Name: Unit 1 Phase 4 - Building and Substation Construction

Project Location: California State -

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Time Slice	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 2/3/2014-4/30/2014 Active Days: 63	0.76	4.47	1.61	0.00	0.00	0.17	0.17	0.00	0.15	0.15	515.14
Building 02/01/2014-04/30/2014	0.76	4.47	2.61	0.00	0.00	0.27	0.27	0.00	0.25	0.25	515.14
Building Off Road Diesel	0.76	4.47	2.61	0.00	0.00	0.27	0.27	0.00	0.25	0.25	515.14
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 2/1/2014 - 4/30/2014 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 6 hours per day

Cranes (250 hp) operating at a 0.29 load factor for 6 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

Project Name: Unit 1 Phase 4 - Building and Station Construction
 Project Location: California State - Irvine
 Off-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Activity	COG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 2/3/2014-4/30/2014 Active Days: 63	0.76	4.47	1.61	0.00	0.00	0.17	0.17	0.00	0.15	0.15	515.14
Building 02/01/2014-04/30/2014	0.76	4.47	2.61	0.00	0.00	0.27	0.27	0.00	0.25	0.25	515.14
Building Off Road Diesel	0.76	4.47	2.61	0.00	0.00	0.27	0.27	0.00	0.25	0.25	515.14
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Case: Building Construction 2/1/2014 - 4/30/2014 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 6 hours per day

Cranes (250 hp) operating at a 0.29 load factor for 6 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Skid Steer Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment Unit
 6. Phase 5 - Transmission Line Unit 1 Phase 5 - Transmission Line Construction Line Construction.url 924

Project Name: McCoy Unit 1 Phase 5 - Transmission Line Construction

Project Location: California State-Ride

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
13											
Building 08/01/2013-03/31/2014	0.09	0.77	0.29	0.00	0.00	0.03	0.03	0.00	0.03	0.03	90.33
Building Off Road Diesel	0.09	0.77	0.29	0.00	0.00	0.03	0.03	0.00	0.03	0.03	90.33
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14											
Building 08/01/2013-03/31/2014	0.05	0.42	0.16	0.00	0.00	0.02	0.02	0.00	0.02	0.02	53.04
Building Off Road Diesel	0.05	0.42	0.16	0.00	0.00	0.02	0.02	0.00	0.02	0.02	53.04
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 8/1/2013 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

Tractor Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\11-7-2011\1. Construction 1-A Construction Equipment Unit 5. Phase 5 - Transmission Line Unit 1 Phase 5 - Transmission Line Construction\1. Construction\ur924

Project Name: McCoy Unit 1 Phase 5 - Transmission Line Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 8/1/2013-12/31/2013 five Days: 109	1.71	14.17	5.38	0.00	0.00	0.57	0.57	0.00	0.51	0.51	1,657.42
Building 08/01/2013-03/31/2014	1.71	14.17	5.38	0.00	0.00	0.57	0.57	0.00	0.52	0.52	1,657.42
Building Off Road Diesel	1.71	14.17	5.38	0.00	0.00	0.57	0.57	0.00	0.52	0.52	1,657.42
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2014-3/31/2014 five Days: 64	1.61	12.99	5.12	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,657.42
Building 08/01/2013-03/31/2014	1.61	12.99	5.12	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,657.42
Building Off Road Diesel	1.61	12.99	5.12	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,657.42
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 8/1/2013 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

Tractor Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions\11-7-2011\1. Construction 1-A Construction Equipment Unit 6. Phase 5 - Transmission Line Unit 1 Phase 5 - Transmission Line Construction\line Construction.ur 924

Project Name: McCoy Unit 1 Phase 5 - Transmission Line Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 8/1/2013-12/31/2013 Active Days: 109	1.71	14.17	5.38	0.00	0.00	0.57	0.57	0.00	0.51	0.51	1,657.42
Building 08/01/2013-03/31/2014	1.71	14.17	5.38	0.00	0.00	0.57	0.57	0.00	0.52	0.52	1,657.42
Building Off Road Diesel	1.71	14.17	5.38	0.00	0.00	0.57	0.57	0.00	0.52	0.52	1,657.42
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2014-3/31/2014 Active Days: 64	1.61	12.99	5.12	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,657.42
Building 08/01/2013-03/31/2014	1.61	12.99	5.12	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,657.42
Building Off Road Diesel	1.61	12.99	5.12	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,657.42
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 8/1/2013 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

Generator Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/year)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions\11-7-2011\1. Construction 1-A Construction Equipment\Unit 2. Phase 1 - Encing and Mobilization\Unit 2 Phase 1 Daily\ur1924

Project Name: McCoy Unit 2 Phase 1 - Encing and Mobilization

Project Location: California State -

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10.Dust	PM10.Exhaust	PM10.Total	PM2.5.Dust	PM2.5.Exhaust	PM2.5.Total	CO2
Building 03/01/2015-04/30/2015	0.03	0.14	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	13.90
Building Off Road Diesel	0.03	0.14	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	13.90
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 3/1/2015 - 4/30/2015 - Default Building Construction Description

Off-Road Equipment:

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 4 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCoy\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment Unit 2 Phase 1 - Fencing and Mobilization\Unit 2 Phase 1 Daily.urj924

Project Name: McCoy Unit 2 Phase 1 - Fencing and Mobilization

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 3/2/2015-4/30/2015 Active Days: 44	1.15	6.43	4.57	0.00	0.00	0.53	0.53	0.00	0.48	0.48	631.73
Building 03/01/2015-04/30/2015	1.15	6.43	4.57	0.00	0.00	0.53	0.53	0.00	0.48	0.48	631.73
Building Off Road Diesel	1.15	6.43	4.57	0.00	0.00	0.53	0.53	0.00	0.48	0.48	631.73
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 3/1/2015 - 4/30/2015 - Default Building Construction Description

Off-Road Equipment:

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 4 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment Unit 2. Phase 1 - Fencing and Mobilization\Unit 2 Phase 1 Daily.ur924

Project Name: McCoy Unit 2 Phase 1 - Fencing and Mobilization

Project Location: California State-Ridge

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Time Slice	ROG	NOL	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
3/2/2015-4/30/2015 Active Days: 44	1.15	6.43	4.57	0.00	0.00	0.53	0.53	0.00	0.48	0.48	631.73
Building	1.15	6.43	4.57	0.00	0.00	0.53	0.53	0.00	0.48	0.48	631.73
Building Off Road Diesel	1.15	6.43	4.57	0.00	0.00	0.53	0.53	0.00	0.48	0.48	631.73
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 3/1/2015 - 4/30/2015 - Default Building Construction Description

Off-Road Equipment:

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 4 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions\11-7-2011\1. Construction 1-A Construction Equipment Unit
 13. Phase 2 - Grading and Earthwork\Unit 2 Phase 2 Grading Daily.url: 924

Project Name: McCoy Unit 2 Phase 2 - Grading and Earthwork

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
015	0.41	3.24	1.47	0.00	0.00	0.13	0.13	0.00	0.12	0.12	436.53
Building 05/01/2015-04/30/2016	0.41	3.24	1.47	0.00	0.00	0.13	0.13	0.00	0.12	0.12	436.53
Building Off Road Diesel	0.41	3.24	1.47	0.00	0.00	0.13	0.13	0.00	0.12	0.12	436.53
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
016	0.19	1.46	0.69	0.00	0.00	0.06	0.06	0.00	0.05	0.05	214.52
Building 05/01/2015-04/30/2016	0.19	1.46	0.69	0.00	0.00	0.06	0.06	0.00	0.05	0.05	214.52
Building Off Road Diesel	0.19	1.46	0.69	0.00	0.00	0.06	0.06	0.00	0.05	0.05	214.52
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 5/1/2015 - 4/30/2016 - Default Building Construction Description

Off-Road Equipment:

Crawler Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

3 Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

age: 2

17/01/2011 11:31:47 AM

Roller Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Scrapers (365 hp) operating at a 0.48 load factor for 8 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\11-7-2011\1. Construction Emissions\1-A Construction Equipment\Unit 3. Phase 2 - Grading and Earthwork\Unit 2 Phase 2 Grading Daily.unr 924

Project Name: McCoy Unit 2 Phase 2 - Grading and Earthwork

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOL	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 5/1/2015-12/31/2015 Active Days: 175	4.71	37.03	16.80	0.00	0.00	1.52	1.52	0.00	1.40	1.40	4,988.93
Building 05/01/2015-04/30/2016	4.71	37.03	16.80	0.00	0.00	1.52	1.52	0.00	1.40	1.40	4,988.93
Building Off Road Diesel	4.71	37.03	16.80	0.00	0.00	1.52	1.52	0.00	1.40	1.40	4,988.93
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2016-4/29/2016 Active Days: 86	4.41	34.03	16.12	0.00	0.00	1.38	1.38	0.00	1.27	1.27	4,988.93
Building 05/01/2015-04/30/2016	4.41	34.03	16.12	0.00	0.00	1.38	1.38	0.00	1.27	1.27	4,988.93
Building Off Road Diesel	4.41	34.03	16.12	0.00	0.00	1.38	1.38	0.00	1.27	1.27	4,988.93
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 5/1/2015 - 4/30/2016 - Default Building Construction Description

Off-Road Equipment:

Tractor Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

17/01/2009

Roller Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Scrapers (365 hp) operating at a 0.48 load factor for 8 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCoy\McCoy Construction Emissions 11-7-2011\1. Construction Emissions\1-A Construction Equipment Unit 2.3. Phase 2 - Grading and Earthwork\Unit 2 Phase 2 Grading Daily.urb24

Project Name: McCoy Unit 2 Phase 2 - Grading and Earthwork

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Time Slice	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 5/1/2015-12/31/2015 Active Days: 175	4.71	37.03	16.80	0.00	0.00	1.52	1.52	0.00	1.40	1.40	4,988.93
Building 05/01/2015-04/30/2016	4.71	37.03	16.80	0.00	0.00	1.52	1.52	0.00	1.40	1.40	4,988.93
Building Off Road Diesel	4.71	37.03	16.80	0.00	0.00	1.52	1.52	0.00	1.40	1.40	4,988.93
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2016-4/29/2016 Active Days: 86	4.41	34.03	16.12	0.00	0.00	1.38	1.38	0.00	1.27	1.27	4,988.93
Building 05/01/2015-04/30/2016	4.41	34.03	16.12	0.00	0.00	1.38	1.38	0.00	1.27	1.27	4,988.93
Building Off Road Diesel	4.41	34.03	16.12	0.00	0.00	1.38	1.38	0.00	1.27	1.27	4,988.93
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 5/1/2015 - 4/30/2016 - Default Building Construction Description

Off-Road Equipment:

Crawler Tractors (185 hp) operating at a 0.43 load factor for 8 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Graders (185 hp) operating at a 0.41 load factor for 8 hours per day

3 Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

11/7/2011 11:31:19 AM

1 Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

2 Scrapers (365 hp) operating at a 0.48 load factor for 8 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\1. Construction 1-A Construction Equipment Unit 1.4. Phase 3 - PV Construction\Unit 2 Phase 3 PV Construction Daily.url:924

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
015	0.20	1.24	0.82	0.00	0.00	0.08	0.08	0.00	0.08	0.08	156.24
Building 07/01/2015-10/31/2016	0.20	1.24	0.82	0.00	0.00	0.08	0.08	0.00	0.08	0.08	156.24
Building Off Road Diesel	0.20	1.24	0.82	0.00	0.00	0.08	0.08	0.00	0.08	0.08	156.24
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
016	0.31	1.88	1.33	0.00	0.00	0.12	0.12	0.00	0.11	0.11	256.85
Building 07/01/2015-10/31/2016	0.31	1.88	1.33	0.00	0.00	0.12	0.12	0.00	0.11	0.11	256.85
Building Off Road Diesel	0.31	1.88	1.33	0.00	0.00	0.12	0.12	0.00	0.11	0.11	256.85
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 7/1/2015 - 10/31/2016 - Default Building Construction Description

Off-Road Equipment:

- Air Compressors (25 hp) operating at a 0.48 load factor for 8 hours per day
- Crane Tractors (185 hp) operating at a 0.43 load factor for 4 hours per day
- Generator Sets (30 hp) operating at a 0.74 load factor for 8 hours per day
- Other Equipment (310 hp) operating at a 0.42 load factor for 6 hours per day
- Rough Terrain Forklifts (99 hp) operating at a 0.4 load factor for 8 hours per day

(17) (b) (1) (i) 38.0 (11)

Roller Tired Loaders (78 hp) operating at a 0.36 load factor for 8 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment\Unit 4, Phase 3 - PV Construction\Unit 2 Phase 3 PV Construction Daily.ur 924

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California State - Tide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NO _x	CO	SO ₂	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO ₂
Time Slice 7/1/2015-12/31/2015 Live Days: 132	3.07	18.71	11.43	0.00	0.00	1.15	1.15	0.00	1.15	1.15	1,367.29
Building 07/01/2015-10/31/2016	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Off Road Diesel	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2016-10/31/2016 Live Days: 217	2.84	17.37	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,367.29
Building 07/01/2015-10/31/2016	2.84	17.37	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,367.29
Building Off Road Diesel	2.84	17.37	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 7/1/2015 - 10/31/2016 - Default Building Construction Description
 -Road Equipment:
 Air Compressors (25 hp) operating at a 0.48 load factor for 8 hours per day
 Tractor Tractors (185 hp) operating at a 0.43 load factor for 4 hours per day
 Generator Sets (30 hp) operating at a 0.74 load factor for 8 hours per day
 Other Equipment (310 hp) operating at a 0.42 load factor for 6 hours per day
 Rough Terrain Forklifts (99 hp) operating at a 0.4 load factor for 8 hours per day

17 (1) 011 (1) 36 40 (1)

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 8 hours per day

Trenchers (15 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment Unit
 4. Phase 3 - PV Construction\Unit 2 Phase 3 PV Construction Daily.uri 924

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 7/1/2015-12/31/2015 Active Days: 132	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building 07/01/2015-10/31/2016	3.07	18.71	12.43	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,367.29
Building Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2016-10/31/2016 Active Days: 217	2.84	17.37	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,367.29
Building 07/01/2015-10/31/2016	2.84	17.37	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,367.29
Building Off Road Diesel	2.84	17.37	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,367.29
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 7/1/2015 - 10/31/2016 - Default Building Construction Description

Off-Road Equipment:

- Air Compressors (25 hp) operating at a 0.48 load factor for 8 hours per day
- Crawler Tractors (185 hp) operating at a 0.43 load factor for 4 hours per day
- Generator Sets (30 hp) operating at a 0.74 load factor for 8 hours per day
- Other Equipment (310 hp) operating at a 0.42 load factor for 6 hours per day
- Rough Terrain Forklifts (99 hp) operating at a 0.4 load factor for 8 hours per day

Page: 2

(7 011 111 37 38 00)

Roller Tired Loaders (78 hp) operating at a 0.36 load factor for 8 hours per day

Trenchers (115 hp) operating at a 0.5 load factor for 8 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 10-18-2011\1. Construction 1-A Construction Equipment Unit 2.5, Phase 4 - Bldg Construction\Unit 2 Phase 4 Bldg Const Daily.urj 924

Project Name: Unit 2 Phase 4 - Building and Station Construction

Project Location: California State -

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

Off-Road Vehicle Emissions Based on: O ROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOL	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
15	0.02	0.14	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.74
Building 08/01/2015-10/31/2015	0.02	0.14	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.74
Building Off Road Diesel	0.02	0.14	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	16.74
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Case: Building Construction 8/1/2015 - 10/31/2015 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 6 hours per day

Cranes (250 hp) operating at a 0.29 load factor for 6 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Trailer Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions\Emissions 10-18-2011\1. Construction\1-A Construction Equipment\Unit 2.5. Phase 4 - Bldg Construction\Unit 2 Phase 4 Bldg Const Daily.ur

Project Name: Unit 2 Phase 4 - Building and Substation Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 8/3/2015-10/30/2015 Live Days: 65	0.70	4.17	1.54	0.00	0.00	0.4	0.4	0.00	0.11	0.11	515.14
Building 08/01/2015-10/31/2015	0.70	4.17	2.54	0.00	0.00	0.24	0.24	0.00	0.22	0.22	515.14
Building Off Road Diesel	0.70	4.17	2.54	0.00	0.00	0.24	0.24	0.00	0.22	0.22	515.14
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 8/1/2015 - 10/31/2015 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 6 hours per day

Cranes (250 hp) operating at a 0.29 load factor for 6 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 10-18-2011\1. Construction\1-A Construction Equipment\Unit 2.5. Phase 4 - Bldg Construction\Unit 2 Phase 4 Bldg Const Daily.ur 924

Project Name: Unit 2 Phase 4 - Building and Substation Construction

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 8/3/2015-10/30/2015 Active Days: 65	0.70	4.17	1.54	0.00	0.00	0.14	0.14	0.00	0.14	0.14	515.14
Building 08/01/2015-10/31/2015	0.70	4.17	2.54	0.00	0.00	0.24	0.24	0.00	0.22	0.22	515.14
Building Off Road Diesel	0.70	4.17	2.54	0.00	0.00	0.24	0.24	0.00	0.22	0.22	515.14
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Building Construction 8/1/2015 - 10/31/2015 - Default Building Construction Description

Off-Road Equipment:

Air Compressors (25 hp) operating at a 0.48 load factor for 6 hours per day

Cranes (250 hp) operating at a 0.29 load factor for 6 hours per day

Generator Sets (30 hp) operating at a 0.74 load factor for 6 hours per day

Rubber Tired Loaders (78 hp) operating at a 0.36 load factor for 6 hours per day

Detail Report for Annual Construction Unmitigated Emissions (Tons/year)

File Name: C:\Users\mehtas\Desktop\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment Unit 2 Phase 6 - Testing and Commissioning\Unit 2 Phase 6 Testing and Commissioning.ur 924

Project Name: McCoy Unit 2 Phase 6 - Testing and Commissioning

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10_Dust	PM10_Exhaust	PM10_Total	PM2.5_Dust	PM2.5_Exhaust	PM2.5_Total	CO2
16	0.05	0.18	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	32.15
Asphalt 10/01/2016-11/30/2016	0.03	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 10/01/2016-11/30/2016	0.02	0.13	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	19.32
Building Off Road Diesel	0.02	0.13	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	19.32
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 10/1/2016 - 11/30/2016 - Default Paving Description

Hours to be Paved: 22

Off-Road Equipment:

Phase: Building Construction 10/1/2016 - 11/30/2016 - Default Building Construction Description

Off-Road Equipment:

Compactors (173 hp) operating at a 0.42 load factor for 6 hours per day

age: 2

17 0011 0004 0007 0000

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCO\McCoy Construction Emissions 11-7-2011\1. Construction 1-A Construction Equipment\Unit 6. Phase 6 - Testing and Commissioning\Unit 2 Phase 6 Testing and Commissioning.url 924

Project Name: McCoy Unit 2 Phase 6 - Testing and Commissioning

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OffROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 10/3/2016-11/30/2016 Active Days: 43	1.33	8.19	4.16	0.01	0.01	0.34	0.37	0.01	0.31	0.31	1,495.19
Asphalt 10/01/2016-11/30/2016	1.48	2.07	0.78	0.01	0.02	0.08	0.10	0.01	0.07	0.08	596.76
Paving Off-Gas	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.17	2.07	0.78	0.01	0.02	0.08	0.10	0.01	0.07	0.08	596.76
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 10/01/2016-11/30/2016	0.75	6.21	3.38	0.00	0.00	0.27	0.27	0.00	0.25	0.25	898.53
Building Off Road Diesel	0.75	6.21	3.38	0.00	0.00	0.27	0.27	0.00	0.25	0.25	898.53
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 10/1/2016 - 11/30/2016 - Default Paving Description

Hours to be Paved: 22

Off-Road Equipment:

Phase: Building Construction 10/1/2016 - 11/30/2016 - Default Building Construction Description

Off-Road Equipment:

Pavers (173 hp) operating at a 0.42 load factor for 6 hours per day

age: 2

7 011 41 13

Rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

Project Name: McCoy Unit 2 Phase 6 - Testing and Commissioning
 Project Location: California State - Idle

Project Name: McCoy Unit 2 Phase 6 - Testing and Commissioning

Project Location: California State - Idle

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

Off-Road Vehicle Emissions Based on: Off ROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 10/3/2016-11/30/2016 Active Days: 43	1.3	8.9	4.16	0.01	0.00	0.34	0.37	0.01	0.30	0.30	1,495.9
Asphalt 10/01/2016-11/30/2016	1.48	2.07	0.78	0.01	0.02	0.08	0.10	0.01	0.07	0.08	596.76
Paving Off-Gas	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving On Road Diesel	0.17	2.07	0.78	0.01	0.02	0.08	0.10	0.01	0.07	0.08	596.76
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 10/01/2016-11/30/2016	0.75	6.21	3.38	0.00	0.00	0.27	0.27	0.00	0.25	0.25	898.53
Building Off Road Diesel	0.75	6.21	3.38	0.00	0.00	0.27	0.27	0.00	0.25	0.25	898.53
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Paving 10/1/2016 - 11/30/2016 - Default Paving Description

Hours to be Paved: 22

Off-Road Equipment:

Phase: Building Construction 10/1/2016 - 11/30/2016 - Default Building Construction Description

Off-Road Equipment:

Tractors (173 hp) operating at a 0.42 load factor for 6 hours per day

Figure 2

7/011014138

rollers (350 hp) operating at a 0.38 load factor for 6 hours per day

REPORT ON THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2014

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1011	1010	1009	1008	1007	1006	1005	1004	1003	1002	1001	1000	999	998	997	996	995	994	993	992	991	990	989	988	987	986	985	984	983	982	981	980	979	978	977	976	975	974	973	972	971	970	969	968	967	966	965	964	963	962	961	960	959	958	957	956	955	954	953	952	951	950	949	948	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931	930	929	928	927	926	925	924	923	922	921	920	919	918	917	916	915	914	913	912	911	910	909	908	907	906	905	904	903	902	901	900	899	898	897	896	895	894	893	892	891	890	889	888	887	886	885	884	883	882	881	880	879	878	877	876	875	874	873	872	871	870	869	868	867	866	865	864	863	862	861	860	859	858	857	856	855	854	853	852	851	850	849	848	847	846	845	844	843	842	841	840	839	838	837	836	835	834	833	832	831	830	829	828	827	826	825	824	823	822	821	820	819	818	817	816	815	814	813	812	811	810	809	808	807	806	805	804	803	802	801	800	799	798	797	796	795	794	793	792	791	790	789	788	787	786	785	784	783	782	781	780	779	778	777	776	775	774	773	772	771	770	769	768
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Attachment 1-C

Construction Vehicles Emissions

Emission Factor	PM2.5													
	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035				
DA-NCAT	1.92E-01	2.57E-02	1.08E-02	0.00E+00	8.33E-05	0.00E+00	0.00E+00	0.00E+00	6.30E-05	0.00E+00	0.00E+00	0.00E+00	5.30E-01	5.52E-01
DA-CAT	5.87E-03	3.92E-04	5.44E-04	8.12E-05	3.58E-05	1.77E-05	2.77E-05	4.54E-05	3.32E-05	4.42E-05	1.19E-05	1.63E-05	3.78E-01	3.81E-01
DA-DS	1.56E-03	2.22E-04	3.56E-03	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	3.67E-01	3.67E-01
DT1-NCAT	1.96E-01	2.24E-02	1.07E-02	0.00E+00	8.67E-05	0.00E+00	0.00E+00	0.00E+00	5.04E-05	0.00E+00	0.00E+00	0.00E+00	5.37E-01	5.71E-01
DT1-CAT	1.10E-02	7.33E-04	3.04E-03	1.06E-05	4.30E-05	1.74E-05	2.79E-05	4.53E-05	3.99E-05	4.34E-05	1.20E-05	1.63E-05	4.78E-01	4.80E-01
DT1-DS	1.19E-03	1.51E-04	3.50E-03	0.00E+00	1.01E-04	1.66E-05	3.30E-05	5.04E-05	6.28E-05	4.20E-05	1.44E-05	1.86E-05	3.45E-01	3.46E-01
DT2-NCAT	1.98E-01	2.28E-02	1.05E-02	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	5.40E-01	5.74E-01
DT2-CAT	8.48E-03	5.44E-04	1.14E-03	1.04E-05	8.25E-05	1.78E-05	2.77E-05	4.54E-05	7.66E-05	4.44E-05	1.19E-05	1.63E-05	4.75E-01	4.78E-01
DT2-DS	1.43E-03	2.86E-04	3.43E-03	0.00E+00	2.86E-04	0.00E+00	0.00E+00	0.00E+00	2.63E-04	0.00E+00	0.00E+00	0.00E+00	3.53E-01	3.53E-01
MDV-NCAT	3.70E-01	2.40E-02	1.80E-02	0.00E+00	6.58E-01	6.92E-01								
MDV-CAT	8.17E-03	5.47E-04	1.19E-03	1.37E-05	7.60E-05	1.80E-05	2.75E-05	4.54E-05	7.06E-05	4.49E-05	1.18E-05	1.63E-05	6.50E-01	6.53E-01
MDV-DS	1.33E-03	0.00E+00	3.67E-03	0.00E+00	3.66E-01	3.66E-01								
MDY-CAT	8.67E-03	1.16E-03	3.06E-03	1.48E-05	1.48E-05	2.95E-05	2.95E-05	5.90E-05	1.37E-05	7.38E-06	1.27E-05	2.00E-05	7.31E-01	7.37E-01
MDY-DS	1.47E-03	2.17E-04	8.66E-03	0.00E+00	4.82E-03	2.41E-05	2.41E-05	4.82E-05	4.43E-05	6.02E-05	1.03E-05	1.64E-05	5.20E-01	5.21E-01
MDZ-CAT	1.47E-02	2.61E-03	4.17E-03	2.90E-05	2.90E-05	2.90E-05	2.90E-05	5.80E-05	2.69E-05	7.25E-06	1.24E-05	1.97E-05	7.34E-01	7.40E-01
MDZ-DS	1.71E-03	2.94E-04	1.28E-02	0.00E+00	5.88E-05	2.94E-05	2.94E-05	5.88E-05	5.41E-05	7.35E-06	1.26E-05	2.00E-05	5.31E-01	5.33E-01
MCD-CAT	3.89E-02	2.94E-03	6.41E-03	0.00E+00	7.09E-01	7.15E-01								
MCD-DS	3.80E-03	3.12E-04	1.62E-02	3.23E-05	3.76E-04	2.15E-05	3.23E-05	5.38E-05	3.46E-04	5.38E-06	1.38E-05	1.92E-05	1.51E+00	1.51E+00
MCD-CAT	1.11E-01	3.71E-03	1.80E-02	0.00E+00	4.76E-05	4.76E-05	4.76E-05	9.52E-05	4.42E-05	1.19E-05	2.04E-05	3.23E-05	6.72E-01	6.78E-01
MCD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.13E-03	7.91E-05	6.24E-05	1.41E-04	1.04E-03	1.98E-05	2.67E-05	4.65E-05	1.85E+00	1.85E+00
OBUS-CAT	8.46E-02	5.14E-03	1.60E-02	0.00E+00	7.54E-01	7.60E-01								
OBUS-DS	3.71E-03	2.86E-04	1.63E-02	0.00E+00	2.86E-04	0.00E+00	0.00E+00	0.00E+00	2.63E-04	0.00E+00	0.00E+00	0.00E+00	1.41E+00	1.41E+00
SBUS-CAT	5.00E-02	6.00E-03	6.00E-03	0.00E+00	6.43E-01	6.49E-01								
SBUS-DS	1.02E-02	1.12E-03	2.88E-02	5.88E-05	1.41E-03	0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00	1.57E+00	1.57E+00
UBUS-CAT	3.42E-02	4.22E-03	8.67E-03	0.00E+00	7.40E-01	7.46E-01								
UBUS-DS	3.71E-03	8.57E-04	1.74E-02	0.00E+00	2.86E-04	0.00E+00	0.00E+00	0.00E+00	2.63E-04	0.00E+00	0.00E+00	0.00E+00	2.26E+00	2.27E+00
M-NCAT	2.61E-01	7.06E-03	7.00E-03	0.00E+00	5.65E-01	5.65E-01								
M-CAT	2.05E-02	5.38E-04	3.21E-03	2.56E-05	0.00E+00	2.56E-05	2.56E-05	5.12E-05	0.00E+00	6.41E-06	1.10E-05	1.74E-05	8.74E-01	8.74E-01
M-DS	1.80E-03	2.00E-04	2.32E-02	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	1.45E+00	1.45E+00
MC-NCAT	1.44E-01	1.07E-02	3.17E-03	0.00E+00	1.47E-04	1.09E-05	1.09E-05	2.19E-05	1.07E-04	2.73E-05	4.65E-06	7.42E-06	1.29E-01	1.29E-01
MC-CAT	3.15E-02	6.94E-03	2.46E-03	0.00E+00	1.06E-05	1.06E-05	1.06E-05	2.12E-05	9.82E-06	2.65E-06	4.54E-06	7.19E-06	2.05E-01	2.05E-01

Emission factors for PM2.5 calculated by dividing total emissions 1/day from BURDEN output of EMFAC2007, version 2.3, by total VMT (midday) from BURDEN output. Emission factor (1/ton) = Burden Emissions (ton/day) / 2000 (hours) / Burden VMT (1000 midday). PM2.5 emission factors by mass fractions in table below.

	PM10	PM2.5
Exhaust - CAT	0.528	
Exhaust - NCAT	0.756	
Exhaust - DS	0.520	
Tire Wear	N/A	0.250
Brake Wear	N/A	0.429

* From Appendix A, "Real Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significant Thresholds, SCA - MD, October 2008. <http://www.4md.gov/air/land/soa/PM25/PM25.html>.

Category	PM10	PM2.5	Description
DA-NCAT	0.0647	0.0704	Gasoline Passenger Cars, Model Years 1984-1993
DA-CAT	0.0079	0.0147	Gasoline Passenger Cars, Model Year 2005
DA-DS	0.0010	0.0005	Diesel Passenger Cars, Model Years 1983-2004
DT1-NCAT	0.1035	0.0813	Gasoline Light Trucks, Model Years 1987-1993
DT1-CAT	0.0101	0.0157	Gasoline Light Trucks, Model Year 2005
DT1-DS	0.0015	0.0010	Light Duty Diesel Trucks, Model Years 1996-2004
DT2-NCAT	0.1035	0.0813	Gasoline Light Trucks, Model Years 1987-1993
DT2-CAT	0.0101	0.0157	Gasoline Light Trucks, Model Year 2005
DT2-DS	0.0015	0.0010	Light Duty Diesel Trucks, Model Years 1996-2004
MDV-NCAT	0.1035	0.0813	Gasoline Light Trucks, Model Years 1987-1993
MDV-CAT	0.0101	0.0157	Gasoline Light Trucks, Model Year 2005
MDV-DS	0.0015	0.0010	Light Duty Diesel Trucks, Model Years 1996-2004
MD-NCAT	0.0515	0.4090	Gasoline Heavy Duty Vehicles, Model Years 1985-1996
MD-CAT	0.0177	0.0326	Gasoline Heavy Duty Vehicles, Model Year 2005
MD-DS	0.0048	0.0051	Diesel Heavy Duty Vehicles, All Model Years
MD-NCAT	0.0515	0.4090	Gasoline Heavy Duty Vehicles, Model Years 1985-1996
MD-CAT	0.0177	0.0326	Gasoline Heavy Duty Vehicles, Model Year 2005
MD-DS	0.0048	0.0051	Diesel Heavy Duty Vehicles, All Model Years
MD-NCAT	0.0515	0.4090	Gasoline Heavy Duty Vehicles, Model Years 1985-1996
MD-CAT	0.0177	0.0326	Gasoline Heavy Duty Vehicles, Model Year 2005
MD-DS	0.0048	0.0051	Diesel Heavy Duty Vehicles, All Model Years
OBUS-NCAT	0.0515	0.4090	Gasoline Heavy Duty Vehicles, Model Years 1985-1996
OBUS-CAT	0.0177	0.0326	Gasoline Heavy Duty Vehicles, Model Year 2005
OBUS-DS	0.0048	0.0051	Diesel Heavy Duty Vehicles, All Model Years
SBUS-NCAT	0.0515	0.4090	Gasoline Heavy Duty Vehicles, Model Years 1985-1996
SBUS-CAT	0.0177	0.0326	Gasoline Heavy Duty Vehicles, Model Year 2005
SBUS-DS	0.0048	0.0051	Diesel Heavy Duty Vehicles, All Model Years
UBUS-NCAT	0.0515	0.4090	Gasoline Heavy Duty Vehicles, Model Years 1985-1996
UBUS-CAT	0.0177	0.0326	Gasoline Heavy Duty Vehicles, Model Year 2005
UBUS-DS	0.0048	0.0051	Diesel Heavy Duty Vehicles, All Model Years

Source: ARB Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, Appendix A, Table B

ACTIVITY		VEHICLE OPERATOR										
ACTIVITY	VEHICLE	12/03	12/04	12/05	12/06	12/07	12/08	12/09	12/10	12/11	12/15	12/16
On-Site Pick Up Truck	MDV-CAT	8.17E-03	5.47E-04	1.19E-03	1.37E-05	1.21E-04	8.68E-05	6.53E-01				
On-Site Flatbed Delivery Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
On-Site Water Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
On-Site Service Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
On-Site Dump Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
On-Site 2200 gal Water Trucks	MD-DS	3.80E-03	3.12E-04	1.62E-02	3.23E-05	4.30E-04	3.65E-04	1.51E-00				
On-Site 4000 gal Water Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
On-Site Heavy Duty Pick Up Truck	MD-DS	1.47E-03	2.17E-04	9.68E-03	0.00E+00	9.64E-05	6.07E-05	5.21E-01				
On-Site Fuel Truck	MD-DS	3.80E-03	3.12E-04	1.62E-02	3.23E-05	4.30E-04	3.65E-04	1.51E-00				
On-Site Concrete Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
On-Site Flat Bed Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Water Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Fuel Truck	DD-DS	3.80E-03	3.12E-04	1.62E-02	3.23E-05	4.30E-04	3.65E-04	1.51E-00				
Off-Site Lending Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Port-Flat Truck	MD-DS	3.80E-03	3.12E-04	1.62E-02	3.23E-05	4.30E-04	3.65E-04	1.51E-00				
Off-Site Gravel/Rocks/AC Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Flat Bed Delivery Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site PV Panel Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Inventors	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Tracker Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Cat Lifting Trucks	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-site Concrete Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Electrical Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-site Insulation Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-site Roof Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Wall Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Structural Steel Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Mechanical Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Architectural Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site 4000 gal Water Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Water Delivery Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Service Truck	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Equipment/Material Delivery Truck - 1	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Equipment/Material Delivery Truck - 2	DD-DS	7.62E-03	1.90E-03	2.52E-02	3.88E-05	1.27E-03	1.09E-03	1.85E-00				
Off-Site Worker Commute, Car	DA-CAT	5.87E-03	3.92E-04	5.44E-04	8.12E-06	8.12E-05	4.95E-05	3.81E-01				

EMISSIONS (pounds/day): Emission factor (pounds/mile) * Vehicle miles travelled (miles/day)

Attachment 1-D

Summary of Criteria Pollutants Emissions

Ur emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

Project Name: McCoy Unit 1 Phase 1 - Fencing and Mobilization
 Project Location: California Statewide
 Project Name: McCoy Construction Emissions 11-7-2011 1, Construction 1-A Construction Equipment Unit 1 12,
 Project Name: McCoy Unit 1 Phase 1 - Fencing and Mobilization
 Project Location: California Statewide

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

Road Vehicle Emissions Based on: OTCROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
3 TOTALS (tons/year unmitigated)	0.03	0.15	0.10	0.00	0.00	0.01	0.00	0.01	0.01	13.58

ge: 1
 7:01101:064:0001
 ge: 1
 7:01101:5939:0001

UrEmis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

Project Name: McCoy Unit 1 Phase 2 - Grading and Earthwork
 Project Location: California Statewide
 Off-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

Project Name: McCoy Unit 1 Phase 2 - Grading and Earthwork

Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
13 TOTALS (tons/year unmitigated)	0.51	3.88	1.65	0.00	0.00	0.16	0.16	0.00	0.15	0.15	451.09
14 TOTALS (tons/year unmitigated)	0.22	1.72	0.76	0.00	0.00	0.07	0.07	0.00	0.07	0.07	212.65

Page: 1

7/11/2011 10:04:56 AM

Page: 1

7/11/2011 10:04:56 AM

Ur emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\11-7-2011\1. Construction Emissions\1-A Construction Emissions\Unit 1 4. Phase 3 - PV Construction\Unit 1 Phase 3 PV Construction Daily.ur 924

Project Name: Unit 1 Phase 3 PV Construction

Project Location: California State - Irvine

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

Off-Road Vehicle Emissions Based on: Off-Road ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 E.haust	PM10	PM2.5 Dust	PM2.5 E.haust	PM2.5	CO2
13 TOTAL S (tons/year unmitigated)	0.24	1.42	0.85	0.00	0.00	0.10	0.10	0.00	0.09	0.09	156.24
14 TOTAL S (tons/year unmitigated)	0.43	2.63	1.65	0.00	0.00	0.18	0.18	0.00	0.17	0.17	308.93
15 TOTAL S (tons/year unmitigated)	0.07	0.40	0.26	0.00	0.00	0.03	0.03	0.00	0.02	0.02	52.22

ge: 1
7/0/011 01 06 4
ge: 1
0/0/011 1 01 54

Ur: emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

Project Name: Unit 1 Phase 4 - Building and Substation Construction

Project Location: California State -

Project Location: California State -

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

Road Vehicle Emissions Based on: OTC ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
4 TOTAL: S (tons/year unmitigated)	0.02	0.14	0.08	0.00	0.00	0.01	0.00	0.01	0.01	16.23

ge: 1
 7/10/11 10:16:40
 ge: 1
 7/10/11 10:50

Url emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

Project Name: McCoy Unit 1 Phase 5 - Transmission Line Construction
 Project Location: California Statewide

Project Name: McCoy Unit 1 Phase 5 - Transmission Line Construction

Project Location: California Statewide

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

Road Vehicle Emissions Based on: OTC ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 E/haust	PM10	PM2.5 Dust	PM2.5 E/haust	PM2.5	CO2
3 TOTALS (tons/year unmitigated)	0.09	0.77	0.29	0.00	0.00	0.03	0.03	0.00	0.03	0.03	90.33
4 TOTALS (tons/year unmitigated)	0.05	0.42	0.16	0.00	0.00	0.02	0.02	0.00	0.02	0.02	53.04

Ur emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

Project Name: McCoy Unit 2 Phase 1 - Fencing and Mobilization
 Project Location: California State - Slide

Project Name: McCoy Unit 2 Phase 1 - Fencing and Mobilization

Project Location: California State - Slide

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

Road Vehicle Emissions Based on: OTC ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
5 TOTALS (tons/year unmitigated)	0.03	0.14	0.10	0.00	0.00	0.01	0.00	0.01	0.01	13.90

ge: 1
 7 011 0 31 40
 ge: 1
 7 011 0 31 40

Ur emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/ year)

Project Name: McCoy Unit 2 Phase 2 - Grading and Earthwork
 Project Location: California Statewide

Project Name: McCoy Unit 2 Phase 2 - Grading and Earthwork

Project Location: California Statewide

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

Road Vehicle Emissions Based on: OPI ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	CO2
5 TOTALS (tons/year unmitigated)	0.41	3.24	1.47	0.00	0.00	0.13	0.00	0.12	436.53
6 TOTALS (tons/year unmitigated)	0.19	1.46	0.69	0.00	0.00	0.06	0.00	0.05	214.52

ge: 1
7/01/10 15:1
ge: 1
7/01/10 17:55

Url: emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

Project Name: Unit 2 Phase 3 PV Construction
Project Location: California Statewide
Project Name: Unit 2 Phase 3 PV Construction
Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

Project Location: California Statewide

Project Name: Unit 2 Phase 3 PV Construction

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
15 TOTAL (tons/year unmitigated)	0.20	1.24	0.82	0.00	0.00	0.08	0.00	0.08	0.08	156.24
16 TOTAL (tons/year unmitigated)	0.31	1.88	1.33	0.00	0.00	0.12	0.00	0.11	0.11	256.85

ge: 1
 7 011 0 51
 ge: 1
 0011 01 3 11

Ur emis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/ year)

Project Name: C:\Users\mehtas\Desktop\McCOY McCoy Construction Emissions 10-18-2011\1. Construction 1-A Construction Equipment Unit 2.5.
 Project Location: California State -wide

Project Name: Unit 2 Phase 4 - Building and Substation Construction

Project Location: California State -wide

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

Road Vehicle Emissions Based on: OTC ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
5 TOTALS (tons/year unmitigated)	0.02	0.14	0.08	0.00	0.00	0.01	0.00	0.01	0.01	16.74

ge: 1
7:0110 5:1
ge: 1
7:0110 4:08

Uremis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/year)

Project Name: McCoy Unit 2 Phase 6 - Testing and Commissioning
Project Location: California Statewide

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

Off-Road Vehicle Emissions Based on: Off ROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
16 TOTAL S (tons/year unmitigated)	0.05	0.18	0.09	0.00	0.00	0.01	0.00	0.01	0.01	32.15

17

2013	8.69E-01	6.23E+00	2.90E+00	1.71E-04	6.44E-04	3.06E-01	3.07E-01	2.11E-04	2.81E-01	2.82E-01			
2014	7.24E-01	4.90E+00	2.65E+00	0.00E+00	0.00E+00	2.76E-01	2.76E-01	0.00E+00	2.54E-01	2.54E-01			
2015	7.08E-02	4.03E-01	2.65E-01	2.34E-05	8.79E-05	2.65E-02	2.66E-02	2.89E-05	2.44E-02	2.44E-02			
2016	0.00E+00												

Table 18: Comparison of the 2015 and 2016 results of the 2015 and 2016

Year	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
2015	6.63E-01	4.75E+00	2.47E+00	0.00E+00	0.00E+00	2.34E-01	0.00E+00	0.00E+00	2.16E-01	2.16E-01
2016	5.46E-01	3.53E+00	2.11E+00	1.19E-04	4.49E-04	1.90E-01	1.90E-01	1.47E-04	1.75E-01	1.75E-01

TABLE 10. STATE FUNDING FOR TRANSPORTATION

FISCAL YEAR	STATE FUNDING FOR TRANSPORTATION									
	STATE	FEDERAL	LOCAL	STATE	FEDERAL	LOCAL	STATE	FEDERAL	LOCAL	STATE
Year 2013	0.08	1.36	0.43	0.00	0.00	0.00	0.00	0.00	0.06	0.05
Year 2014	0.06	1.06	0.37	0.00	0.00	0.00	0.00	0.00	0.04	0.04
Year 2015	0.05	0.93	0.32	0.00	0.00	0.00	0.00	0.00	0.04	0.03
Year 2016	0.05	0.87	0.30	0.00	0.00	0.00	0.00	0.00	0.04	0.03
Year 2013	0.55	2.29	6.78	0.01	0.01	0.01	0.01	0.01	0.17	0.13
Year 2014	0.91	3.09	11.98	0.02	0.02	0.02	0.02	0.02	0.26	0.18
Year 2015	0.92	2.70	12.45	0.02	0.02	0.02	0.02	0.02	0.25	0.17
Year 2016	1.33	3.99	17.91	0.03	0.03	0.03	0.03	0.03	0.36	0.25
Year 2013	0.62	3.65	7.20	0.0137	0.0137	0.0137	0.0137	0.0137	0.2287	0.1741
Year 2014	0.97	4.15	12.35	0.0208	0.0208	0.0208	0.0208	0.0208	0.3030	0.2202
Year 2015	0.97	3.62	12.78	0.0207	0.0207	0.0207	0.0207	0.0207	0.2837	0.2016
Year 2016	1.38	4.86	18.22	0.0291	0.0291	0.0291	0.0291	0.0291	0.3940	0.2783

TABLE 11.11: THE EFFECTS OF THE 2013-2014 BUDGET CUTS ON THE NUMBER OF STUDENTS

LEVEL OF STUDY	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year 2013	1.49	9.88	10.10	0.01	11.08	2.65			
Year 2014	1.70	9.06	15.00	0.02	4.35	1.26			
Year 2015	1.71	8.78	15.51	0.02	11.24	2.67			
Year 2016	1.92	8.39	20.33	0.03	4.14	1.19			
TOTAL	5	5	100	5	15	15.0			
PERCENTAGE OF STUDENTS	0.0	0.0	0.0	0.0	0.0	0.0			

Attachment 1-E

Summary of Construction GHG Emissions

Table 1 Equipment Summary

Unit 1 Annual CO₂ Construction Equipment Emissions (Tons/year)	
Year	CO₂ (Tons)
2013	711
2014	591
2015	52
2016	0

Unit 2 Annual CO₂ Construction Equipment Emissions (Tons/year)	
Year	CO₂ (Tons)
2015	623
2016	504

Table 2 Summary of MDAB-wide Monthly Vehicle CO₂e Emissions from All Phases

Monthly Emissions (Tonnes/month)	Month 1 Mar-13	Month 2 Apr-13	Month 3 May-13	Month 4 Jun-13	Month 5 Jul-13	Month 6 Aug-13	Month 7 Sep-13	Month 8 Oct-13	Month 9 Nov-13	Month 10 Dec-13	Month 11 Jan-14	Month 12 Feb-14	Month 13 Mar-14	Month 14 Apr-14	Month 15 May-14	Month 16 Jun-14	Month 17 Jul-14	Month 18 Aug-14	Month 19 Sep-14	Month 20 Oct-14	Month 21 Nov-14	Month 22 Dec-14	Month 23 Jan-15	Month 24 Feb-15	
On-Site Vehicles	11.6	4.9	30.0	55.2	30.0	30.0	15.7	16.7	16.7	16.7	16.7	17.7	17.7	17.7	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
Off-Site Vehicles	18.9	18.9	38.2	45.3	120	155	163	168	168	168	169	202	200	173	129	129	129	129	129	129	129	130	129	129	129
Monthly Total	30.6	23.9	68.2	101	150	185	180	185	185	185	185	220	218	190	143	143	143	143	143	143	143	144	144	144	144

Monthly Emissions (Tonnes/month)	Month 25 Mar-15	Month 26 Apr-15	Month 27 May-15	Month 28 Jun-15	Month 29 Jul-15	Month 30 Aug-15	Month 31 Sep-15	Month 32 Oct-15	Month 33 Nov-15	Month 34 Dec-15	Month 35 Jan-16	Month 36 Feb-16	Month 37 Mar-16	Month 38 Apr-16	Month 39 May-16	Month 40 Jun-16	Month 41 Jul-16	Month 42 Aug-16	Month 43 Sep-16	Month 44 Oct-16	Month 45 Nov-16	Month 46 Dec-16			
On-Site Vehicles	11.6	11.6	2.4	2.4	16.7	17.7	17.7	17.7	16.7	16.7	16.7	16.7	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	2.3	2.3	2.3	2.3
Off-Site Vehicles	2.0	1.9	1.1	4.1	224	283	283	283	224	224	224	224	221	221	221	222	222	222	221	221	221	182	181	181	181
Monthly Total	13.6	13.5	3.5	6.5	240	300	301	301	241	241	241	241	236	236	236	236	236	236	235	235	235	185	183	183	183

Table 3 Annual MDAB-wide Vehicle CO₂e Emissions

Onsite Vehicles Emissions	CO₂e (Tonnes)
Year 2013	229
Year 2014	184
Year 2015	160
Year 2016	152

Offsite Vehicles Emissions	CO₂e (Tonnes)
Year 2013	1065
Year 2014	1776
Year 2015	1789
Year 2016	2584

All Vehicles Emissions	CO₂e (Tonnes)
Year 2013	1294
Year 2014	1959
Year 2015	1948
Year 2016	2736

Table 4 Total MDAB-wide Construction GHG Emissions

GHG Emissions	CO₂	CH₄	N₂O	CO₂e
Off-Road Equipment				
Emission Factor (kg/gallon) ¹	10.21	0.00058	0.00026	---
Year 2013 Emission (Tonnes)	645	0.037	0.016	651
Year 2014 Emission (Tonnes)	536	0.030	0.014	541
Year 2015 Emission (Tonnes)	613	0.035	0.016	619
Year 2016 Emission (Tonnes)	457	0.026	0.012	461
Vehicles				
Year 2013 Emission (Tonnes)				1294
Year 2014 Emission (Tonnes)				1959
Year 2015 Emission (Tonnes)				1948
Year 2016 Emission (Tonnes)				2736
Total GHG Emissions from Project Construction				
Total 2013 CO₂e Emissions (Tonnes)	1,945			
Total 2014 CO₂e Emissions (Tonnes)	2,500			
Total 2015 CO₂e Emissions (Tonnes)	2,567			
Total 2016 CO₂e Emissions (Tonnes)	3,197			
Total CO₂e Emissions (Tonnes)	10,209			
30-yr Amortized Emissions (Tonnes/year)	340			

1. Emission Factors obtained from 2011 The Climate Registry Default Emission Factors--Released January 14, 2011.

<http://www.theclimater registry.org/downloads/2009/05/2011-Emission-Factors.pdf>

2. All vehicles were assumed to be gasoline vehicles. Emission factors for CH₄ and N₂O are the maximum factors of various vehicle types and control technologies

Table 12 Annual California-wide Vehicle CO_{2e} Emissions

Onsite Vehicles Emissions	CO_{2e} (Tonnes)
Year 2013	229
Year 2014	184
Year 2015	160
Year 2016	152

Offsite Vehicles Emissions	CO_{2e} (Tonnes)
Year 2013	1427
Year 2014	2403
Year 2015	2337
Year 2016	3509

All Vehicles Emissions	CO_{2e} (Tonnes)
Year 2013	1655
Year 2014	2587
Year 2015	2497
Year 2016	3661

Table 13 Total California-Wide Construction GHG Emissions

GHG Emissions	CO₂	CH₄	N₂O	CO₂e
Off-Road Equipment				
Emission Factor (kg/gallon) ¹	10.21	0.00058	0.00026	---
Year 2013 Emission (Tonnes)	645	0.037	0.016	651
Year 2014 Emission (Tonnes)	536	0.030	0.014	541
Year 2015 Emission (Tonnes)	613	0.035	0.016	619
Year 2016 Emission (Tonnes)	457	0.026	0.012	461
Vehicles				
Year 2013 Emission (Tonnes)				1655
Year 2014 Emission (Tonnes)				2587
Year 2015 Emission (Tonnes)				2497
Year 2016 Emission (Tonnes)				3661
Total GHG Emissions from Project Construction				
Total 2013 CO₂e Emissions (Tonnes)	2,306			
Total 2014 CO₂e Emissions (Tonnes)	3,127			
Total 2015 CO₂e Emissions (Tonnes)	3,116			
Total 2016 CO₂e Emissions (Tonnes)	4,122			
Total CO₂e Emissions (Tonnes)	12,671			
30-yr Amortized Emissions (Tonnes/year)	422			

1. Emission Factors obtained from 2011 The Climate Registry Default Emission Factors – Released January 14, 2011. <http://www.theclimateregistry.org/downloads/2009/05/2011-Emission-Factors.pdf>

2. All vehicles were assumed to be gasoline vehicles. Emission factors for CH₄ and N₂O are the maximum factors of various vehicle types and control technologies

Attachment 2

Operation Emissions

Attachment 2-A

Operation Equipment

Operation Emissions from Emergency Diesel Generators

Generator Specification	Value	Unit	Data Source
Number of Engines	2		Applicant
Tier	4 (Interim)		CARB ATCM
Model Year	2008-2012		CARB ATCM
Diesel Engine Capacity	26	kW	Calculated
Diesel Engine Capacity	35	hp	Applicant
Brake Specific Fuel Consumption	7000	Btu/hp-hr	AP-42
Heating Value	19300	Btu/lb	AP-42
Annual Hours of Operation	50	hours/year	CARB ATCM
Daily Hours of Operation	1	hour/day	Applicant
Fuel Sulfur Content %	0.0015	lb of S/lb of fuel	BACT
Density of Diesel	7.1	lb/gal	AP-42
Fuel Consumption	1.8	gal/hr/engine	Calculated
Total Annual Fuel Consumption	179	gal/year	Calculated

Pollutant	Generator Emission Factor	Hourly Emissions (lb/hr)	Maximum Daily Emissions (lb/day)	Annual Emissions (tpy)
NOX ¹	7.125	0.8203	0.8203	0.0205
ROG ^{1,2}	0.375	0.0432	0.0432	0.0011
CO ¹	5.5	0.6332	0.6332	0.0158
SO ₂ ³	0.00001	0.0008	0.0008	0.0000
PM ₁₀ total ¹	0.3	0.0345	0.0345	0.0009
PM _{2.5}	0.3	0.0345	0.0345	0.0009

Emergency Engine TAC	
Component	Emissions (tpy)
Diesel Particulate Matter	0.001

NOTES:

1. Diesel Engine Emission Factors from California Code of Regulations, Title 13, Division 3, Chapter 9, Article 4, Section 2423
2. ROG standards = NHMC standards
3. The emission factor for SO₂ is derived from BSFC, heating value and fuel sulfur content and by assuming 100% of fuel sulfur is converted to SO₂

Attachment 2-B

Operation Vehicles

Table 1 Operation URBEMIS input - Vehicle Numbers

Equipment/Vehicle Type	Miles/Day	Type	Daily Number												Annual VMT		
			Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12			
On-Site Motor Vehicles																	
On-Site F-150 Pickup Trucks - 1	10	MDV-CAT	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3960
On-Site Utility/Service Vehicles	10	MHD-DSL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5280
On-Site 2200 gal Water Truck	10	MHD-DSL	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1760
Off-Site Motor Vehicles																	
Off-Site Worker Commute Car	40	LDA-CAT	29	16	16	29	16	16	16	16	16	16	16	16	16	16	214720
Off-Site Carpenter Service Vehicle	40	MHD-DSL	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5720
Off-Site Electrical Service Vehicle	40	MHD-DSL	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5720
Off-Site Equipment/Material Delivery Truck	40	HHD-DSL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	960

Table 1-B Motor Vehicle Operation Characteristics

Travel on unpaved surface		
Annual VMT on unpaved road	11000	VMT/year
Daily VMT on unpaved road	30.14	VMT/day
Assumed average trip length	20	miles
Daily trip rate on unpaved surface	1.51	Trips/day
Vehicle type distribution on unpaved surface		
MDV-CAT	96	%
MHD-DSL	64	%
Travel on paved surface		
Annual VMT on paved road	227120	VMT/year
Daily VMT on paved road	622.25	VMT/day
Assumed average trip length	20	miles
Daily trip rate on paved surface	31.11	Trips/day
Vehicle type distribution on paved surface		
LDA-CAT	94.5	%
MHD-DSL	5.0	%
HHD-DSL	0.4	%

Detail Report for Annual Operational Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\2. Operation\2-A. Onsite Equipment and Vehicles\On-site Equipment and Vehicles.urb924

Project Name: McCoy Operation

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
McCoy PV project	0.00	0.03	0.02	0.00	7.73	0.77	14.32
TOTALS (tons/year, unmitigated)	0.00	0.03	0.02	0.00	7.73	0.77	14.32

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 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
McCoy PV project	1.51	1000 sq ft	1.00	1.51	1.51	30.20

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	0.0	0.2	99.6	0.2

Vehicle Type	Vehicle Fleet Mix				Diesel
	Percent Type	Non-Catalyst	Catalyst		
Light Truck < 3750 lbs	0.0	0.0	97.2		2.8
Light Truck 3751-5750 lbs	0.0	0.0	100.0		0.0
Med Truck 5751-8500 lbs	36.0	0.0	100.0		0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	76.5		23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	57.1		42.9
Med-Heavy Truck 14,001-33,000 lbs	64.0	0.0	0.0		100.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0		100.0
Other Bus	0.0	0.0	0.0		100.0
Urban Bus	0.0	0.0	0.0		100.0
Motorcycle	0.0	44.4	55.6		0.0
School Bus	0.0	0.0	0.0		100.0
Motor Home	0.0	0.0	90.0		10.0

	Travel Conditions			
	Home-Work	Home-Shop	Home-Other	Home-Work
Urban Trip Length (miles)	10.8	7.3	7.5	7.4
Rural Trip Length (miles)	20.0	20.0	20.0	20.0
Trip speeds (mph)	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1	35.0

% of Trips - Commercial (by land use)

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
McCoy PV project				100.0	0.0	0.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

The percentage of paved roads changed from 100% to 0%

The percentage of unpaved roads changed from 0% to 100%

Home-based work rural trip length changed from 16.8 miles to 20 miles

Home-based shop rural trip length changed from 7.1 miles to 20 miles

Home-based other rural trip length changed from 7.9 miles to 20 miles

Commercial-based commute rural trip length changed from 14.7 miles to 20 miles

Commercial-based non-work rural trip length changed from 6.6 miles to 20 miles

Commercial-based customer rural trip length changed from 6.6 miles to 20 miles

Detail Report for Summer Operational Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCoy\McCoy Construction Emissions\Emissions 11-7-2011\2. Operation\2-A. Onsite Equipment and Vehicles\On-site Equipment and Vehicles.urb924

Project Name: McCoy Operation

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
McCoy PV project	0.01	0.13	0.13	0.00	42.33	4.24	79.26
TOTALS (lbs/day, unmitigated)	0.01	0.13	0.13	0.00	42.33	4.24	79.26

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 85 Season: Summer

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
McCoy PV project	1.51	1000 sq ft	1.00	1.51	1.51	30.20
					1.51	30.20

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	0.0	0.2	99.6	0.2

Vehicle Type	Vehicle Fleet Mix			Diesel
	Percent Type	Non-Catalyst	Catalyst	
Light Truck < 3750 lbs	0.0	0.0	97.2	2.8
Light Truck 3751-5750 lbs	0.0	0.0	100.0	0.0
Med Truck 5751-8500 lbs	36.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	64.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	44.4	55.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	90.0	10.0

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	7.4
Rural Trip Length (miles)	20.0	20.0	20.0	20.0	20.0	20.0
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)

	Travel Conditions				
	Residential	Home-Work	Home-Shop	Home-Other	Commercial
McCoy PV project					
				Commuter	Customer
				100.0	0.0
					0.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

The percentage of paved roads changed from 100% to 0%

The percentage of unpaved roads changed from 0% to 100%

Home-based work rural trip length changed from 16.8 miles to 20 miles

Home-based shop rural trip length changed from 7.1 miles to 20 miles

Home-based other rural trip length changed from 7.9 miles to 20 miles

Commercial-based commute rural trip length changed from 14.7 miles to 20 miles

Commercial-based non-work rural trip length changed from 6.6 miles to 20 miles

Commercial-based customer rural trip length changed from 6.6 miles to 20 miles

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\2. Operation\2-A. Onsite Equipment and Vehicles\On-site Equipment and Vehicles.urb924

Project Name: McCoy Operation

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
McCoy PV project	0.01	0.16	0.12	0.00	42.33	4.24	76.94
TOTALS (lbs/day, unmitigated)	0.01	0.16	0.12	0.00	42.33	4.24	76.94

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 40 Season: Winter

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
McCoy PV project	1.51	1000 sq ft	1.00	1.51	1.51	30.20
					1.51	30.20

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	0.0	0.2	99.6	0.2

Vehicle Type	Vehicle Fleet Mix			Diesel
	Percent Type	Non-Catalyst	Catalyst	
Light Truck < 3750 lbs	0.0	0.0	97.2	2.8
Light Truck 3751-5750 lbs	0.0	0.0	100.0	0.0
Med Truck 5751-8500 lbs	36.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	64.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	44.4	55.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	90.0	10.0

	Travel Conditions			
	Residential	Commercial	Commuter	Customer
Urban Trip Length (miles)	10.8	7.3	9.5	7.4
Rural Trip Length (miles)	20.0	20.0	20.0	20.0
Trip speeds (mph)	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1	

% of Trips - Commercial (by land use)

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
McCoy PV project				100.0	0.0	0.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

The percentage of paved roads changed from 100% to 0%

The percentage of unpaved roads changed from 0% to 100%

Home-based work rural trip length changed from 16.8 miles to 20 miles

Home-based shop rural trip length changed from 7.1 miles to 20 miles

Home-based other rural trip length changed from 7.9 miles to 20 miles

Commercial-based commute rural trip length changed from 14.7 miles to 20 miles

Commercial-based non-work rural trip length changed from 6.6 miles to 20 miles

Commercial-based customer rural trip length changed from 6.6 miles to 20 miles

Detail Report for Annual Operational Unmitigated Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\10-18-2011\2. Operation\2-B. Offsite Vehicles\McCoy Operation Offsite Vehicles.urb924

Project Name: McCoy Project Operation Offsite Vehicles

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
McCoy Project	0.02	0.07	0.43	0.00	0.20	0.04	104.65
TOTALS (tons/year, unmitigated)	0.02	0.07	0.43	0.00	0.20	0.04	104.65

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 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
McCoy Project	31.11	1000 sq ft	1.00	31.11	31.11	622.20
					31.11	622.20

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	94.5	0.0	100.0	0.0

Vehicle Type	Vehicle Fleet Mix			Catalyst	Diesel
	Percent Type	Non-Catalyst			
Light Truck < 3750 lbs	0.0	0.0		97.2	2.8
Light Truck 3751-5750 lbs	0.0	0.0		100.0	0.0
Med Truck 5751-8500 lbs	0.0	0.0		100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0		76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0		57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	5.0	0.0		0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0		0.0	100.0
Other Bus	0.0	0.0		0.0	100.0
Urban Bus	0.0	0.0		0.0	100.0
Motorcycle	0.0	44.4		55.6	0.0
School Bus	0.0	0.0		0.0	100.0
Motor Home	0.0	0.0		90.0	10.0

	Travel Conditions			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4
Rural Trip Length (miles)	20.0	20.0	20.0	20.0	20.0
Trip speeds (mph)	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)

	Travel Conditions					
	Home-Work	Home-Shop	Home-Other	Commuta	Commercial Non-Work	Customer
McCoy Project				100.0	0.0	0.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

Home-based work rural trip length changed from 16.8 miles to 20 miles

Home-based shop rural trip length changed from 7.1 miles to 20 miles

Home-based other rural trip length changed from 7.9 miles to 20 miles

Commercial-based commute rural trip length changed from 14.7 miles to 20 miles

Commercial-based non-work rural trip length changed from 6.6 miles to 20 miles

Commercial-based customer rural trip length changed from 6.6 miles to 20 miles

Detail Report for Summer Operational Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\10-18-2011\2. Operation\2-B. Offsite Vehicles\McCoy Operation Offsite Vehicles.urb924

Project Name: McCoy Project Operation Offsite Vehicles

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
McCoy Project	0.12	0.36	2.46	0.01	1.07	0.20	598.95
TOTALS (lbs/day, unmitigated)	0.12	0.36	2.46	0.01	1.07	0.20	598.95

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 85 Season: Summer

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
McCoy Project	31.11	1000 sq ft	1.00	31.11	31.11	622.20
					31.11	622.20

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	94.5	0.0	100.0	0.0

Vehicle Type	Vehicle Fleet Mix			Catalyst	Diesel
	Percent Type	Non-Catalyst			
Light Truck < 3750 lbs	0.0	0.0		97.2	2.8
Light Truck 3751-5750 lbs	0.0	0.0		100.0	0.0
Med Truck 5751-8500 lbs	0.0	0.0		100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0		76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0		57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	5.0	0.0		0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0		0.0	100.0
Other Bus	0.0	0.0		0.0	100.0
Urban Bus	0.0	0.0		0.0	100.0
Motorcycle	0.0	44.4		55.6	0.0
School Bus	0.0	0.0		0.0	100.0
Motor Home	0.0	0.0		90.0	10.0

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	7.4
Rural Trip Length (miles)	20.0	20.0	20.0	20.0	20.0	20.0
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)

Travel Conditions

Residential	Home-Work	Home-Shop	Home-Other	Commute	Commercial Non-Work	Customer
				100.0	0.0	0.0

McCoy Project

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

Home-based work rural trip length changed from 16.8 miles to 20 miles

Home-based shop rural trip length changed from 7.1 miles to 20 miles

Home-based other rural trip length changed from 7.9 miles to 20 miles

Commercial-based commute rural trip length changed from 14.7 miles to 20 miles

Commercial-based non-work rural trip length changed from 6.6 miles to 20 miles

Commercial-based customer rural trip length changed from 6.6 miles to 20 miles

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\10-18-2011\2. Operation\2-B. Offsite Vehicles\McCoy Operation Offsite Vehicles.urb924

Project Name: McCoy Project Operation Offsite Vehicles

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
McCoy Project	0.14	0.50	2.13	0.01	1.07	0.20	522.46
TOTALS (lbs/day, unmitigated)	0.14	0.50	2.13	0.01	1.07	0.20	522.46

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 40 Season: Winter

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
McCoy Project	31.11	1000 sq ft	1.00	31.11	31.11	622.20
					31.11	622.20

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	94.5	0.0	100.0	0.0

Vehicle Fleet Mix

Vehicle Type	Percent Type		Catalyst	Diesel
	Non-Catalyst	Catalyst		
Light Truck < 3750 lbs	0.0	0.0	97.2	2.8
Light Truck 3751-5750 lbs	0.0	0.0	100.0	0.0
Med Truck 5751-8500 lbs	0.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	5.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	44.4	55.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	90.0	10.0

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4
Rural Trip Length (miles)	20.0	20.0	20.0	20.0	20.0
Trip speeds (mph)	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)

Attachment 2-C

Summary of Operation Criteria Pollutant Emissions

Off-road Equipment Emissions Summary

Pollutant	Maximum Daily Emissions (lb/day)
NOx	0.820
ROG	0.043
CO	0.633
SO ₂	0.001
PM10	0.035
PM2.5	0.035

On-site Vehicles Emissions

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions 11-7-2011\2. Operation\2-A. Onsite Equipment and Vehicles\On-site Equipment and Vehicles.urb924
 Project Name: McCoy Operation

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.01	0.13	0.13	0.00	42.33	4.24	79.26

SUMMARY OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.01	0.13	0.13	0.00	42.33	4.24	79.26

On-site Vehicles Emissions

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\11-7-2011\2. Operation\2-A. Onsite Equipment and Vehicles\On-site Equipment and Vehicles.urb924
Project Name: McCoy Operation

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

DETAILS (lbs/day, unmitigated)	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
	0.01	0.16	0.12	0.00	42.33	4.24	76.94

OFF-ROAD AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

DETAILS (lbs/day, unmitigated)	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
	0.01	0.16	0.12	0.00	42.33	4.24	76.94

Page: 1
0/25/2011 01:48:37 PM

Off-site Vehicles Emissions
Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\10-18-2011\2. Offsite Vehicles\McCoy Operation Offsite Vehicles.urb924

Project Name: McCoy Project Operation Offsite Vehicles

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

PERATIONAL (VEHICLE) EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.12	0.36	2.46	0.01	1.07	0.20	598.95
SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES							
TOTALS (lbs/day, unmitigated)	ROG 0.12	NOx 0.36	CO 2.46	SO2 0.01	PM10 1.07	PM2.5 0.20	CO2 598.95

Off-site Vehicles Emissions
 Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Users\meintas\Desktop\McCOY\McCoy Construction Emissions\Emissions 10-18-2011\2. Operation\2-B. Offsite Vehicles\McCoy Operation Offsite Vehicles.urb924

Project Name: McCoy Project Operation Offsite Vehicles

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES		ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)		0.14	0.50	2.13	0.01	1.07	0.20	522.46
SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES		ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)		0.14	0.50	2.13	0.01	1.07	0.20	522.46

Maximum Daily Operation Emissions (lb/day)

Source	ROG	NOx	CO	SO2	PM10 Exhaust	PM10 Dust	Total PM10	PM2.5 Exhaust	PM2.5 Dust	PM2.5
On-Site Equipment	0.04	0.82	0.63	0.00	0.03	0.00	0.03	0.03	0.00	0.03
On-Site Vehicles	0.01	0.16	0.13	0.00	0.01	42.32	42.33	0.01	4.23	4.24
Off-Site Vehicles	0.14	0.50	2.46	0.01	0.05	1.02	1.07	0.03	0.17	0.20
Total Emissions	0.19	1.48	3.22	0.01	0.09	43.34	43.43	0.07	4.40	4.47
MDAQMD CEQA Threshold	137	137	548	137			82			82
Significant Impact	No	No	No	No			No			No

Off-road Equipment Emissions Summary

Pollutant	Annual Emissions (tpy)
NOx	0.021
ROG	0.001
CO	0.016
SO ₂	0.000
PM10	0.001
PM2.5	0.001

Annual On-site Vehicles Emissions

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 11-7-2011\2. Operation\2-A. Onsite Equipment and Vehicles\On-site Equipment and Vehicles.urb924

Project Name: McCoy Operation

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

TOTALS (tons/year, unmitigated)	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
	0.00	0.03	0.02	0.00	7.73	0.77	14.32

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

TOTALS (tons/year, unmitigated)	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
	0.00	0.03	0.02	0.00	7.73	0.77	14.32

Annual Off-site Vehicles Emissions
 Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Users\mehtas\Desktop\McCOY\McCoy Construction Emissions\Emissions 10-18-2011\2. Operation\2-B. Offsite Vehicles\McCoy Operation Offsite Vehicles.urb924

Project Name: McCoy Project Operation Offsite Vehicles

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.07	0.43	0.00	0.20	0.04	104.65
SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.07	0.43	0.00	0.20	0.04	104.65

Total Annual Operation Emissions (ton/year)

Source	CO	ROG	NOx	SOx	PM10 Exhaust	PM10 Dust	Total PM10	PM2.5 Exhaust	PM2.5 Dust	PM2.5
Equipment	0.016	0.001	0.021	0.000	0.001	0.000	0.001	0.001	0.000	0.001
On Site Vehicles	0.020	0.000	0.030	0.000	0.000	7.730	7.730	0.000	0.770	0.770
Off Site Vehicles	0.430	0.020	0.070	0.000	0.010	0.190	0.200	0.010	0.030	0.040
Total	0.47	0.02	0.12	0.00	0.01	7.92	7.93	0.01	0.80	0.81
MDAQMD CEQA Threshold	100	25	25	25			15			15
Significant Impact (Yes/No)	No	No	No	No			No			No

Operation-Related GHG Emissions

1. GHG Emissions Using The Climate Registry Emission Factors

GHG Emissions	CO ₂	CH ₄	N ₂ O
Off-Road Equipment			
Emission Factor (kg/gallon) ¹	10.21	0.00058	0.00026
Annual Fuel Consumption (gallons/year)	179	179	179
Emission (Tonnes/year)	1.83	0.00	0.00
Total CO ₂ e Emissions (Tonnes/year)	1.84		
Diesel Vehicles			
Emission Factor (kg/gal) ^{1,2}	10.21	0.0000408	0.0000384
Emission (Tonnes/year)	12.99	0.00	0.00
Total CO ₂ e Emissions (Tonnes/year)	13.01		
Gasoline Vehicles			
Emission Factor (kg/gal) ^{1,2}	8.78	0.00356	0.000394
Emission (Tonnes/year)	94.94	0.04	0.00
Total CO ₂ e Emissions (Tonnes/year)	97.07		
Total Annual GHG Emissions from Equipment and Vehicle Operation			
Total CO₂e Emissions	112	Tonnes/year	
1. Emission Factors obtained from 2011 The Climate Registry Default Emission Factors – Released January 14, 2011. http://www.theclimateregistry.org/downloads/2009/05/2011-Emission-Factors.pdf			
2. Emission factors for CH ₄ and N ₂ O are the for Uncontrolled vehicles, heavy duty trucks for diesel vehicles and passenger cars for gasoline vehicles. Emissions factors for CH ₄ and N ₂ O converted from kg/mile to kg/gallon assuming a fuel economy of 20 mpg for cars and light trucks and 8 mpg for medium and heavy duty vehicles.			

2. Indirect GHG Emission from Electricity Use

Annual Electricity Consumption	76 MWh/year
--------------------------------	-------------

Electricity Consumption Emissions	CO ₂	CH ₄	N ₂ O
Emission Factor (lb/MWh) ¹	681.01	0.02829	0.00623
Emissions (Tonnes/year)	23.48	0.0010	0.0002
Total CO₂e Emissions	23.56	Tonnes/year	
http://www.theclimateregistry.org/downloads/2009/05/2011-Emission-Factors.pdf			

3. Fugitive Sulfur Hexafluoride Emissions

Equipment Type	Voltage (kV)	Full Charge Capacity (lbs of SF ₆)	lbs of SF ₆ /year (0.5% leak rate)	CO ₂ e (Tonnes/year)
Circuit Breaker	230	270	1.4	14.6
Circuit Breaker	230	270	1.4	14.6
Circuit Breaker	230	270	1.4	14.6
Circuit Breaker	230	270	1.4	14.6
Circuit Breaker	34.5	100	0.5	5.4
Circuit Breaker	34.5	100	0.5	5.4
Circuit Breaker	34.5	100	0.5	5.4
Circuit Breaker	34.5	100	0.5	5.4
Estimated Metric Tons CO₂e/year =				80.22

1 metric ton =	2,205 lbs
SF ₆ Global Warming Potential	23,900

230 kV Breakers: Estimated to contain approximately 270 lbs of SF₆ based on specifications from Blythe Solar Power Project. Number of circuit breakers based on conservative estimates of two 230 kV breakers per power unit.

34.5 kV Breakers: Estimated to contain approximately 80 to 100 lbs of SF₆ based on specifications from Blythe Solar Power Project. Number of circuit breakers based on conservative estimates of two 34.5 kV breakers per power unit.

4. GHG Reduction Due to Electricity Displacement

Capacity Factor	26%	
Combined Cycle Heat Rate	6940	Btu/kWh
Displaced System Fuel Type	Natural Gas	Solar power displaces dispatchable natural gas-fired generators
Annual Operating Hours	8760	hr/year
Project Capacity	750	MW
Project Energy Generated	1708200	MWh/year
Natural Gas Energy Equivalent	11854908	MMBtu/year

Emissions Displaced	CO ₂	CH ₄	N ₂ O
Emission Factor (kg/MMBtu) ¹	53.02	0.0009	0.0028
Emissions (Tonnes/year)	628,547	11	33
Total CO_{2e} Emissions	639,061	Tonnes/year	

1. Emission Factors obtained from 2011 The Climate Registry Default Emission Factors – Released January 14, 2011. <http://www.theclimateregistry.org/downloads/2009/05/2011-Emission-Factors.pdf>

California Senate Bill 1638 (Perata) establishes a GHG emission performance standard for all baseload generation at an emission rate of GHG that is not higher than the average emission rate of GHG for existing combined-cycle natural gas baseload generation (and includes the net lifecycle emissions resulting from the production of electricity by the baseload generation. The standard adopted by the CPUC for this is 1100 lb CO_{2e}/MW-hr. If the local utility purchased additional electricity from others it would be expected to meet this standard

Net power production	750.0	MW
Hours per year	8,760	hrs
Capacity factor	0.26	
Displaced electricity emissions (Per SB 1638)	0.50	Tonnes CO _{2e} /MW-h
Emissions displaced	852,310	Tonnes CO_{2e}/year

Minimum GHG Emissions Displaced	639,061	Tonnes CO_{2e}/year
--	----------------	------------------------------------

5. Net GHG Emissions

Fossil Fuel Combustion	112	Tonnes/Year
Indirect Electricity Use	23.6	Tonnes/Year
Fugitive Sulfur Hexafluoride Emission	80.2	Tonnes/Year
Emissions Displaced	-639,061	Tonnes/Year
Net Emissions	-638,846	Tonnes/Year

EXHIBIT 2

February 16, 2012

VIA E-MAIL AND FIRST CLASS MAIL

Tiffany North
Office of Riverside County Counsel
3960 Orange St., 5th Fl
Riverside, CA 92501

Re: McCoy Solar, LLC – Acknowledgement of Obligations under Public Resources Code, sections 21183 (c), (e) and (f)

Dear Ms. North:

As you know, McCoy Solar, LLC (“McCoy”), a subsidiary of NextEra Energy Resources, Inc., has applied to the California Governor to request certification of the McCoy Solar Energy Project (the “Project”) as a leadership project pursuant to Public Resources Code, section 21178 et seq. As you are further aware, the Governor may certify a leadership project for streamlining if certain conditions outlined in Public Resources Code section 21183 are satisfied.

Subdivision (c) of Public Resources Code section 21183 requires that a leadership project will not result in any net additional emission of greenhouse gases (“GHG”). To ensure the Project meets the requirements of Section 21183 (c), McCoy Solar, LLC will secure voluntary carbon credits totaling 19,152 tonnes CO₂e. Securing these carbon credits will offset the GHG emissions generated during construction and operation of the Project; and therefore, the Project will not result in any net additional GHG emissions. The voluntary carbon credits would be secured from NextEra Energy Resources, LLC or from a similar type of voluntary credit generator.

Subdivisions (e) and (f) of Public Resources Code section 21183 require that the project applicant agree to pay certain costs in connection with processing projects pursuant to the Leadership Program. The purpose of this letter is to acknowledge those obligations and to memorialize McCoy’s agreement to pay those costs as outlined below.

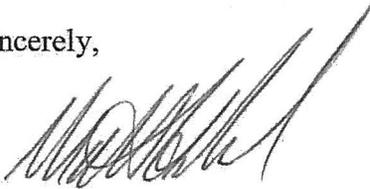
McCoy agrees to pay all costs required by Public Resources Code section 21183(e). Specifically, McCoy agrees “to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court”. (Pub. Res. Code, § 21183(e)). McCoy expressly recognized this obligation in its application to the Governor. (See application at p. 4, a copy of which has been provided to you and is also available at: <http://opr.ca.gov/docs/McCoySolarApp.pdf>.)

Furthermore, McCoy agrees to pay all costs required by Public Resources Code section 21183(f). Specifically, McCoy agrees to pay “the costs of preparing the administrative record for the project concurrent with review and consideration of the project”. (Pub. Res. Code, § 21183(f)). McCoy also expressly recognized this obligation in its application to the Governor. (See application at p. 4.) This obligation is further ensured in that McCoy has already agreed to be bound by Riverside County’s (“County”) “hold harmless” condition of approval. Upon filing its conditional use permit (CUP-03671) and public use permit (PUP-00911) applications, McCoy has agreed to indemnify the County in connection with any claims, actions or proceedings brought against the County in connection with its processing of the Project.

Finally, as Vice President for McCoy Solar, LLC., I am authorized to acknowledge and to bind the project as outlined above.

If you have any questions regarding this aspect of the application, please contact Kenny Stein at 561.691.2216 or via email at Kenneth.Stein@NextEraEnergy.com.

Sincerely,



Matthew S. Handel
Vice President

SKP

cc: Ken Alex, Office of Planning and Research, California Governor’s Office

EXHIBIT 3

February 16, 2012

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Re: McCoy Solar Energy Project Minimum Investment (Public Resources Code Section 21183(b))

To Whom it may concern:

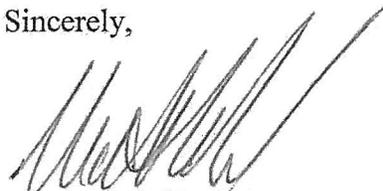
The McCoy Solar Energy Project recently filed an application under the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (Public Resources Code, Section 21181). In accordance with Governor's implementing *Guidelines for Streamlining Judicial Review Under the California Environmental Quality Act*, this letter is being submitted as "other information requested by the Governor" to augment the information provided in that application and specifically to address PRC Section 21183 (b) regarding the minimum investment required for a project to qualify for certification.

The McCoy Solar Energy Project is comprised of two power units – Unit 1 with a capacity of 250 MW and Unit 2 with a capacity of up to 500 MW to be built in an unincorporated part of Riverside County, California. The capital expenditures for the entire project are expected to be approximately \$1.6 billion based on anticipated project costs of approximately \$800 million per unit through their respective construction periods. The project, therefore, is expected to far exceed the one hundred million dollar minimum investment in California in accordance with PRC Section 21183(b).

Finally, as Vice President for McCoy Solar, LLC., I am authorized to acknowledge and to bind the project as outlined above.

If you have any questions regarding this aspect of the application, please contact Kenny Stein at 561.691.2216 or via email at Kenneth.Stein@NextEraEnergy.com.

Sincerely,



Matthew S. Handel
Vice President

cc: Ken Alex, Office of Planning and Research, California Governor's Office

EXHIBIT 4



February 16, 2012

VIA E-MAIL AND FIRST CLASS MAIL

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Re: McCoy Solar Energy Project – Confirmation of Prevailing and Living Wage Requirements Pursuant to Public Resources Code section 21183(b)

To Whom it may concern:

McCoy Solar Energy Project recently filed an application under the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (Pub. Res. Code, § 21178 et seq.). This letter is submitted to augment the information provided in that application and specifically addresses Public Resources Code section 21183 (b) regarding the job and wage requirements required for a project to qualify for certification.

During construction, the McCoy Project will create high-wage, highly skilled jobs for construction professionals including carpenters, electricians, and heavy equipment operators. We've identified the prevailing wages for job classifications as set forth by California's Employee Development Department (EDD). The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel and construction management personnel) is expected to range between 43 and 600 over an approximate 46-month period. The average on-site construction workforce would consist of approximately 341 construction, supervisory, support, and construction management personnel.

Below is a subset of job classifications and median wages*from the EDD database that we expect will comprise a majority of the construction jobs created by the project:

Construction Laborers	\$ 17.28
Carpenters	\$ 23.21
Reinforcing Iron and Rebar Workers	\$ 28.41
Cement Masons and Concrete Finishers	\$ 21.59
Electrician	\$ 23.84
Paving, Surfacing, and Tamping Equipment Operators	\$ 25.90
Heavy Truck Drivers	\$ 19.98

*These represent base wages (no loaders/benefits) for Riverside County, based on 1Q2011

Riverside County has not adopted a living wage. Therefore, for categories of workers not directly found in the state's EDD, we will correlate to one that is the closest match. If there is not a reasonable substitute or related classification, the state minimum wage rate would control

for positions that would not otherwise be subject to payment of a prevailing wage. To the extent that both a prevailing wage and a minimum wage apply to a particular position, the higher wage will be paid.

During operations, we anticipate that the McCoy Project will create approximately 15 permanent full-time positions at the plant site during daytime working hours. This assumes both of the units that comprise the McCoy Project are operational. Temporary personnel would also be employed, as needed, during periods of seasonal maintenance. Below is a subset of job classifications and median wages* from the EDD database that we expect will comprise a majority of the operations jobs created by the project:

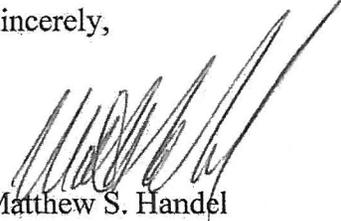
Electro-Mechanical Technicians	\$ 24.23
Production, Planning, and Expediting Clerks	\$ 18.72
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$ 28.01

*These represent base wages (no loaders/benefits) for Riverside County, based on 1Q2011

Finally, as Vice President for McCoy Solar, LLC., I am authorized to acknowledge and to bind the project to pay the equivalent of prevailing and living wages as outlined above.

If you have any questions regarding this aspect of the application, please contact Kenny Stein at 561.691.2216 or via email at Kenneth.Stein@NextEraEnergy.com.

Sincerely,


Matthew S. Handel
Vice President

cc: Ken Alex, Office of Planning and Research, California Governor's Office

EXHIBIT 5



Air Resources Board



Matthew Rodriguez
Secretary for
Environmental Protection

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Edmund G. Brown Jr.
Governor

March 21, 2012

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown Jr.
State Capitol, First Floor
Sacramento, California 95814

Dear Mr. Alex:

Pursuant to Assembly Bill 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition for the Governor's certification is that a project does not result in any net additional emission of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On January 12, 2012, in accordance with the Governor's Guidelines for applications for the CEQA streamlining, McCoy Solar, LLC submitted to ARB an Air Quality and Greenhouse Gas Technical Report (Report) for its proposed McCoy Solar Energy Project (Project). The Report included a proposed methodology for quantifying the net additional GHG emissions from the Project and documentation that the Project does not result in any net additional GHG emissions. After evaluating the Report in consultation with the lead agency, ARB found that it provided an adequate technical basis for estimating the total GHG emissions and required mitigation for the Project. Based on the information submitted, ARB staff has determined that McCoy Solar Energy Project will not result in any net additional GHG emissions.

I have enclosed ARB's Executive Order noting our determination. ARB staff's evaluation of the Air Quality and Greenhouse Gas Technical Report submitted by McCoy Solar, LLC is included in Attachment A and the Report is included in Attachment B.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

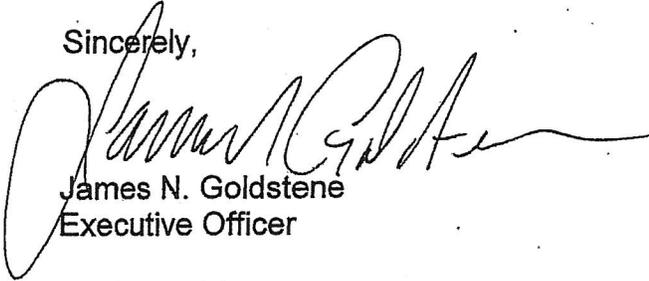
California Environmental Protection Agency

Mr. Ken Alex, Director

March 21, 2012

If you have questions regarding ARB's evaluation or determination, please contact Mr. Richard Corey, Deputy Executive Officer, at (916) 322-2890 or by e-mail at rcorey@arb.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "James N. Goldstene", with a long horizontal flourish extending to the right.

James N. Goldstene
Executive Officer

Enclosure(s)

cc: Richard Corey
Deputy Executive Officer

**State of California
AIR RESOURCES BOARD**

EXECUTIVE ORDER LP-12-001

**Relating to Determination of Any Net Additional Greenhouse Gas Emissions
Pursuant to Public Resources Code section 21183(c)**

For McCoy Solar Energy Project, McCoy Solar, LLC

WHEREAS, in September 2011, Governor Brown signed Assembly Bill 900, "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, in accordance with AB 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, in accordance with California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHGs), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for applications for the CEQA streamlining require, for purposes of ARB's determination on GHGs, that an applicant submit electronically to ARB a proposed methodology for quantifying a project's net additional GHGs and documentation that the project does not result in any net additional GHGs;

WHEREAS, in accordance with the Governor's Guidelines, McCoy Solar, LLC submitted its GHG methodologies and documentation to ARB on the proposed McCoy Solar Energy Project (Project) on January 12, 2012;

WHEREAS, the Air Quality and Greenhouse Gas Technical Report (Report) submitted for the McCoy Solar Energy Project states that the Project's estimated GHG emissions are as follows:

1. Construction GHG Emissions: 12,672 metric tons of carbon dioxide equivalent (MTCO₂e) generated by the equipment used for construction activities and from both on-site and off-site motor vehicles;
2. Direct Operation-Related GHG Emissions: 3,360 MTCO₂e from fossil fuel combustion used to support operation of the facility, including employee transportation;
3. Indirect Operation GHG Emissions: 3,120 MTCO₂e emissions from electricity use and sulfur hexafluoride usage associated with electrical switchgear;

4. Total Project Lifetime GHG Emissions: 19,152 MTCO_{2e} from construction and operation of the Project during a projected 30-year operational lifetime;

WHEREAS, in the Report submitted, McCoy Solar, LLC proposes to secure 19,152 MTCO_{2e} carbon credits through a voluntary carbon credits market such as the New York Stock Exchange Blue Registry, or from a similar type of voluntary carbon credit registry, to mitigate the total identified construction and operational GHG emissions prior to the commencement of the Project;

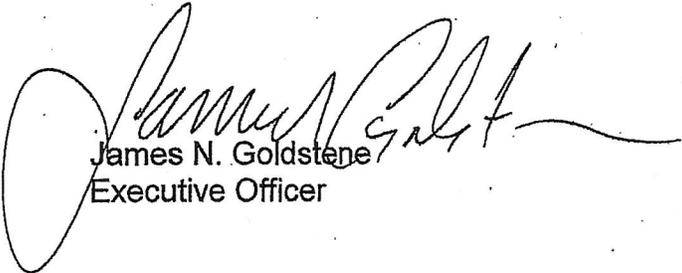
WHEREAS, ARB staff has reviewed and evaluated the submitted Report in consultation with the lead agency; prior to finalizing its determination, staff shared a draft of its evaluation with the lead agency;

WHEREAS, staff's evaluation of the Report found that it provides an adequate technical basis for estimating the total GHG emissions and required mitigation for the Project; and

WHEREAS, ARB's review and evaluation of the Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900; ARB's determination is not in lieu of any findings or determination required to be made by the lead agency or a responsible agency pursuant to any other requirement under state or federal law, including CEQA; the lead agency remains responsible for full compliance with CEQA for this project.

NOW, THEREFORE, based on ARB staff's evaluation (Attachment A) of the Air Quality and Greenhouse Gas Technical Report submitted by McCoy Solar, LLC (Attachment B), I determine that McCoy Solar Energy Project will not result in any net additional greenhouse gas emissions pursuant to Public Resources Code section 21183(c).

Executed at Sacramento, California this 21 day of March 2012.


James N. Goldstone
Executive Officer

Attachment(s)

Attachment A

Air Resources Board
Staff Evaluation

This page intentionally left blank

Air Resources Board Evaluation
of Greenhouse Gas Emission Methodologies and Documentation
Pursuant to Public Resources Code Section 21183, subdivision (c)

Project Information

Project Name: McCoy Solar Energy Project

Project Applicant: McCoy Solar, LLC

Project Location: Unincorporated portion of Riverside County near the city of Blythe

Project Description: The proposed McCoy Solar Energy Project (MSEP or Project) would be an up to 750 megawatt (MW) net alternating current solar power generating installation. The Project would utilize photovoltaic (PV) technology for the generation of electricity. The entire 750 MW Project would be comprised of two power units—Unit 1 would have a capacity of 250 MW and Unit 2 would have a capacity of up to 500 MW. The Project would be developed over an area of approximately 4,315 acres of federal land managed by the Bureau of Land Management (BLM) and 477 acres of private land, plus an approximately 15.5-mile long transmission line right-of-way. The applicant expects the Project to have a 30-year operational life.

AB 900 Standards and Applicants Proposed Method of Compliance

The Governor may certify a project for streamlining pursuant to Assembly Bill 900 "Jobs and Economic Improvement through Environmental Leadership Act" if certain conditions are met. (Public Resources Code § 21178 et seq.) One such condition is that the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the Air Resources Board pursuant to Division 25.5. (commencing with Section 38500) of the Health and Safety Code." (Public Resources Code § 21183, subdivision (c).)

In accordance with the Guidelines established by the Governor for applying for the streamlining, McCoy Solar, LLC submitted an "Air Quality and Greenhouse Gas Technical Report" (Report) for the proposed Project to the Air Resources Board (ARB) for review and evaluation. The Report states that combining the total construction and operational GHG emissions, the proposed Project would emit an estimated 12,672 metric tons carbon dioxide equivalent (MTCO_{2e}) greenhouse gas (GHG) emissions during construction and 6,480 (216 x 30 years) MTCO_{2e} GHG emissions during operation, for a total of 19,152 MTCO_{2e} of GHG emissions.

The Report states that the proposed Project will result in the displacement of more GHG intensive forms of energy production, and therefore, would result in an overall net reduction in GHG emissions. However, the Report states that to ensure the proposed Project meets the requirements of Public Resources Code section 21183, subdivision (c), McCoy Solar, LLC has proposed to secure voluntary carbon credits equivalent to 19,152 MTCO_{2e} to mitigate the GHG emissions expected to be generated during construction and operation of the proposed Project. By mitigating the total projected

GHG emissions, the Report concludes that the proposed project will not result in any net additional GHG emissions.

The Report states that a joint Environmental Impact Study (EIS)/Environmental Impact Report (EIR) is being prepared for the proposed Project pursuant to the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Prior to approval of the proposed Project, the EIS/EIR must be certified by the lead agency (Riverside County) and a mitigation monitoring and reporting plan must be adopted. The Report states that the applicant expects that all mitigation measures necessary to ensure compliance will be included in the mitigation monitoring and reporting plan, as conditions of project approval, or both. According to the Application for CEQA Streamlining Under the "Jobs and Economic Improvement through Environmental Leadership Act" submitted with the Report, the applicant will be required to implement all mitigation measures contained in the mitigation monitoring and reporting plan and adhere to all conditions of project approval set forth by Riverside County and the BLM.

GHG Emissions Calculation Methodology

The Report evaluated the emissions of six categories of GHGs: carbon dioxide, nitrous oxide, methane, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. Carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) are GHGs emitted by combustion sources and would be directly emitted by the equipment and vehicles used for constructing the Project. Sulfur hexafluoride (SF₆) may be emitted from some types of electrical switchgear associated with the Project. The Report states that the Project is not expected to result in any emissions of hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs).

The Report states that although CO₂ is expected to be the primary GHG of concern for this project, emissions of CH₄, N₂O, and SF₆ were also estimated. ARB staff agrees that in most cases CO₂ drives the projected GHG emissions associated with fuel combustion. ARB staff expects that there may be SF₆ emissions associated with the Project due to gas-insulated switchgear being used in conjunction with the Project. ARB staff would not expect any HFC or PFC emissions associated with the Project because of the specialty nature of these compounds, one of the most common forms of usage is as a refrigerant.

The CO₂ emissions from construction equipment use were estimated in the Report using the same methodology used to estimate criteria pollutant emissions. This methodology employs the URBEMIS model to estimate CO₂ emissions. Emissions of N₂O and CH₄ were estimated using the CO₂ emissions calculated by URBEMIS and CO₂, N₂O, and CH₄ emission factors obtained from The Climate Registry Default Emission Factors (2011) for diesel fuel combustion. The URBEMIS default load factors were revised by the applicant to reflect the revised load factors proposed by the Air Resources Board (ARB) in *The Amendments to the Regulations for In-Use Off-Road*

Diesel-Fueled Fleets and Off-Road Large Spark Ignition Engine Fleet Requirements (2010).

The Report explains that URBEMIS is the model recommended by the Mojave Desert Air Quality Management District. ARB staff agrees that URBEMIS with revised load factors is an appropriate model for estimating CO₂ emissions from mobile equipment. Staff agrees that using CO₂ emissions from URBEMIS and back-calculating comparable N₂O and CH₄ emissions from Climate Registry emission factors is a reasonable way to estimate these emissions.

In the Report, GHG emissions from motor vehicles used during construction were estimated using the same methodology used to estimate criteria pollutants from construction vehicles by using ARB's EMFAC2007 model. Since the EMFAC2007 model provides emission factors for CO₂ emissions only, the Report used emission factors for N₂O and CH₄ for different vehicle types from ARB's Regulation for The Mandatory Reporting of Greenhouse Gas Emissions, Appendix A, Table 8 (ARB's mandatory reporting program).

ARB staff agrees with the use of EMFAC2007 for the estimation of emissions factors for motor vehicles. Staff agrees that using the CO₂ emissions from the model and back-calculating to obtain N₂O and CH₄ emissions from ARB's mandatory reporting program is a reasonable method to obtain those emission estimates.

The Report estimated GHG emissions during construction generated by motor vehicles within the Mojave Desert Air Basin (MDAB) (i.e., worker trips to and from site and deliveries of construction materials). The applicant has not decided at the time of submission where the PV panels will be obtained from for the Project. The Report states that, in order to provide a conservative estimate of GHG emissions from the delivery of the panels, GHG emissions were estimated based on an assumed round trip for delivery of panels from the Port of Long Beach. The Report split GHG emissions due to panel delivery trips into those emissions that would occur inside of and outside of the MDAB as provided in the table below.

Report's Construction GHG Emission Estimates (MTCO₂e)

Calendar Year	Within MDAB	Outside of MDAB	Total
2013	1,945	362	2,307
2014	2,500	627	3,127
2015	2,567	549	3,116
2016	3,197	925	4,122
Total	10,209	2,463	12,672

The Report states that the Project's operation would emit GHGs from the use of equipment and vehicles. It further states that GHGs could be emitted as fugitive emissions from electrical switchgear that contains SF₆ and indirect GHG emissions due to electricity use from off-site generators.

The Report estimated GHG emissions for on-site equipment based on anticipated fuel use and emission factors from The Climate Registry's Default Emission Factors (2011). The Report estimated vehicle emissions using the same methodology used to estimate vehicle emissions during construction. SF₆ emissions were assumed to be emitted at half the allowable level for calendar year 2020 under ARB's Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (California Code of Regulations, title 17, sections 95350 – 95359).

ARB staff agrees that using projected fuel usage from equipment and vehicles is a valid basis for estimating GHG emissions from these devices. The Climate Registry is a reasonable source for emission factors from these devices. Staff agrees that this is an appropriate methodology for the same reasons as were detailed under the review of the applicant's estimation of GHG emissions from equipment used during construction.

ARB adopted a regulation pertaining to the maximum allowable SF₆ emission rate from gas insulated switchgear. The regulation starts at a ten percent leak rate allowed in 2011 and decrease one percent per year until it reaches a one percent allowable leak rate in 2020. The Report assumed that the switchgear used would emit at the rate of one-half of a percent, based on installed capacity, annually from the time of installation through the life of the project. Currently available new switchgear typically has a maximum leak rate of one-half percent or less. As such, ARB staff agrees that the applicant used a reasonable estimation of SF₆ emissions.

Report's Annual GHG Emission Estimates from Project Operation

	Annual Emissions (MTCO₂e/yr)
Fossil Fuel Combustion	112
Indirect Electricity Use	24
Fugitive Sulfur Hexafluoride	80
Total Annual Operations	216

The Report derived the Project's total GHG emissions by combining construction and operational GHG emission for a 30-year project life. This yields a total GHG estimate of 19,152 MTCO₂e. Based on the staff evaluation of the calculations for estimating emissions as described above, staff agrees that 19,152 MTCO₂e is a reasonable estimate of the Project's total GHG emissions over the lifetime of the Project.

Carbon Credits

McCoy Solar, LLC proposes to secure voluntary carbon credits from NextEra Energy Resources, LLC (the parent company of McCoy Solar, LLC) or from a similar type of voluntary credit generator. The applicant submitted the following information regarding the carbon credits that they are proposing to use to mitigate the GHG emissions from the Project. In 2010, NextEra Energy Resources submitted the Capricorn Ridge 4 wind project to the Voluntary Carbon Standard (VCS, now called the Verified Carbon

Standard) to generate carbon offset credits. The 112.5 MW project is located in Sterling and Coke counties in West Texas. First Environment, a "qualified third party," verified the creation of the Verified Carbon Units (VCUs) for the renewable generation from the project for periods from January 1, 2010 through September 30, 2010, accounting for over 100,000 metric tons of carbon credits. The majority of these VCUs have been sold in the voluntary carbon offset market, with the remaining VCUs still residing in NextEra Energy Resources' NYSE Blue (APX) registry account. The Report states that the applicant would secure 19,152 metric tons CO₂e of these remaining VCUs, or similar carbon credits, to mitigate the construction and operations of the Project. As McCoy Solar is a wholly owned subsidiary of NextEra Energy Resources, ARB staff believes that the potential for the Project to procure these credits is enhanced by this business relationship.

ARB staff reviewed the information available on the VCS website and found that the VCS registry is consistent with the registry required to be used for renewable energy projects to demonstrate compliance with the Renewable Portfolio Standard as amended by Senate Bill 2 of the first extraordinary session of 2011. VCS issues individual certificates with unique serial numbers. The unique serial numbers allows for the tracking of all transactions involving certificates and prevents multiple claims against the same credits. Credits can be tracked through the registry from issuance through retirement. According to VCS, its registry operators must meet strict capitalization, transparency, and other requirements. The VCS system currently has three international registries: NYSE Blue, Markit, and CDC Climat. After reviewing information about VCS, ARB staff believes that the credits the applicant is proposing to use would be acceptable for CEQA mitigation of the GHG emission impacts due to the Project.

Conclusions/Recommendations

The ARB staff reviewed the GHG emission estimates and the methodology provided by the applicant. During its review, ARB staff had numerous conversations with the CEQA lead agency, the County of Riverside, and consultants working on the CEQA evaluation for this Project. Based on these discussions with lead agency representatives, staff concluded that the emissions estimates and methodology submitted to ARB are generally consistent with how the lead agency is planning to evaluate the Project's GHG emissions. The lead agency's approach may evaluate the GHG emissions from a couple of potential sources (e.g. carbon embedded in water used for the project) that are not calculated in the Report submitted to ARB. However, there is a less than one percent difference in estimated GHG emissions between the two estimation approaches. Based on discussions with the lead agency's consultant, ARB staff and the consultant agree that the differences in calculations are negligible.

Based on the staff's evaluation of the documentation provided in the Report and the discussions with the lead agency's consultants, staff concludes that the project applicant has reasonably documented and estimated the Project's anticipated GHG

emissions. If McCoy Solar, LLC secures the proposed GHG emission credits described in the Report, then the Project's estimated GHG emissions would be fully mitigated.

Based on this evaluation, ARB staff recommends that a determination be made that the McCoy Solar Energy Project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, pursuant to Public Resources Code section 21183, subdivision (c).

EXHIBIT 6

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

832



FROM: Planning Department

SUBMITTAL DATE:
November 29, 2012

SUBJECT: Agreement between the County of Riverside and McCoy Solar, LLC regarding CEQA Streamlining of the McCoy Solar Energy Project under the Jobs and Economic Improvement through Environmental Leadership Act of 2011

RECOMMENDED MOTION: That the Board of Supervisors approve the attached agreement between McCoy Solar, LLC and the County of Riverside regarding California Environmental Quality Act streamlining of the McCoy Solar Energy Project Under the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (the "Act") and authorize the Chairman of the Board to execute the agreement on behalf of the County.

Carolyn Syms Luna
Carolyn Syms Luna, Planning Director

(continued on the attached page)

FINANCIAL DATA	Current F.Y. Total Cost:	\$0	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	\$0	Budget Adjustment:	N/A
	Annual Net County Cost:	\$0	For Fiscal Year:	N/A

SOURCE OF FUNDS:	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION: APPROVE
BY: *Denise C. Harden*
Denise C. Harden
County Executive Office Signature

FORM APPROVED COUNTY COUNSEL
BY: *[Signature]* 11/29/12
DATE
TIPPA MANN NORTH

Departmental Concurrence

Dept's Recomm.: Policy Consent
Per Exec. Ofc.: Policy Consent

Prev. Agn. Ref. | District: 4th/4th | Agenda Number:

ATTACHMENTS FILED WITH THE CLERK OF THE BOARD

3.22

The Honorable Board of Supervisors

RE: Agreement between the County of Riverside and McCoy Solar, LLC regarding CEQA Streamlining of the McCoy Solar Energy Project under the Jobs and Economic Improvement through Environmental Leadership Act of 2011

Page 2 of 2

BACKGROUND:

Assembly Bill 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (Public Resources Code section 21178 et seq), effective January 1, 2012, sets up a California Environmental Quality Act ("CEQA") streamlining/expedited procedure for judicial challenges under CEQA to "environmental leadership development projects."

In order to qualify for the litigation streamlining provisions of the Act, a project must be designated as an "environmental leadership development project" by the Governor. One of the potential categories for such a leadership project designation is a solar photovoltaic project. McCoy Solar, LLC ("McCoy") has filed an application for a conditional use permit (CUP03682), an application for a public use permit (PUP00911), a development agreement and proposes to construct the McCoy Solar Energy Project, an up-to 750 megawatt solar photovoltaic project (the "Project"), in an unincorporated portion of the County.

AB 900 requires that the applicant notify a lead agency prior to the release of the Draft Environmental Impact Report that the applicant is electing to proceed under the Act. McCoy has given such notice. Further, the applicant must apply to the Governor to be deemed a leadership project. McCoy applied to the Governor on January 12, 2012.

Among other things, under the Act, the Governor may certify a leadership project for CEQA streamlining if:

- The project applicant has entered into a binding and enforceable agreement that all mitigation measures required pursuant to the Act to certify the project shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency or another agency designated by the lead agency.
- The project applicant agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court.
- The project applicant agrees to pay the costs of preparing the administrative record for the project concurrent with review and consideration of the project pursuant to the Act, in a form and manner specified by the lead agency for the project.

The attached agreement addresses the above bullet points.

There is no cost to the County under the agreement. McCoy will be responsible for payment of all costs associated with the Act.

BINDING AND ENFORCEABLE AGREEMENT BETWEEN THE COUNTY OF RIVERSIDE AND MCCOY SOLAR, LLC, REGARDING CEQA STREAMLINING OF THE MCCOY SOLAR ENERGY PROJECT UNDER THE JOBS AND ECONOMIC IMPROVEMENT THROUGH ENVIRONMENTAL LEADERSHIP ACT OF 2011

This Binding and Enforceable Agreement (this "Agreement") is entered into this ____ day of _____, 2012 by and between McCoy Solar, LLC, a Delaware limited liability company ("McCoy") and the County of Riverside ("County") in accordance with Public Resources Code, section 21183. Together McCoy and the County are herein referred to as "Parties"; individually they are referred to as a "Party".

RECITALS

This Agreement is made with respect to the following facts:

WHEREAS, the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (the "Act") became effective on January 1, 2012; and

WHEREAS, the stated purpose of the Act is to provide unique and unprecedented streamlining benefits under the California Environmental Quality Act (Pub. Res. Code § 21000 et seq.: "CEQA") for projects that provide the benefits described in the Act for a limited period of time in order to put people to work as soon as possible; and

WHEREAS, McCoy has filed an application for a conditional use permit (CUP03682) and an application for a public use permit (PUP00911), has requested a development agreement and proposes to construct the McCoy Solar Energy Project, an up-to 750 megawatt net alternating current solar generating installation utilizing photovoltaic technology (the "Project"), in an unincorporated portion of the County of Riverside; and

WHEREAS, in accordance with Public Resources Code, section 21165 and Title 14, California Code of Regulations, section 15367, the County is the lead agency for purposes of the Project; and

WHEREAS, McCoy has applied to the Governor's Office of Planning and Research ("Governor") for certification of the Project as a leadership project pursuant to Public Resources Code, section 21178 et seq. ("Certification"); and

WHEREAS, Public Resources Code, section 21183 states that the Governor may certify a leadership project for streamlining pursuant to the Act if all six prerequisites outlined in the statute are satisfied; and

WHEREAS, Public Resources Code, section 21183, subdivision (d), requires that a project applicant enter into a binding and enforceable agreement that requires all mitigation measures that are necessary to certify the Project under the Act be imposed as conditions of approval on the project and that those conditions will be fully enforceable by the lead agency; and

WHEREAS, Public Resources Code, section 21183, subdivision (e) requires that a project applicant agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the Rules of Court adopted by the Judicial Council; and

WHEREAS, Public Resources Code, section 21183, subdivision (f) requires that a project applicant agrees to pay the costs of preparing the administrative record for the project concurrent with review and consideration of the project pursuant to CEQA and the Act, in a form and manner specified by the lead agency for the project; and

WHEREAS, the Parties desire to enter into this Agreement in satisfaction of Public Resource Code, section 21183.

AGREEMENT

NOW, THEREFORE, in consideration of the following mutual promises and agreements, McCoy and the County agree as follows:

1. Recitals. The Parties agree that the Recitals constitute the factual basis upon which McCoy and the County have entered into this Agreement. McCoy and the County each acknowledge the accuracy of the Recitals and agree that the Recitals are incorporated into this Agreement as though fully set forth at length herein.

2. Conditions of Approval. All mitigation measures required pursuant to Division 13 of the Public Resources Code to certify the Project under Chapter 6.5 of Division 13 of the Public Resources Code shall be conditions of approval of the Project. Additionally, McCoy agrees that it, and any of its successors and assigns, will be responsible for all costs incurred to comply with the Act.

3. Enforceability. The conditions of approval of the Project shall be fully enforceable by the County or another agency designated by the County.

4. Mitigation Monitoring. In the case of environmental mitigation measures, McCoy agrees, as an ongoing obligation, that the mitigation measures required pursuant to Division 13 of the Public Resources Code will be monitored and enforced by the County for the life of the obligation. Additionally, McCoy agrees that it, and any of its successors and assigns, will be responsible for all costs incurred by the County to monitor and enforce such mitigation measures for the life of the obligation. McCoy further agrees that any Project approval may include a condition of approval requiring a cash deposit or other form of security acceptable to the County to secure the County's ability to monitor and enforce the mitigation measures for the of the obligation at no cost to the County.

5. Resolution of Discretion. The Parties understand and acknowledge that, in the context of processing the applications for the Project, the County cannot guarantee the ultimate outcome of any public hearings before the County Planning Commission or the County Board of Supervisors or other public bodies of the County, nor prevent any opposition thereto by members of the public or other agencies affected by or interested in the Project. By entering into this

Agreement, the County does not pre-commit or imply that the applications for the Project to be considered for approval will be approved. The County retains the discretion to approve, conditionally approve, or disapprove the Project.

6. Appeal Costs. As required by Public Resources Code section 21183, subdivision (e), McCoy agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the Rules of Court adopted by the Judicial Council pursuant to the Act.

7. Administrative Record Costs. As required by Public Resources Code section 21183, subdivision (f), McCoy agrees to pay the costs of preparing the administrative record for the Project, in a form and manner specified by the County, concurrent with review and consideration of the Project pursuant to CEQA and the Act. In the event of a dispute between the County and McCoy with regard to the form and manner of preparing the administrative record, the County's decision shall control.

8. Indemnification. McCoy shall defend, indemnify, and hold harmless the County, its agents, officers, and employees from any claim, action, or proceeding against the County or its agents, officers, or employees in connection with this Agreement. The County shall notify McCoy of any such claim, action, or proceeding and the County shall reasonably cooperate in the defense. The legal counsel selected by McCoy shall be acceptable to the County. McCoy shall pay all legal services expenses the County incurs in connection with any such claim, action or proceeding, whether it incurs such expenses directly, whether it is ordered by a court to pay such expenses, or whether it incurs such expenses by providing legal services through its Office of County Counsel or through other outside counsel.

9. Severability. If any term, condition or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect and shall not be affected, impaired or invalidated in any way.

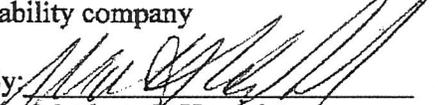
10. Governing Law. The terms and conditions of this Agreement shall be governed by the laws of the State of California with venue in Riverside County, California.

11. Authority to Execute. The persons executing this Agreement warrant and represent that they have the authority to execute this Agreement on behalf of the Party for which they are executing this Agreement. They further warrant and represent that they have the authority to bind their respective Party to the performance of its obligations under this Agreement.

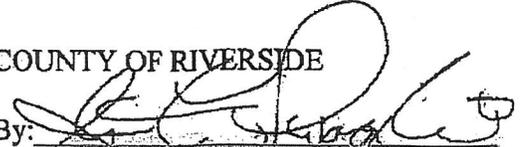
[Signatures on Next Page]

SIGNATURE PAGE TO THE BINDING AND ENFORCEABLE AGREEMENT BETWEEN
MCCOY SOLAR, LLC AND THE COUNTY OF RIVERSIDE:

McCOY SOLAR, LLC, a Delaware limited liability company

By: 
Matthew S. Handel
Vice President

COUNTY OF RIVERSIDE

By: 
JOHN TAVAGLIONE
CHAIRMAN, BOARD OF SUPERVISORS

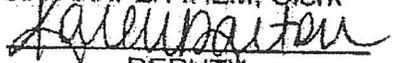
Date: DEC 11 2012

Date: _____

ATTESTED TO:

By: _____

ATTEST:
KECIA HARPER-IHEM, Clerk

By: 
DEPUTY

APPROVED AS TO FORM:

By: _____

APPROVED AS TO FORM:

By: 
Taffey North