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CHAPTER 4 – ENVIRONMENTAL IMPACT ASSESSMENT

4.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.3.0 Introduction

This section describes the existing air quality within the Sierra Pacific Power Company (SPPCo) 625 and 650 Line Upgrade Project (project) area and evaluates the potential air quality impacts associated with construction, operation, and maintenance of the project. Air quality in the project area will be temporarily impacted during construction, operation, and maintenance activities. The implementation of the minimization measures listed in Section 4.3.4 Applicant-Proposed Measures will reduce some of these air quality impacts to the less-than-significant level; however, the impacts from the construction-related emissions of oxides of nitrogen (NO_x) will be potentially significant.

4.3.1 Methodology

The majority of the project's air emissions were assessed by estimating emission rates from construction, operation, and maintenance activities and then comparing them to established significance criteria. For the odor and sensitive receptor analysis, the impact assessment was based on subjective criteria, including experience with similar projects. Air pollutant emission rates for off-road construction equipment were estimated using the publicly available software, URBEMIS version 9.2.4 (URBEMIS). This computer model allows users to generate estimates of construction and operational emissions of various pollutants, including inhalable particulate

matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), reactive organic gases (ROG), sulfur oxides (SO_x), NO_x , and carbon dioxide (CO_2). URBEMIS also allows users to input minimization measures and evaluate their effects on emission rates. On-road vehicle travel and operational emissions were estimated using the publicly available emission factors from the South Coast Air Quality Management District (SCAQMD). On-road emissions were estimated outside of URBEMIS to allow more control over the categorization of on-road equipment that will be used during construction. Operational emissions within the URBEMIS model are limited to on-road equipment. Because the operation and maintenance of the project will require the use of off-road construction equipment, these emissions were also calculated outside of the model. The SCAQMD emission factors were selected due to their availability and industry-wide acceptance.

Particulate matter (PM) and NO_x will be the pollutants of greatest concern during construction of the project, primarily from on- and off-road construction vehicles and soil-disturbing activities. The primary operation and maintenance emissions will result from worker commute traffic and maintenance vehicle travel to and from the project area.

4.3.2 Existing Conditions

Regulatory Background

This section describes the regulations and regulatory agencies that have jurisdiction over the project, the regional climate and meteorology, and existing air quality conditions in the area.

Federal

The 1970 federal Clean Air Act (CAA) established national ambient air quality standards (AAQS) for six pollutants: CO, ozone (O_3), PM_{10} , nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. These six criteria pollutants are known to have adverse impacts on human health and the environment. To protect human health and the environment, the United States (U.S.) Environmental Protection Agency (EPA) has set primary and secondary maximum ambient thresholds. The primary thresholds were set to protect human health, particularly children and the elderly, as well as individuals in the population that suffer from chronic lung conditions (e.g., asthma and emphysema). The secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings. The combined primary and secondary standards are termed the National AAQS (NAAQS).

The 1977 CAA required each state to develop and maintain a State Implementation Plan (SIP) for each criteria pollutant that exceeds ambient air quality standards. The SIP serves as a tool to reduce pollutants that are known to cause impacts that exceed the ambient thresholds and to achieve compliance with the NAAQS. In 1990, the CAA was amended to strengthen regulation of both stationary and mobile emission sources for the criteria pollutants.

In July 1997, the U.S. EPA developed new health-based NAAQS for O_3 and PM_{10} . However, these standards were not fully implemented until 2001, after the resolution of several lawsuits. The new federal O_3 standard of 0.08 parts per million (ppm), established in 1997, was based on a longer averaging period (eight-hour versus one-hour), recognizing that prolonged exposure to O_3 is more damaging. In March 2008, the EPA further lowered the eight-hour O_3 standard from

0.08 ppm to 0.075 ppm. The new federal PM standard is based on finer particles (2.5 microns and smaller versus 10 microns and smaller), recognizing that finer particles may have a higher residence time in the lungs and contribute to greater respiratory illness. In February 2007, the NO₂ AAQS was amended to lower the existing one-hour standard of 0.25 ppm to 0.18 ppm and established a new annual standard of 0.030 ppm.

State

The California Clean Air Act of 1988 requires air districts to develop and implement strategies to attain California's Ambient Air Quality Standards (CAAQS). For some pollutants, the California standards are more stringent than the national standards. Regional air quality management districts, such as the Placer County Air Pollution Control District (PCAPCD) and the Northern Sierra Air Quality Management District (NSAQMD), were required to prepare air quality plans specifying how federal and state standards would be met.

The California Air Resources Board (CARB) enforces the CAAQS and works with the state's Office of Environmental Health Hazard Assessment (OEHHA) in identifying toxic air contaminants (TACs) and enforcing rules related to TACs, including the Air Toxic Hot Spots Information and Assessment Act of 1987. Enacted to identify toxic air contaminant hot spots where emissions from specific sources may expose individuals to an elevated risk of adverse health effects, the act requires that a business or other establishment identified as a significant source of toxic emissions provide the affected population with information about health risks posed by the emissions.

The CARB also regulates mobile emission sources in California, such as construction equipment, trucks, and automobiles, and oversees the air districts. Relevant programs related to oversight of mobile source emissions include the Off-Road and On-Road Mobile Sources Reduction programs, the Portable Equipment Registration Program (PERP), and the Airborne Toxic Control Measure for Diesel Particulate Matter (DPM) from Portable Engines. The Mobile Sources Emission Reduction programs are aimed at reductions of NO_x, volatile organic compounds (VOCs), CO, and PM₁₀. CARB has also adopted specific control measures for the reduction of DPM from off-road (in-use) diesel vehicles (rated at 25 horsepower or higher), such as backhoes, dozers, and earthmovers, used in construction projects. Additional DPM control measures are also in place for heavy-duty, on-road diesel trucks operated by public utilities and municipalities. The PERP and Airborne Toxic Control Measure for DPM (for portable engines) provide for state-wide registration and control of DPM from portable engines rated at 50 horsepower and higher.

Local

The air districts are primarily responsible for regulating stationary emission sources at industrial and commercial facilities within their respective geographic areas and for preparing the air quality plans that are required under the federal and California CAAs. The project area is located within two air basins—Lake Tahoe Air Basin (LTAB) and the Mountain Counties Air Basin (MCAB). The PCAPCD has jurisdictional control over a portion of LTAB and a portion of MCAB, and the NSAQMD has jurisdictional control over a different portion of MCAB. Additionally, the LTAB coincides with jurisdictional boundaries of the Tahoe Regional Planning Agency (TRPA). Both the NSAQMD and PCAQMD produce rule books which provide lists of

rules and regulations that all projects must conform to. In addition, the NSAQMD's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects provides a methodology for analyzing a project's impacts under the California Environmental Quality Act (CEQA).

Town of Truckee

The Town of Truckee's Particulate Matter Air Quality Management Plan is a policy document on particulate matter air quality that includes the control strategies to reduce particulate matter emissions and improve air quality within the town's jurisdiction.

Climate Change Policies and Regulations

Many chemical compounds found in the earth's atmosphere act as "greenhouse gases" (GHG). These gases allow sunlight to enter the atmosphere freely but absorb heat radiated from the surface of the earth and trap the heat in the atmosphere. Many gases exhibit these greenhouse properties. Some of them occur in nature—such as water vapor, CO₂, methane (CH₄), and nitrous oxide (N₂O)—and some are man-made—such as gases used for aerosols. Over time, the amount of energy sent from the sun to the earth's surface should be about the same as the amount of energy radiated back into space, keeping the temperature of the earth's surface roughly constant. The generally accepted scientific understanding is that human-caused increases in GHG have and will continue to contribute to global warming; however, the scientific community is still in disagreement over the rate or magnitude of this warming.

Over the past decade, the issue of global warming has developed into a critical issue for consideration in land use planning. The public and political will to address this issue has resulted in recent legislation in California designed to curb emissions and mandate limits and reductions on GHG emissions. The California Climate Action Team's Report to the Governor, published in April of 2006, identifies initial strategies that the state should pursue for managing GHG emissions.

California Global Warming Solutions Act of 2006

In response to Executive Order S-3-05 (June 2005), which declared California's particular vulnerability to climate change, the California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB32), was signed into effect on September 27, 2006. In enacting the bill, the California Legislature found that:

"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."

This law requires the CARB to adopt a statewide GHG emissions limit equivalent to the levels in 1990 to be achieved by 2020. The following six compounds have been defined as GHGs under AB32: CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF₆). To achieve this reduction goal, the CARB is required to adopt rules and regulations to achieve the

maximum technologically feasible and cost-effective GHG-emission reductions. The CARB established the statewide emissions limit for 2020 at its meeting on December 6, 2007. At the same time, the CARB also adopted regulations that require mandatory GHG emissions reporting.

The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) concluded a lengthy proceeding in October 2008 to provide electricity and natural gas specific recommendations to the CARB for inclusion in its scoping plan and AB32 regulations and programs. The CARB adopted a comprehensive scoping plan in December 2008 that outlined programs designed to achieve the 2020 GHG reduction goal of 174 million metric tons of CO₂ equivalent (MMTCO₂E) emissions through regulations, market mechanisms, and other actions. For the electricity sector, the scoping plan adopted the fundamental recommendations of the CPUC for both investor-owned and publicly owned utilities to continue and increase the implementation of programs designed to reduce emissions including energy efficiency programs, increasing the use of electricity supplies obtained from renewable generation sources to 33 percent by 2020, and adopting a cap and trade system to ensure an overall reduction of emissions from electric generation. As stated in the Final Recommendations:

"The electricity and natural gas sectors will play a critical role in achieving this ambitious goal. Indeed, [C]ARB's Climate Change Draft Scoping Plan envisions that the electricity sector will contribute at least 40% of the total statewide GHG reductions, even though the sector currently creates just 25% of California's GHG emissions. This is before considering the additional emissions reductions that are projected to result from a GHG emissions allowance cap-and trade system, if such a system is adopted and implemented. The electricity sector is expected to reduce its emissions further due to its participation in such a market-based system."

The CPUC/CEC Joint Recommendation Decision, adopted on October 16, 2008, details the planned GHG reductions. This document makes three important points. First, GHG emissions from the electricity sector have been essentially flat since 1990. Second, the "reference case" modeled by the CPUC's consultants (the current 20 percent Renewable Portfolio Standard¹ [RPS] and existing energy efficiency programs) would result in continued compliance with the electricity sector's 1990 proportional share of GHG emissions by 2020 despite population growth. Third, the "accelerated policy case" (33 percent RPS plus greater energy efficiency as proposed by the CPUC, CEC, and CARB) would produce about 30 MMTCO₂E of annual reductions or 27 percent below 1990 levels. This is without considering additional reductions expected from a cap and trade program.

Throughout 2009, CARB staff will draft rules to implement the AB32 Scoping Plan and hold public workshops on each measure, including market mechanisms. The CARB has identified "Discrete Early Actions" that can be implemented to reduce GHG emissions from the years 2007 to 2012. On January 29, 2009, the CARB also announced its regulatory schedule to adopt 74 separate regulations and other measures including the enhanced energy efficiency programs and 33 percent RPS standard recommended in the Final Recommendations and in the CARB Scoping

¹ The requirement imposed on utilities to derive a specified percentage of their power from renewable sources is known as a RPS.

Plan. Implementation of the CARB Scoping Plan was outlined at a workshop held by CARB staff on January 29, 2009.

AB32 – Early Action C17, 2-8: Reduce Sulfur Hexafluoride from Electrical Generation

Early Action C17 is directly applicable to the project due to the use of SF₆ in substation equipment. The U.S. EPA estimates that the electric power industry can achieve cost-effective SF₆-emissions reductions through operational improvements and equipment upgrades. Options to reduce SF₆ emissions include leak detection and repair, SF₆ recycling, and employee education and training through a corporate policy of managing SF₆. CARB's staff is attempting to quantify the SF₆ emissions attributed to the California electric power industry and develop the most appropriate and effective emission-reduction equipment and practices. The CARB is tentatively scheduled to consider adoption of this item in late 2009 or early 2010.

Executive Order S14-08

Senate Bill (SB) 1078, passed in 2002, initially required electricity providers to obtain 20 percent of their power from renewable sources by 2020. The current RPS requirement of 20 percent renewable electricity sources by 2010 was established by 2006 legislation (SB107). On November 17, 2008, Governor Schwarzenegger signed an Executive Order requiring California's investor and publicly owned utilities to obtain 33 percent of their electric power from renewable sources by 2020. The latest RPS is expected to be brought into legislation introduced during the upcoming legislative session.

CPUC GHG Emissions Performance Standard

The Electricity GHG Emission Standards Act (SB1368) was enacted in 2006. At the CPUC meeting on January 25, 2007, the CPUC adopted GHG requirements in the form of an emissions performance standard for any long-term power commitments made by the state's electrical utilities. Utilities are not allowed to enter into a long-term commitment to buy base-load power from power plants that emit more than 1,100 pounds of CO₂ (0.5 metric ton) per megawatt-hour. This standard is approximately the amount emitted by a combined-cycle turbine fueled with natural gas. The GHG emissions performance standard applies to new power plants, new investments in existing power plants, and new or renewed contracts with terms of 5 years or more, including contracts with power plants located outside of California. On May 23, 2007, the CEC also adopted a performance standard consistent with those of the CPUC.

Regional Climate and Meteorology

The project will be located in northeastern Placer County and southeastern Nevada County, and is under the jurisdiction of the PCAPCD and NSAQMD. Regional climatic conditions consist of dry, warm summers with temperatures peaking between June and September and cold, snowy winters. August is normally the warmest month in the project area with an average maximum temperature of 78.7 degrees Fahrenheit (°F) and an average minimum temperature of 39.8 °F. January is the coolest month with an average maximum temperature of 41.0 °F and an average minimum temperature of 15.1 °F. Annual precipitation ranges from over 55 inches in watersheds on the west side of the Lake Tahoe Basin to approximately 26 inches near the lake on the east side of the basin. Most of the precipitation falls in the form of snow between November and April.

Air Quality

Criteria Pollutants

O₃, CO, NO₂, SO₂, lead, PM₁₀, and PM_{2.5} are all criteria air pollutants that are regulated in California. Nonmethane-ethane VOCs, also referred to as ROGs, are also regulated as precursors to the formation of O₃. These criteria pollutants and their effects on humans are discussed as follows.

Ozone

O₃ is a colorless gas that is not directly emitted as a pollutant, but is formed when hydrocarbons and NO_x react in the presence of sunlight. Low wind speeds or stagnant air mixed with warm temperatures typically provide optimum conditions for the formation of O₃. Because O₃ formation does not occur quickly, O₃ concentrations often peak downwind of the emission source. As a result, O₃ is of regional concern, impacting a larger area. When inhaled, O₃ irritates and damages the respiratory system.

Particulate Matter

PM—defined as particles suspended in a gas—is often a mixture of substances including metals, nitrates, organic compounds, and complex mixtures, such as diesel exhaust and soil. PM can be traced back to both man-made and natural sources. The most common sources of natural PM are dust and fires, while the most common man-made source is the combustion of fossil fuels.

PM causes irritation to the human respiratory system when inhaled. The extent of the health risks due to PM exposure can be determined by the size of the particles. The smaller the particles, the deeper they can be deposited in the lungs. PM is often grouped into two categories: inhalable PM less than 10 microns in diameter (PM₁₀) and fine PM less than 2.5 microns in diameter (PM_{2.5}).

Carbon Monoxide

CO is a colorless, odorless, and tasteless gas that is directly emitted as a by-product of combustion. CO concentrations tend to be localized to the source with the highest concentrations and are associated with cold, stagnant weather conditions. CO is readily absorbed through the lungs into the blood, where it reduces the ability of the blood to carry oxygen.

Nitrogen Oxides

NO_x is a generic name for the group of highly reactive gases that contain nitrogen and oxygen in varying amounts. Many of the NO_x are colorless and odorless. However, one common pollutant, NO₂, along with particles in the air, can often be seen as a reddish-brown layer over many urban areas.

NO_x form when fuel is burned at high temperatures. Typical manmade sources of NO_x include motor vehicles, fossil-fueled electricity generation facilities, and other industrial, commercial, and residential sources that burn fuels. NO_x can harm humans by affecting the respiratory system. Small particles can penetrate the sensitive parts of the lungs and can cause or worsen respiratory disease and aggravate existing heart conditions.

Sulfur Oxides

SO_x is a generic name for the group of gasses that easily dissolve in water and contain sulfur and oxygen in varying amounts. These gases, which include SO_2 , are formed when sulfur-containing materials are processed or burned. SO_x sources include industrial facilities—such as petroleum refineries, cement manufacturing, and metal processing facilities—locomotives, large ships, and some off-road diesel equipment.

A wide variety of health and environmental impacts are associated with SO_x because of the way it reacts with other substances in the air. People with asthma, children, the elderly, and people with heart or lung disease are particularly sensitive to SO_x emissions. When inhaled, these particles gather in the lungs and contribute to increased respiratory symptoms and disease, difficulty breathing, and premature death.

Volatile Organic Compounds

VOCs (or ROGs) are a group of chemicals that react with NO_x and hydrocarbons in the presence of heat and sunlight to form O_3 . Examples of VOCs include gasoline fumes and oil-based paints. Exposure to VOCs can cause eye, nose, and throat irritation; headaches; nausea; and loss of coordination. Some VOCs are suspected or known to cause cancer in humans. This group of chemicals does not include CH_4 or other compounds determined by the U.S. EPA to have negligible photochemical reactivity.

Air Quality Designations

Three air quality designations can be given to an area for a particular pollutant:

- Nonattainment: This designation applies when air quality standards have not been consistently achieved.
- Attainment: This designation applies when air quality standards have been achieved.
- Unclassified: This designation applies when insufficient monitoring data exists to determine a nonattainment or attainment designation.

The current CAAQS and NAAQS are provided in Table 4.3-1: State and Federal Ambient Air Quality Standards and the current attainment status for the project area is provided in Table 4.3-2: Project Area Attainment Status. Portions of the project area are currently designated nonattainment areas for O_3 and PM.

Toxic Air Contaminants

TACs are the listed toxic pollutants as established by OEHHA. Under AB 1807, the CARB is required to use certain criteria in prioritizing, identifying, and controlling air toxics. In selecting substances for review, the CARB must consider pollutants that may pose a threat to human health or cause or contribute to serious illnesses or death. For many TACs, no threshold level exists below which adverse health impacts may not be expected to occur. This contrasts with criteria air pollutants (CAPs) for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Table 4.3-1: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard	Federal Standard	
			Primary	Secondary
Ozone	1 hour	0.09 ppm (180 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$])	Not Applicable (NA)	NA
	8 hour	0.070 ppm (137 $\mu\text{g}/\text{m}^3$)	0.075 ppm (147 $\mu\text{g}/\text{m}^3$)	0.075 ppm (147 $\mu\text{g}/\text{m}^3$)
PM ₁₀	24 hour	50 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$
	Annual arithmetic mean	20 $\mu\text{g}/\text{m}^3$	50 $\mu\text{g}/\text{m}^3$	50 $\mu\text{g}/\text{m}^3$
PM _{2.5}	24 hour	NA	35 $\mu\text{g}/\text{m}^3$	35 $\mu\text{g}/\text{m}^3$
	Annual arithmetic mean	12 $\mu\text{g}/\text{m}^3$	15 $\mu\text{g}/\text{m}^3$	15 $\mu\text{g}/\text{m}^3$
CO	1 hour	20 ppm (23 milligrams per cubic meter [mg/m^3])	35 ppm (40 mg/m^3)	NA
	8 hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	NA
	8 hour (Lake Tahoe)	6 ppm (7 mg/m^3)	NA	NA
NO ₂	1 hour	0.18 ppm (339 $\mu\text{g}/\text{m}^3$)	NA	NA
	Annual arithmetic mean	0.030 ppm (57 $\mu\text{g}/\text{m}^3$)	0.053 ppm (100 $\mu\text{g}/\text{m}^3$)	0.053 ppm (100 $\mu\text{g}/\text{m}^3$)
SO ₂	1 hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$)	NA	NA
	3 hour	NA	NA	0.5 ppm (1,300 $\mu\text{g}/\text{m}^3$)
	24 hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$)	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)	NA
	Annual arithmetic mean	NA	0.030 ppm (80 $\mu\text{g}/\text{m}^3$)	NA

Pollutant	Averaging Time	California Standard	Federal Standard	
			Primary	Secondary
Lead	30 day	1.5 $\mu\text{g}/\text{m}^3$	NA	NA
	Rolling 3 month	NA	0.15 $\mu\text{g}/\text{m}^3$	0.15 $\mu\text{g}/\text{m}^3$
	Quarterly	NA	1.5 $\mu\text{g}/\text{m}^3$	1.5 $\mu\text{g}/\text{m}^3$

Source: CARB, 2008; EPA, 2010

Table Notes:

1. California standards for O₃, CO (except Lake Tahoe), SO₂ (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀ and PM_{2.5}—and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu\text{g}/\text{m}^3$ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units used to promulgate the standard. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure that can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
8. CARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects established. These actions allow for implementation of control measures at levels below the ambient concentrations specified for these pollutants.
9. National lead standard, rolling 3-month average; final rule signed October 15, 2008.

Table 4.3-2: Project Area Attainment Status

Criteria Pollutants	State			Federal		
	Lake Tahoe Air Basin	Mountain Counties Air Basin		Lake Tahoe Air Basin	Mountain Counties Air Basin	
		Nevada County	Placer County		Nevada County	Placer County
Ozone (8 hour)	U	N	N	U/A	N	N
PM _{2.5}	A	U	U	U/A	U/A	U/A
PM ₁₀	N	N	N	U	U	U
CO	A	U	U	U/A	U/A	U/A
NO ₂	A	A	A	U/A	U/A	U/A
SO ₂	A	A	A	A	U	U
Sulfates	A	A	A	X	X	X
Lead	A	A	A	A	A	A
Hydrogen Sulfide	U	U	U	X	X	X
Visibility Reducing Particle	U	U	U	X	X	X

Source: CARB, 2006

Notes:

A = Attainment

U = Unclassified

N = Nonattainment

X = Not applicable, there is no federal standard

U/A = Unclassified/Attainment

GHG Emissions Inventory

Industrial Sector

CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆ are all GHGs that contribute to global climate change. Emissions of CO₂ occur largely from combustion of fossil fuels. The major categories of fossil fuel combustion sources can be broken into the following five sectors: residential, commercial, industrial, transportation, and electricity generation. GHG emissions, such as CH₄ and N₂O, which occur in smaller quantities, are also tracked by state inventories.

California is responsible for approximately 500 MMTCO₂E, or more than 1 percent of the 49,000 MMTCO₂E emitted globally. Electricity generation within California is responsible for about 55 MMTCO₂E (depending on yearly variations) or 11 percent of the total statewide CO₂ emissions and about 1 percent of statewide CH₄ emissions.

The use of SF₆ in power transformers and circuit breakers at power plants also poses a concern because of its extremely high global warming potential (GWP) of 23,900.² Within the electricity production industry, emissions of SF₆ generally occur from losses through poor gas handling practices during equipment installation, maintenance and decommissioning, and leakage from SF₆-containing equipment. Older equipment has been found to have a higher rate of SF₆ leakage, while newer equipment is often guaranteed minimal to zero leak rates by equipment manufacturers. In a recent EPA study, leak rates were established as a percentage of nameplate capacity and both a lower bound and an upper bound estimate of average circuit breaker leak rates were produced. All estimates are defined as the weighted average of circuit breaker annual leak rates as a percentage of SF₆ nameplate capacity. For the lower-bound estimate (best-case scenario), the weighted-average circuit breaker leak rate is approximately 0.2 percent per year. For the upper-bound estimates (worst-case scenario), the weighted-average leak rate is estimated to be between 2.4 and 2.5 percent per year. The approximate annual leak rate provided by SPPCo for SF₆ is approximately 0.50 percent and this rate compares favorably with the lower bound leak rate estimate from the EPA study.

The California Climate Action Registry (CCAR) offers protocols to facilitate the preparation of inventories of GHG emissions. The registry is a non-profit public corporation that records GHG emissions inventories that California entities voluntarily report. SPPCo has provided voluntary reports of GHG emissions to the CCAR for the 2006, 2007, and 2008 calendar years. In addition, SPPCo has reported emissions to the CARB for 2008 and Nevada Division of Environmental Protection (NDEP) for 2008. SPPCo will be reporting emissions from the 2009 calendar year to CARB, the Nevada Division of Environmental Protection, and The Climate Registry. Lastly, SPPCo plans to begin additional reporting to the EPA in 2011.

SPPCo has put forth significant efforts and resources toward energy-efficiency and demand-response programs, as well as the development of customer-owned renewable energy. The success of such programs is demonstrated by the fact that the Consortium for Energy Efficiency ranked Nevada eighth in per capita investment on demand-side management (DSM) and load control for 2008, and among the four leaders in growth of program investments for DSM and

² GWP is a measurement of how much a GHG will contribute to global warming. This relative scale compares the emission of any GHG to that of CO₂, that has a warming potential of 1.

load control for the same year. Additionally, the responses to the energy-efficiency programs from the communities served by SPPCo have achieved major carbon dioxide emission reductions. By the end of 2009, the estimated cumulative annual electric savings due to energy efficiency and conservation of 1,235,000 megawatt hours will have offset approximately 1.8 billion pounds of CO₂, which is equivalent to removing 135,000 cars from the roads.

Along with adding new, more efficient generating facilities based upon traditional designs, SPPCo's three-part strategy focuses on increasing energy-efficiency, creating conservation programs, and expanding renewable energy initiatives and investments.

Forestry Sector

Forests represent significant carbon sinks in the U.S., storing carbon in quantities approximately equal to 10 percent of the country's total annual GHG emissions. Carbon stock in forest ecosystems can be divided into the following five pools, as defined by the Intergovernmental Panel on Climate Change:

- Aboveground biomass – This pool includes all living biomass above the soil, such as stump, stem, branches, bark, seeds, and foliage. This category also includes live understory.
- Belowground biomass – This pool includes all living biomass below the soil, such as living roots.
- Deadwood – This pool includes all non-living woody biomass not considered litter.
- Litter – This pool includes all litter, fumic, and humic layers, and all non-living biomass with a diameter less than approximately 3 inches.
- Soil – This pool includes all organic material in soil not including the sources above.

Carbon is constantly cycling between these pools and the atmosphere during biological processes (including photosynthesis, respiration, growth, mortality, decomposition, and other disturbances) and anthropogenic activities (including harvesting, clearing, and replanting). The intake of carbon from the atmosphere by trees takes place during photosynthesis and growth, where it is stored within the tree's biomass. When trees die and deposit litter and debris on the forest floor, carbon is either released to the atmosphere or transferred to the soil during decomposition.

When harvested, the carbon contained within timber is not instantly released back into the atmosphere. Instead, the carbon contained within the timber is transferred to two new product pools of carbon, including:

- Harvested wood products in use: This pool includes lumber, furniture, and other wood products that are currently being used.
- Harvested wood products in solid waste disposal sites (SWDS): This pool includes wood that has been harvested, used as a component to a product, and now disposed of in a SWDS.

Carbon held in these two pools is released over time when the products combust or decay. The use of the timber determines the rate at which it releases carbon. For example, if timber is harvested for energy production, its carbon is released immediately during combustion. If it is

harvested as lumber, the carbon may be held for decades or even centuries in the timber until it decays. Finally, if the timber is disposed of in a SWDS, the carbon contained in the wood may take decades to be released or it may be stored almost permanently in the SWDS.

When determining the carbon flux of forested areas, the absorption and storage of carbon is given a negative value and the release of carbon is deemed as a positive value. Because the carbon flux in forested areas is typically less than zero, forests are considered areas of sequestration. Forested areas in California feature the greatest carbon sequestration rates of any state in the U.S., with western forests sequestering carbon at an approximately 50 percent higher rate than forests in the east.

Sensitive Receptors

Some exposed population groups, including children, the elderly, and the ill, can be especially vulnerable to airborne chemicals and irritants and are termed “sensitive receptors.” Additionally, due to sustained exposure durations, all persons located within residential areas are considered to be sensitive receptors. While the majority of the project components traverse sparsely populated, forested areas, the transmission lines originate and terminate at facilities that are located in more populous areas. Numerous residences are located within 1,000 feet of the project as identified in Table 4.9-1: Residences within 1,000 Feet in Section 4.9 Land Use and Planning. Approximately 484 residences are in close proximity (within 250 feet) of the transmission lines and substations, and are the nearest sensitive receptors to the project. Of these residences, approximately 85 are located within 25 feet of the 650 Line between MP 8.0 and 8.6. The location and type of specific sensitive receptors that are located near the project’s switching stations and substations are described as follows.

Brockway Substation

The Brockway Substation is located within a residential area that includes multiple single-family residences; the closest residence is located approximately 150 feet from the substation. In addition to these residences, there are multiple hotels and schools within 1 mile of the project. The Kings Beach Elementary School, located approximately 0.2 mile to the southwest, is the closest school to the substation. The closest hotel—the Seven Pines Motel—is located approximately 0.35 mile south of the substation.

Northstar Substation

The Northstar Substation is located near the Northstar-at-Tahoe Ski Resort and, as a result, near multiple sensitive receptors, including residences and hotels. The closest residences to the substation are located approximately 500 feet to the west. The Northstar-at-Tahoe Village is located approximately 0.4 mile west of the substation and is the closest hotel to the substation.

Squaw Valley Substation

The Squaw Valley Substation is located near the Squaw Valley Ski Resort. As a result, the substation is located near many sensitive receptors, including single-family residences and hotels. The closest sensitive receptor to the Squaw Valley Substation—the Tavern Inn—is a group of condominiums located approximately 500 feet west of the facility. The Squaw Valley Academy is the closest school to the substation and is located adjacent to the Tavern Inn.

Tahoe City Substation

The Tahoe City Substation is located near the Truckee River and downtown Tahoe City. Sensitive receptors located in the vicinity of the substation include residences, hotels, and a school. The closest residence to the substation is located approximately 0.3 mile to the south. The closest school to the substation is the Tahoe Lake Elementary School, located approximately 0.6 mile to the north.

Kings Beach Substation

The Kings Beach Switching Station, which will be converted to a substation, is located within the Kings Beach Diesel Generation Facility. The area surrounding this existing facility is surrounded by forested areas it is located approximately 0.3 mile north of the Brockway Substation. The closest sensitive receptors to the substation are residences located approximately 0.1 mile to the west and south. Kings Beach Elementary School—approximately 0.4 mile southwest of the substation—is the closest school.

North Truckee Switching Station

The North Truckee Switching Station is located in a primarily commercial area of Truckee. The Forest Charter School, which is located approximately 0.26 mile southwest of the substation, is the closest school. The closest residence is located approximately 0.3 mile to the east.

4.3.3 Impacts

Significance Criteria

Placer County Air Pollution Control District

To determine whether a significant impact will occur during construction, the PCAPCD recommends quantifying construction emissions and comparing them to significance thresholds (pounds per day) found in Table 4.3-3: Thresholds of Significance for Criteria Air Pollutants. If emissions during project construction will exceed the thresholds that apply to stationary sources, then construction activities will have the potential to violate air quality standards or contribute substantially to existing violations.

Northern Sierra Air Quality Management District

The NSAQMD has developed a tiered approach to construction thresholds of significance where the project's construction emissions dictate the required mitigation to be implemented in order to reduce the potential impact from the project. The three-tiered thresholds of significance are presented in Table 4.3-3: Thresholds of Significance for Criteria Air Pollutants. The recommended mitigation measures for the construction phase of the project are listed by emission tier in Table 4.3-4: NSAQMD Mitigation Measures for Construction ActivitiesSources: PCAPCD, 2008; NSAQMD, 2007

Table 4.3-4: NSAQMD Mitigation Measures for Construction Activities. If construction emissions from the project exceed the thresholds presented as Level C, the project will have a significant impact.

Table 4.3-3: Thresholds of Significance for Criteria Air Pollutants

Pollutant	PCAPCD Thresholds (pounds per day)	NSAQMD Thresholds (pounds per day)		
		Level A	Level B	Level C
ROG (VOC)	82	Less than 24	24 to 136	Greater than 136
NO _x	82	Less than 24	24 to 136	Greater than 136
PM ₁₀	82	Less than 79	79 to 136	Greater than 136
CO	550	None listed	None listed	None listed

Sources: PCAPCD, 2008; NSAQMD, 2007

Table 4.3-4: NSAQMD Mitigation Measures for Construction Activities

Mitigation Measures for Level A Projects
a. Alternatives to open burning of vegetative material will be used unless otherwise deemed infeasible by the District. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.
b. Adequate dust control measures will be implemented in a timely and effective manner during all phases of project development and construction (pursuant to the project's Dust Control Plan).
c. Temporary traffic control will be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.
d. Construction activities should be scheduled to direct traffic flow to off-peak hours as much as practicable.
Mitigation Measures for Level B Projects
e. All controls discussed above—measures a through d—shall be implemented.
f. All inactive portions of the construction site should be covered, seeded, or watered until a suitable cover is established.
Mitigation Measures for Level C Projects
g. All controls discussed above—measures a through f—shall be implemented.
h. During initial grading, earth moving, or site preparation, larger projects may be required to construct a paved, coarse gravel or dust palliative treated apron, at least 100 feet in length, leading onto the paved road(s).
i. Wheel washers will be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads on larger projects. Vehicles and/or equipment will be washed prior to each trip, if necessary.

Source: NSAQMD, 2007

CEQA Guidelines

In addition to the previously mentioned criteria, Appendix G of the CEQA Guidelines determines project impacts to be significant if they will:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard
- Expose sensitive receptors to substantial pollutant concentrations
- Create objectionable odors affecting a substantial number of people

GHG Significance Thresholds

Placer County Air Pollution Control District and Northern Sierra Air Quality Management District

The PCAPCD and NSAQMD have not released any formal or interim significance thresholds for GHGs.

California Governor's Office of Planning and Research

The Office of Planning and Research (OPR) is the state-wide, comprehensive planning agency that is responsible for making policy recommendations and coordinating land use planning efforts. The OPR also coordinates the state-level review of environmental documents pursuant to the CEQA. Currently, the OPR's stance on GHG significance thresholds has been to allow each lead agency to determine their own level of significance. OPR issued a Technical Advisory recommending an approach to evaluating greenhouse emissions in CEQA documents and is currently developing amendments to the CEQA Guidelines concerning GHG emission assessment. One of the principal elements of the proposed approach to determining significance of emissions in Code of Regulations, Section 15064.4 is that:

“(a) A lead agency should consider the following, where applicable, in assessing the significance of impacts from greenhouse gas emissions, if any, on the environment:

(1) The extent to which the project could help or hinder attainment of the state’s goals of reducing greenhouse gas emissions to 1990 levels by the year 2020 as stated in the Global Warming Solutions Act of 2006. A project may be considered to help attainment of the state’s goals by being consistent with an adopted statewide 2020 greenhouse gas emissions limit or the plans, programs, and regulations adopted to implement the Global Warming Solutions Act of 2006.”

On October 24, 2008, the CARB released their interim CEQA significance thresholds for GHG, stating that a zero-molecule threshold is not required. The guidance divides projects analyzed under CEQA into two categories—industrial and residential/commercial—and provides

significance criteria for each. The project qualifies as an industrial project and, as a result, will be considered less than significant if the following two conditions are met:

- The project meets minimum performance standards or includes equivalent mitigation measures:
 - Construction – meets an interim CARB performance standard for construction-related emissions
 - Transportation – meets an interim CARB performance standard for transportation-related emissions
- The project with mitigation will emit no more than approximately 7,000 MMTCO₂E per year from operation of non-transportation-related GHG sources. These sources include:
 - Combustion-related components/equipment
 - Process losses
 - Purchased electricity

Question 4.3a – Applicable Air Quality Plan Conflicts

Construction – Potentially Significant Impact

Emissions for the off-road equipment to be used construction were simulated using the URBEMIS model using site-specific information to generate emission rates based on the project's anticipated size, schedule, land use, and construction methods. Using this data, the model calculated the maximum daily and yearly emissions for a range of pollutants. On-road vehicle traffic emissions were estimated using the CARB's Emission Factors (EMFAC) 2007 model. The categorization system used to characterize this equipment has been provided as Table 4.3-5: Construction Equipment Categorization. Emissions from helicopter use were calculated using the Federal Aviation Administration's Emissions and Dispersion Modeling System.

The results of these modeling efforts were used to generate maximum daily emission rates for construction. These peak emissions and the applicable NSAQMD and PCAQMD thresholds of significance are presented in Table 4.3-6: CAP Emissions from Construction. A detailed discussion of the calculations used to generate these results and the URBEMIS output files are provided in Attachment 4.3-A: Air Quality Calculations.

The URBEMIS model allows for the user to specify project-specific mitigation measures during the characterization of the project. The model then presents both unmitigated and mitigated results. The values presented in Table 4.3-6: CAP Emissions from Construction incorporate the APMs detailed in Section 4.3.4 Applicant-Proposed Measures. As a result, with the implementation of APM-AIR-01 through APM-AIR-10 (as described in Section 4.3.4 Applicant-Proposed Measures), which include the control of fugitive dust emission sources through watering, limiting construction vehicle speeds on unpaved roads, and controlling trackout onto public roadways, all pollutants except NO_x and PM₁₀ will be below the associated significance thresholds. The exceedances of the applicable daily thresholds have been highlighted using bold text and placed on a grey background. In order to ensure that these APMs are implemented during construction, SPPCo will submit a project-specific Dust Control Plan for approval by the

Table 4.3-5: Construction Equipment Categorization

Equipment	Use	On-Road Emission Category	URBEMIS Equipment Type	Horsepower	Load Factor
¾-ton and 1-ton pickup trucks	Transport construction personnel	Light	Not Applicable (NA)	NA	NA
2-ton flatbed trucks; flatbed boom truck	Haul and unload materials	Light	NA	NA	NA
5-kW generator	Generate power	NA	Generator sets	15	0.74
525 Rubber-tired skidder	Haul and load logs	NA	Skid steer loaders	160	0.55
Aerial lift trucks	Access poles, string conductor, and other uses	NA	Aerial lifts	60	0.46
Air compressors	Operate air tools	NA	Air compressors	50	0.48
Air tamper- compactor	Compact soil around pole foundations	NA	Plate compactors	8	0.43
Boom loader	Load logs	NA	Rough terrain forklifts	93	0.60
Boom truck (small crane)	Lift small loads	NA	Cranes	200	0.43
Brush puller	Pull brush	NA	Skid Steer Loaders	44	0.55
Bulldozer	Grade access roads and pole sites used during reclamation	NA	Graders	174	0.61
Chainsaws	Fell and delimb trees	NA	Concrete/Industrial Saws	10	0.73
Chip van	Catch and haul chips	Heavy	NA	NA	NA

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Equipment	Use	On-Road Emission Category	URBEMIS Equipment Type	Horsepower	Load Factor
Compactor (roller with sheep's foot)	Compact soil	NA	Rollers	95	0.56
Concrete pumper truck	Pump concrete	NA	Other Material Handling Equipment	191	0.59
Concrete truck	Deliver concrete	Heavy-Heavy	NA	NA	NA
Conductor reel trailer (has small gas motor)	Transport cable reels and feed cables into conduit	NA	Other General Industrial Equipment	50	0.51
D5 CAT-tracked skidder	Clear and grade land and transport material	NA	Crawler Tractors	175	0.64
Dump truck	Haul excavated materials and import backfill	Heavy-Heavy	NA	NA	NA
Fire units	Control potential fires	Heavy-Heavy	NA	NA	NA
Fire water tender	Suppress potential fires through water application	Heavy	NA	NA	NA
Forklift (diesel)	Lift material	NA	Tractors/Loaders/Buckets	108	0.55
Fuel and fluid truck	Refuel and maintain vehicles	Heavy	NA	NA	NA
John Deere processor	Process vegetation	NA	Crushing/Processing Equipment	175	0.78
Large chipper	Reduce timber to chips	NA	Crushing/Processing Equipment	142	0.78
Large mobile crane (75 tons)	Erect poles	NA	Cranes	250	0.43
Large mobile crane (200 tons)	Move transformers	NA	Cranes	500	0.43

Equipment	Use	On-Road Emission Category	URBEMIS Equipment Type	Horsepower	Load Factor
Log loader	Load logs	NA	Tractors/Loaders/Backhoes	108	0.55
Logging truck	Haul logs	Heavy-Heavy	NA	NA	NA
Mechanic truck	Service and repair equipment	Heavy	NA	NA	NA
Mini excavator	Excavate	NA	Excavators	125	0.57
Morbark model 13 chipper	Reduce timber to chips	NA	Crushing/Processing Equipment	115	0.78
Puller and tensioner	Pull conductor and wire	NA	Other General Industrial Equipment	100	0.51
Road grader	Level road surfaces	NA	Graders	174	0.61
Semi tractor-trailers	Haul poles and equipment	Heavy-Heavy	NA	NA	NA
Shop vans	Store tools	Heavy	NA	NA	NA
Skid steer (Bobcat)	Move dirt/auger holes	NA	Skid Steer Loaders	44	0.55
Small chippers	Reduce timber to chips	NA	Crushing/Processing Equipment	75	0.78
Small mobile crane (12 ton)	Load and unload materials	NA	Cranes	150	0.43
Splice trailer	Store splicing supplies	NA	NA	NA	NA
Truck-mounted backhoe	Excavate	NA	Excavators	75	0.57
Water truck	Suppress dust and fire	Heavy-Heavy	NA	NA	NA

Table 4.3-6: CAP Emissions from Construction

Pollutant	Peak Daily Emissions (pounds per day)			Total Peak Daily Emissions (pounds per day)	Significance Threshold (pounds per day)
	Off-Road Equipment ³	On-Road Vehicles	Helicopters ⁴		
PCAPCD					
ROG	15.1	3.8	3.1	22.0	82
NO _X	201.2	36.5	20.8	258.5	82
PM ₁₀	121.8	2.9	NA	124.7	82
PM _{2.5}	30.3	2.6	NA	32.9	NA
CO	109.3	21.9	50.4	181.6	550
SO _X	0.1	<0.1	5.2	5.3	NA
NSAQMD					
ROG	1.0	0.3	NA	1.3	136
NO _X	12.8	3.2	NA	16.0	136
PM ₁₀	7.8	0.3	NA	8.1	136
PM _{2.5}	1.9	0.2	NA	2.1	NA
CO	7.0	1.9	NA	8.9	NA
SO _X	<0.1	<0.1	NA	<0.1	NA

Note: Emission rates that exceed the applicable significance threshold have been identified with bold text and placed on a grey background.

³ The off-road equipment emissions include fugitive dust emissions predicted by the URBEMIS model.

⁴ A total of 14 days of helicopter use has been included. Helicopter use is not anticipated in Nevada County.

PCAPCD and NSAQMD. This plan will detail the required dust control measures and will require documentation of their implementation prior to and during construction activities.

APM-AIR-11 through APM-AIR-15, which include limiting vehicle idling time, encouraging carpooling by construction workers, and encouraging the use of higher tier diesel engines, will be implemented to help reduce PM and NO_x emissions. Even with the implementation of these measures, it is not anticipated that the NO_x emissions from project construction will be reduced by the necessary 200 percent in order to be in compliance with the PCAPCD threshold.

As shown in Table 4.3-2: Project Area Attainment Status, portions of the project area are currently designated as nonattainment for ozone. Because the project's emissions will exceed the daily significance thresholds for NO_x, it will conflict with the applicable air quality plans. As a result, these impacts will be potentially significant.

Operation and Maintenance – Less-than-Significant Impact

Criteria air pollutants will not be emitted directly from the project's upgraded facilities; however, some emissions will result from the operation of heavy equipment and helicopters in order to perform regular maintenance. Because all of the transmission lines will be rebuilt within existing rights-of-way (ROWS) or relocated, future operation and maintenance activities will not differ significantly from the existing practices already conducted. As a result, the upgraded transmission lines and substations will not cause a substantial increase in the emissions during operation and maintenance. Thus, impacts will be less than significant.

Question 4.3b – Air Quality Standard Violations

Construction – Potentially Significant Impact

CAP Emissions

As stated previously in the response to Question 4.3a, with implementation of APM-AIR-01 through APM-AIR-10 in Section 4.3.4 Applicant-Proposed Measures, the expected emission levels resulting from construction of the project will still exceed the significance threshold for NO_x recommended by the PCAPCD. While levels of NO_x will be elevated during construction, the CAAQS or NAAQS are not expected to be exceeded in the project area because these emission sources will be spread across the large project area and will be short term in nature. Because construction of the project is expected to exceed the daily emissions thresholds established by the PCAPCD, impacts to existing air quality standards during construction will be potentially significant.

GHG Emissions – Construction Equipment

GHG emissions were simulated for the construction phase the project. These GHG emissions will occur as a result of burning the fuel required to operate the on-site construction equipment and mobilize work crews to and from the project site. Emissions of CO₂ were estimated using URBEMIS. The resulting CO₂ emissions were then used in conjunction with the methods from the California Climate Action Registry's (CCAR) General Reporting Protocol (GRP) version 3.1 and data from the California Statewide GHG Inventory to develop estimated CH₄ and N₂O emissions. Each chemical's GWP—CO₂, CH₄, and N₂O have GWPs of 1, 21, and 310, respectively—were multiplied by their emission rate to produce CO₂E emission rates. Table

4.3-7: GHG Emissions from Construction present the total CO₂, CH₄, N₂O, and CO₂E emissions from construction. A detailed description of this calculation methodology is presented in Attachment 4.3-A: Air Quality Calculations.

Table 4.3-7: GHG Emissions from Construction

Year	Emission Rate				
	CO ₂ (pounds per day)	CO ₂ (metric tons per year)	CH ₄ (metric tons per year)	N ₂ O (metric tons per year)	CO ₂ E (metric tons per year)
2011	26,712.6	950.7	0.04	0.03	959.9
2012	20,386.2	650.9	0.03	0.02	657.3
2013	1,046.7	132.0	0.01	0.01	133.4
Total Emissions	--	1,733.6	0.08	0.06	1,750.6

Note: Daily CO₂ emissions represent a peak emission

APM-AIR-11 through APM-AIR-15, which include limiting vehicle idling time, encouraging carpooling by construction workers, and encouraging the use of higher tier diesel engines, will ensure that the project will be in compliance with the CARB's interim threshold for industrial projects, which requires the implementation of CARB performance standards for construction and transportation-related sources. It is anticipated that these APMs will collectively reduce the GHGs emitted during construction by approximately 20 percent. With the implementation of these APMs, the impact of GHG emissions due to construction will be less than significant.

GHG Emissions – Deforestation

The construction of the project will require the clearing of existing forested habitat, including the removal of trees. Approximately 161.1 acres of tree removal will be required to expand the existing approximately 30-foot easements to a 65-foot-wide temporary ROW and to establish new spur roads, temporary work areas, stringing sites, and the new 625 Line temporary ROW. After construction has been completed, all areas that were used temporarily during construction that are located outside of a permanent easement will be allowed to revegetate naturally, while the stringing sites and existing 625 Line easement will be replanted as described in Section 4.4 Biological Resources. A summary of these areas, by forest type, has been provided in Table 4.3-8: Forested Habitat Summary.

Because carbon stocks vary greatly by geography and forest type, the Carbon On Line Estimator was used to generate approximate carbon stock rates from the USFS Forest Inventory and Analysis Program. The resulting report from the Carbon On Line Estimator has been included as Attachment 4.3-B: Carbon On Line Estimator Report. These values were used to estimate the amount of carbon that will be affected due to the clearing of trees for construction and operation of the project. Table 4.3-9: Carbon Pools by Habitat Type provides an estimate of the carbon stored within the forest's carbon pools by habitat type.

Table 4.3-8: Forested Habitat Summary

Forest Type	Tree Removal (acres)	Replacement Scheme (acres)		
		No Revegetation	Natural Revegetation	Replanted
Jeffry Pine	7.9	0.8	7.0	0.0
Red Fir	95.6	44.1	45.1	38.4
California Mixed Conifer	56.4	19.0	36.3	22.1
Total	159.9	63.9	88.4	60.5

Table 4.3-9: Carbon Pools by Habitat Type

Forest Type	Tree Removal (hectares)	Carbon Stocks by Source (metric tons/hectare)						Total Sequestered GHG in Forest Removed (metric tons)
		Live Tree	Dead Tree	Under-story	Dead down wood	Forest Floor	Soil ⁵	
Jeffry Pine	3.2	85.8	0.3	3.6	10.5	21.6	42.2	521.0
Red Fir	38.7	130.4	15	2.6	14.6	36.9	51.8	9,725.3
California Mixed Conifer	22.8	116.2	9.4	3.6	12.5	35.6	49.5	5,180.2
Total	64.7	--	--	--	--	--	--	15,426.5

Source: COLE, 2010

As shown in Table 4.3-9: Carbon Pools by Habitat Type, approximately 15,426.5 metric tons of carbon is sequestered within the forested habitat that will be removed in preparation for construction. As discussed previously, the live trees removed during construction (approximately 7,973.1 metric tons of carbon) will be collected and harvested for commercial use. This merchantable lumber will include engineered building materials, such as plywood, particle board and medium-density fiberboard. During this conversion to merchantable lumber, approximately 30 percent (totaling approximately 2,391.9 metric tons of carbon) of the tree's mass will be lost as wood chips and sawdust.⁶ This material will be transported to an energy-generation facility.

The lumber and engineered building material will then be converted to finished products where an additional 8 percent of the product's mass will be lost as sawdust (totaling approximately

⁵ The carbon contained within soil will remain constant throughout the clearing process.

⁶ Source: Mader, 2007, p23

542.2 metric tons of carbon).⁷ As a result of these processes, approximately 6,235.0 metric tons of carbon will be transferred from the live trees within the ROW to finished goods. The wood chips and sawdust, containing approximately 1,738.1 metric tons of carbon, will be burned to generate energy.

The remaining biomass within the ROW—including dead trees, understory, dead down wood, and biomass within the forest floor—will be chipped. This chipped matter will be spread across the project’s ROWs to an approximate depth of 0.25 inch or will be transported off site to an energy-generation facility where it will be burned. The results from the COLE report were used to generate an approximation of the material that will be removed during the clearing process. The total volume of chip required to cover the forested areas of the ROW was also estimated. Approximately 25 percent, or approximately 200,915.0 cubic feet, of the cleared material containing approximately 1,050.9 metric tons of carbon will be used to cover the ROW. The remaining material, containing approximately 3,133.2 metric tons of carbon, will be burned to generate energy.

The carbon that is stored within the final products or that is spread across the ROW will be released slowly as the material decomposes. The decomposition process can take many years, releasing approximately 3 percent of the total stored carbon over a period of 30 years.⁸ The carbon contained within the material that will be burned will be released immediately. As a result, the tree-removal activities to be conducted during the construction of the project will result in the release of approximately 4,871.3 metric tons of GHG over the 3-year-long construction period. Over a 30-year period, the total release of carbon due to the removal of trees will be approximately 5,104.4 metric tons.

As shown in Table 4.3-8: Forested Habitat Summary, portions of the project that will be cleared during construction will be allowed to revegetate naturally. SPPCo will assist with the revegetation process by replanting trees within the existing 625 Line’s approximately 40-foot-wide easement and associated stringing sites as part of the restoration process. The COLE was used to estimate the amount of carbon that these reforested areas will sequester as they revegetate. After 30 years of regrowth,⁹ approximately 19,566.1 metric tons of carbon will be sequestered. This sequestration will offset the carbon release of approximately 5,104.4 metric tons from tree removal, resulting in a net increase of approximately 14,461.7 metric tons of carbon after a 30-year period. A detailed description of these calculations is provided in Attachment 4.3-A: Air Quality Calculations.

The initial release of carbon during construction—approximately 1,623.8 metric tons per year—will be well below the CARB’s annual threshold of 7,000 MTCO₂E from non-transportation-related sources. As a result, the GHG released from tree clearing and harvesting will be less than significant.

⁷ Source: Mader, 2007, p23

⁸ Source: Mader, 2007, p26

⁹ Areas where revegetation will be assisted by the replanting of trees were assumed to mature at a rate of 5 years faster than those areas allowed to revegetate naturally.

Operation and Maintenance – Less-than-Significant Impact

CAP Emissions

As described previously in the response to Question 4.3a, criteria air pollutants will not be emitted directly from the project's upgraded facilities. Because all of the transmission lines will be rebuilt within existing ROWs or relocated and future operation and maintenance activities will not differ significantly from the existing practices already conducted, there will not be a substantial increase in the emissions during operation and maintenance. As a result, impacts will be less than significant.

GHG Emissions

Similar to the construction phase of the project, GHG emissions during operation and maintenance will be the result of burning fuel during vehicle and equipment operation. In addition, fugitive emissions of SF₆—a potent GHG with a GWP of 23,900—will result from the operation of transmission-line equipment that will be installed at the substations. GHG emissions from the operation and maintenance of the project are presented in Table 4.3-10: GHG Emissions from Operation and Maintenance. A detailed description of this calculation methodology is presented in Attachment 4.3-A: Air Quality Calculations.

Table 4.3-10: GHG Emissions from Operation and Maintenance

The project's annual operational GHG emissions are anticipated to be approximately 91.4 MTCO₂E. To put the potential maximum GHG emissions and net increase from the project into context, GHG emissions within Nevada and Placer counties are estimated to be approximately 5.6 MMTCO₂E per year. This value was derived by proportioning the 2006 State of California GHG emission inventory—approximately 479.8 MMTCO₂E per year for a population of approximately 36.1 million—to the approximate population of these two counties—approximately 420,500. These emissions will also be below the CARB interim significance threshold of 7,000 MTCO₂E per year from non-transportation-related sources. As a result, the impact of GHG emissions due to operation and maintenance will be less than significant.

Question 4.3c – Criteria Pollutant Increases

Construction – Potentially Significant Impact

As shown Table 4.3-6: CAP Emissions from Construction, the construction of the project will lead to a temporary increase in criteria air pollutants localized to the project's construction activities. SPPCo will implement APM-AIR-01 through APM-AIR-15 provided in Section 4.3.4 Applicant-Proposed Measures, including minimizing vehicle idling time and controls for dust emissions, to reduce the impacts of construction. Despite the implementation of these measures, NO_x emissions during construction are expected to temporarily exceed the daily PCAPCD thresholds. As a result, impacts due to criteria pollutant increases will be potentially significant.

Operation and Maintenance – Less-than-Significant Impact

As described previously all of the transmission lines will be rebuilt within existing ROWs or relocated, and future operation and maintenance activities will not differ significantly from the existing practices already conducted. As a result, there will not be a substantial increase in the emissions during operation and maintenance and impacts will be less than significant.

Question 4.3d – Sensitive Receptor Exposure

Construction – Less-than-Significant Impact

A large portion of the project's ROW is remote, running through wooded, undeveloped land; however, the transmission line termini, substations, and switching stations are located in populated areas. As described previously, sensitive receptors, including residences and schools, were identified within 1 mile of all project components. The transmission lines come within approximately 25 feet of sensitive receptors, while the closest sensitive receptor to a substation is approximately 0.1 mile away.

Temporary emissions resulting from the construction of the project will increase the exposure of these receptors to pollutants; however, due to the nature of the project, impacts will be short-term. Construction activities at each pole will last a few days and work at the substations will take a few months to complete. These impacts will be reduced to the less-than-significant level with the implementation of the APM-AIR-01 through APM-AIR-15, including limiting vehicle idling time and controlling dust emissions from earth-disturbing activities.

Operation and Maintenance – Less-than-Significant Impact

As previously described, SPPCo currently operates and maintains electrical transmission facilities in the project area and the intensity and duration of these activities will not change significantly after construction has been completed. All of the transmission lines will be rebuilt within their existing ROWs except for the 625 Line. The existing and new 625 line alignments will share the same ROW in the communities of Kings Beach and Tahoe City. As a result, there are no new sensitive receptors that will be exposed to air emissions, as there are none located within 1 mile of the new ROW that SPPCo will acquire to build the new 625 Line. Therefore, no new sensitive receptors will be exposed to emissions due to the realignment of the 625 Line. As a result, impacts will be less than significant.

Question 4.3e – Odor

Construction – Less-than-Significant Impact

Due to the nature of the project, odor impacts are unlikely. Typical odor nuisances associated with construction activities include hydrogen sulfide, ammonia, chlorine, and other sulfide-related emissions. No significant sources of these pollutants will exist during construction. An additional potential source of project-related odor is diesel engine emissions. As described previously, multiple sensitive receptors are located in the vicinity of the existing transmission lines near the Town of Truckee, Kings Beach, and Tahoe City. Construction activities will be scheduled to last a total of approximately 15 months but will be conducted during the dry seasons over a three-year period. Construction activities along the transmission lines will be localized to each transmission pole and will be short-term (lasting only a few days at each pole) due to the linear nature of the project. There are no sensitive receptors within approximately 0.1 mile of the substations. Because there will be few sources of odor and construction will be short-term and localized to the transmission line routes, impacts due to odor will be less than significant.

Operation and Maintenance – No Impact

As described previously, the operation and maintenance activities will not change substantially after construction of the project and no new receptors will be affected. As a result, there will be no perceptible changes to odor emissions during operation and maintenance activities, and there will be no impact.

4.3.4 Applicant-Proposed Measures

As described previously, SPPCo will develop a Dust Control Plan for submittal to and approval by the NSAQMD. This plan will detail the required dust control measures and will require their implementation prior to and during construction activities. In addition to this plan, the APMs that follow will be implemented to reduce the potential impacts from CAPs and GHGs. As described previously, impacts from all emissions, except NO_x, will be less than significant with the implementation of these measures. The APMs have been developed by reviewing the applicable control measures included in the PCAPCD and NSAQMD guidelines, the CPUC’s Working Draft Proponent’s Environmental Assessment Checklist for Transmission Line and Substation Projects, and results from the URBEMIS model simulations. Several of these APMs are inherent to the construction equipment and include such things as operating vehicles that meet emission standards, using catalytic converters as appropriate, and using low-sulfur diesel fuel.

- APM-AIR-01: Unpaved areas subject to vehicle access will be stabilized using water at least two times daily, or as needed to control fugitive dust. A locally approved chemical dust palliative, applied according to the manufacturer’s recommendations, may be substituted for watering.
- APM-AIR-02: All inactive, disturbed portions of the project’s ROW will be covered, seeded, or watered, as needed to control fugitive dust, until suitable vegetative cover is established.

- APM-AIR-03: Prior to any ground disturbance, sufficient water will be applied to the area to be disturbed in order to control fugitive dust emissions.
- APM-AIR-04: If wind-driven fugitive dust cannot be stabilized using water or a chemical dust suppressant such that the resulting dust plume crosses the nearest property line, all grading and excavating activities must cease until dust can be effectively controlled.
- APM-AIR-05: Exposed stockpiles (e.g., dirt, sand, etc.) will be covered and/or stabilized with water or a locally approved chemical dust stabilizer as needed to control fugitive dust emissions.
- APM-AIR-06: Traffic speeds on unpaved roads and the ROW will be limited to 15 mph.
- APM-AIR-07: Construction vehicles and equipment will be cleaned to prevent dust, silt, mud and dirt from being tracked off-site prior to entering public roadways.
- APM-AIR-08: Any visible trackout deposited on paved, public roadways will be cleaned up at the conclusion of each workday or at 24-hour intervals for continuous operation. If trackout extends for a cumulative distance greater than 50 feet, it will be cleaned up within 1 hour. Trackout will be cleaned with a wet sweeper or vacuum device.
- APM-AIR-09: Trucks transporting bulk materials off-site will be maintained such that no spillage can occur from holes or other openings in the cargo compartments. Loads will be completely covered or the bulk material will be wetted and loaded to maintain 6 inches of freeboard from the top of the container.
- APM-AIR-10: SPPCo will limit actively graded areas to a cumulative total of 5 acres per day in order to control fugitive dust. The total area of disturbance can exceed this acreage so long as the actively graded portion is below this threshold.
- APM-AIR-11: Traffic will be controlled by flaggers or other methods, as necessary, to improve traffic flow along roadways in the project area.
- APM-AIR-12: Construction activities in more populated areas will be scheduled during off-peak hours, to the extent practical, to minimize impacts to traffic flow.
- APM-AIR-13: Vehicle idling time will be limited to a maximum of 5 minutes for vehicles and construction equipment, except where idling is required for the equipment to perform its task.
- APM-AIR-14: If suitable park-and-ride facilities are available in the project vicinity, construction workers will be encouraged to carpool to the job site to the extent feasible. The ability to develop an effective carpool program for the project would depend upon the proximity of carpool facilities to the job site, the geographical commute departure points of construction workers, and the extent to which carpooling would not adversely affect worker show-up time and the project's construction schedule.

- APM-AIR-15: All off-road diesel engines with a rated output of greater than 100 horsepower will, at a minimum, meet the Tier II California Emissions Standards for Off-Road Compression Ignition Engines. If reasonably available, Tier III engines will be employed.

4.3.5 References

- CARB. 2006. State of California and National Area Designation for Criteria Pollutants by Air Basin and Air District. Online. <http://www.arb.ca.gov/desig/adm/adm.htm#>. Site visited November 24, 2008.
- CARB. 2008. Ambient Air Quality Standards for Federal Regulations and State of California Regulations. November 11, 2008. Online. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. Site visited November 24, 2008.
- CARB. 2009. California Air Toxics Emission Factor Database. Online.
<http://www.arb.ca.gov/ei/catef/catef.htm>. Site visited January 26, 2009.
- CARB. 2010. California's Greenhouse Gas Emissions Inventory. Online.
<http://www.arb.ca.gov/cc/inventory/data/data.htm>. Site visited February 12, 2010.
- COLE. 2010. Welcome to COLE: Carbon On Line Estimator! Online.
<http://ncasi.uml.edu/COLE/>. Site visited January 20, 2010.
- CPUC. Memorandum. Applicants Filing Proponent's Environmental Assessment. November 24, 2008.
- California Resources Agency. 2009. Title 14 California Code of Regulations, Chapter 3 Guidelines for Implementation of the CEQA. CEQA Guidelines.
- Chang, Yu-Shuo. Placer County Air Pollution Control District (PCAPCD). Planning and Monitoring Section Supervisor. Personal communication with R. Curley, Insignia. March 6, 2009. YChang@placer.ca.gov.
- EPA. 2010. National Ambient Air Quality Standards (NAAQS) | Air and Radiation. Online.
<http://www.epa.gov/air/criteria.html>. Site visited January 20, 2010.
- EPA. 2009. 2009 U.S. Greenhouse Gas Inventory Report. Online.
<http://www.epa.gov/climatechange/emissions/usinventoryreport.html>. Site visited January 14, 2010.
- EPA. 2006. SF₆ Leak Rates from High Voltage Circuit Breakers – U.S. EPA Investigates Potential Greenhouse Gas Emissions Source. Online. http://www.epa.gov/electricpower-sf6/documents/leakrates_circuitbreakers.pdf. Site visited October 20, 2009.
- FAA. Emissions and Dispersion Modeling System Version 5.1.2. Software. Program used February 12, 2010.

Mader, Steve. "Climate Project: Carbon Sequestration and Storage by California Forests and Forest Products." 2007.

Mustatia, Rita. USFS. Resource Unit Leader. Personal communication with R. Curley, Insignia. February 11, 2010. (530) 543-2677.

National Council for Air and Stream Improvement, Inc. Carbon Online Estimator. Online. <http://ncasi.uml.edu/COLE/index.html>. Site visited October 2, 2009.

Nevada Division of Environmental Protection (NDEP). 2008. Online. <http://www.ndep.nv.gov/baqp/monitoring/aaqstd.html>. Site visited November 24, 2008.

NSAQMD. District Rules. Rule 202 - Visible Emissions, Rule 207 - Particulate matter, Rule 210 - Specific Contaminants, Rule 226 – Dust control, Rule 309 – Ditch, Road and Right of Way Maintenance. Online. <http://www.myairdistrict.com/index.php/rules>. Site visited November 24, 2008.

NSAQMD. 2007. "Draft Guidelines For Assessing and Mitigating Air Quality Impacts of Land Use Projects." September 10, 2007.

PCAPCD. District Rules. Rule 202 – Visible Emissions, Rule 207 – Particulate matter, Rule 210 – Specific Contaminants, Rule 226 - Sulfur Content of fuels- Lake Tahoe Air Basin, Rule 228 – Fugitive Dust - Lake Tahoe Air Basin. Online. <http://www.placer.ca.gov/Departments/Air/Rules.aspx>. Site visited November 24, 2008.

Rimpo and Associates, Inc. URBEMIS Version 9.2.4. Software. Program used February 12, 2010.

SCAQMD. 2009. CEQA Handbook of air quality emission factors. <http://www.aqmd.gov/ceqa/handbook/onroad/onroad.html>. Online. Site visited January 26, 2009.

SCAQMD. 2009. CEQA Handbook of air quality emission factors. Online. <http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html>. Site visited January 26, 2009.

TRPA. 2007. "2006 TRPA Threshold Evaluation Report - Chapter 2 - Air Quality." April 1, 2007. <http://tiims.org/getdoc/cdf4c175-6f63-4ec6-a87a-bf8871cb0521/2006-TRPA-Threshold-Evaluation-Report---Chapter-2-.aspx>. Site visited November 24, 2008.

U.S. Census Bureau. 2010. Population Estimates. Online. <http://www.census.gov/popest/counties/>. Site visited February 12, 2010.

U.S. Department of Agriculture. 2008. U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2005. Online. http://www.usda.gov/oce/global_change/AFGGInventory1990_2005.htm. Site visited October 2, 2009.

U.S. EPA. 2009. 2009 U.S. Greenhouse Gas Inventory Report. Online.

<http://www.epa.gov/climatechange/emissions/usinventoryreport.html>. Site visited October 2, 2009.

ATTACHMENT 4.3-A: AIR QUALITY CALCULATIONS

ATTACHMENT 4.3-A: AIR QUALITY CALCULATIONS

1.0 CRITERIA AIR POLLUTANTS

The computer model URBEMIS version 9.2.4 (URBEMIS) was used to simulate the potential emissions for various pollutants, including inhalable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), carbon monoxide (CO), volatile organic compounds (VOC), sulfur oxides (SO_x), oxides of nitrogen (NO_x), and carbon dioxide (CO₂) from the operation of off-road equipment during construction of the 625 and 650 Line Upgrade Project (project). URBEMIS—which stands for "Urban Emissions Model"—was originally developed by the California Air Resources Board as a tool to assist with estimating the potential air quality impacts from projects during the California Environmental Quality Act process. URBEMIS was also used to evaluate the effectiveness of applicant-proposed measures on emission rates.

In addition to the URBEMIS modeling results, emission factors obtained from the South Coast Air Quality Management District (SCAQMD) were used to evaluate the emissions due to the use of on-road construction vehicles. On-road emissions were estimated outside of URBEMIS to allow more control over the categorization of on-road equipment that will be used during construction. Operational emissions within the URBEMIS model are limited to on-road equipment. Because the operation and maintenance of the project will require the use of off-road construction equipment, these emissions were also calculated outside of the model. The SCAQMD emission factors were selected due to their availability and industry-wide acceptance. Lastly, emissions from helicopter use were calculated using the Federal Aviation Administration's (FAA) Emissions and Dispersion Modeling System (EDMS).

The results of these calculations are discussed further in the following sections.

1.0.0 URBEMIS Modeling

Modeling Input

Information related to the scope, physical size, and duration of each phase of the project was obtained from Sierra Pacific Power Company (SPPCo) and used to characterize the construction activities. Data was also provided for the type and quantity of off-road equipment expected to be used during construction. A list of this construction equipment has been included as Table 3-11: Typical Major Construction Equipment. Table 3-12: Proposed Construction Schedule contains the project schedule that was used for the URBEMIS simulations.

Modeling Output

Two separate modeling runs—one for the annual emissions and a second for the peak daily emissions—were created for the project's construction phase. The output files from all of the URBEMIS simulations have been included at the end of this document.

1.0.1 Supplemental Calculations

On-Road Construction Emissions

The anticipated on-road vehicle trips were calculated and divided into three groups—light duty, heavy duty, and heavy-heavy duty. Emission factors were then obtained from the SCAQMD in order to estimate the emissions from these vehicle trips. The SCAQMD emission factors have been generated by dividing the total daily district-wide emissions by the total daily vehicle miles traveled. The weighted average of vehicle types was then taken and the emission factors were adjusted to span the three vehicle type categories described previously. An average trip length of 30 miles was chosen. The resulting emissions from on-road vehicle travel are presented in Table 1: On-Road Construction Vehicle Emissions.

Helicopter Emissions

The FAA's EDMS was used to simulate the use of helicopters during construction. Helicopter use is estimated at 14 days—spread out across the 3-year construction schedule. These operating hours that are expected during construction of the project were assigned to one helicopter type—the Kaman SH-2 Seasprite. This aircraft was selected for use in the EDMS model because the K-35—or also known as the K-MAX is not available in the EDMS database. The SH-2 provides a more conservative estimate of the helicopter-related emissions as it is a heavier and less fuel efficient aircraft than the K-35. The following input parameters were used to characterize their use during construction:

- Taxi Out – approximately 19 minutes
- Takeoff – approximately 9 minutes
- Approach – approximately 9 minutes
- Landing – approximately 1 minute
- Taxi in – approximately 7 minutes
- Landings and Takeoffs – 120 total annually

The results of the EDMS simulation have been included at the end of this document.

1.1 GREENHOUSE GASSES

Greenhouse gas (GHG) emissions were calculated for the following sources:

- On-road and off-road vehicle and equipment used during construction, operation, and maintenance
- Sequestered GHGs released during deforestation
- Leaks from sulfur hexafluoride (SF_6)-containing equipment located at the substations

These GHG calculations are discussed further in the following sections.

1.1.0 Construction Vehicles

The resulting emissions from the URBEMIS and EDMS simulations, as well as the on-road emissions calculated using the SCAQMD emission factors, were used in conjunction with the methods from the California Climate Action Registry (CCAR) General Reporting Protocol

(GRP) version 3.1 and data from the California Statewide Greenhouse Gas Inventory to develop estimated methane (CH_4) and nitrous oxide emissions. These GHG calculations have been provided at the end of this attachment.

1.1.1 Sequestered GHGs Released During Deforestation

The construction of the new 625 Line will require the clearing of approximately 155.8 acres of forested habitat; as a result, the GHG emissions resulting from this deforestation were also calculated. Because carbon stocks vary greatly by geography and forest type, the Carbon Online Estimator was used to generate approximate carbon stock rates from the United States Forest Service Forest Inventory and Analysis Program. Carbon stock rates were provided for live tree, non-soil, and soil sources. It was assumed that the GHG contained within the live tree and non-soil biomass would be retained within the timber and other material until decay at an approved solid waste disposal site, a process that will take decades to occur. It was assumed that approximately 30 percent of the tree's mass would be lost as wood chips and sawdust during the conversion of this material to lumber. An additional 8 percent of the lumber's mass was assumed to be lost as sawdust during conversion to finished goods. The material lost during the conversion of live trees to finished products was assumed to be used for energy generation. The vegetation communities maps provided in Attachment 4.4-A: Biological Resources Technical Report were used to estimate the number of acres of each forest type that will be affected during the clearing process. Table 4.3-7: GHG Released from Timber Harvesting contains the data used to prepare these calculations.

1.1.2 Fugitive SF_6 Emissions

The operation of the substations throughout the transmissions system will result in the fugitive emissions of SF_6 . This emission is the result of leaks that develop at SF_6 -containing equipment, such as breakers, and SF_6 -handling and storage equipment, such as cylinders. The nameplate capacity of the breakers that will be installed as part of the project was estimated and the historical SF_6 leak rate was obtained from SPPCo. The nameplate capacity was scaled using this leak rate to estimate annual fugitive SF_6 emissions. A summary of these calculations is presented at the end of this document.

Table 1: On-Road Construction Vehicle Emissions

Vehicle Category	Emission Rate (pounds per mile)					
	ROG	CO	NO _x	SO _x	PM	CO ₂
Light Duty	0.0028	0.0202	0.0224	0.00003	0.0008	2.7233
Heavy Duty	0.0033	0.0128	0.0418	0.00004	0.0020	4.2108
Heavy-Heavy Duty	0.0033	0.0128	0.0418	0.00004	0.0020	4.2108

Vehicle Category	Vehicle Emissions (pounds per day)					
	ROG	CO	NO _x	SO _x	PM	CO ₂
Light Duty	2.09	15.12	16.77	0.02	0.60	2,042.48
Heavy Duty	1.15	4.48	14.61	0.01	0.70	1,470.15
Heavy-Heavy Duty	2.45	9.53	31.10	0.03	1.48	3,129.06
Total	5.69	29.13	62.48	0.06	2.78	6,641.69

Vehicle Category	Vehicle Emissions (pounds per project)					
	ROG	CO	NO _x	SO _x	PM	CO ₂
Light Duty	727.93	5,261.96	5,837.62	6.99	210.23	710,781.30
Heavy Duty	400.12	1,557.92	5,084.28	4.88	242.48	511,612.20
Heavy-Heavy Duty	851.62	3,315.86	10,821.35	10.38	516.09	1,088,912.88
Total	1,979.67	10,135.74	21,743.25	22.25	968.81	2,311,306.38

Note: 8,700, 4,050, and 8,620 vehicle trips were assumed for light duty, heavy duty, and heavy-heavy duty vehicles, respectively.

URBEMIS SIMULATION RESULTS

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\rcurley\Application Data\Urbemis\Version9a\Projects\625and650LineUpgradeProject.urb924

Project Name: 625 and 650 Line Upgrade Project

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2011 TOTALS (lbs/day unmitigated)	16.08	214.08	116.28	0.01	300.03	9.10	307.05	62.66	8.61	69.32	26,712.55
2011 TOTALS (lbs/day mitigated)	16.08	214.08	116.28	0.01	122.56	9.10	129.58	25.60	8.61	32.26	26,712.55
2012 TOTALS (lbs/day unmitigated)	13.14	164.89	84.93	0.00	200.02	7.01	206.42	41.78	6.65	47.86	20,386.20
2012 TOTALS (lbs/day mitigated)	13.14	164.89	84.93	0.00	81.71	7.01	88.11	17.07	6.65	23.15	20,386.20
2013 TOTALS (lbs/day unmitigated)	0.87	6.90	6.98	0.00	100.01	0.52	100.53	20.89	0.48	21.37	1,046.66
2013 TOTALS (lbs/day mitigated)	0.87	6.90	6.98	0.00	40.85	0.52	41.37	8.53	0.48	9.02	1,046.66

AREA SOURCE 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)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SUM 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)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Construction Unmitigated Detail Report:

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 5/2/2011-5/31/2011 Active Days: 22	5.41	63.09	49.47	0.01	200.03	3.32	203.34	41.78	3.14	44.92	8,077.40
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	200.03	3.32	203.34	41.78	3.14	44.92	8,077.40
Mass Grading Dust	0.00	0.00	0.00	0.00	200.00	0.00	200.00	41.77	0.00	41.77	0.00
Mass Grading Off Road Diesel	5.27	62.85	44.95	0.00	0.00	3.30	3.30	0.00	3.13	3.13	7,540.21
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.14	0.24	4.51	0.01	0.03	0.01	0.04	0.01	0.01	0.02	537.18
Time Slice 6/1/2011-6/3/2011 Active Days: 3	11.94	150.59	97.14	0.01	300.03	7.02	307.05	62.66	6.66	69.32	18,937.01

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Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89	1.49	22.37	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.32
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	200.03	3.32	203.34	41.78	3.14	44.92	8,077.40
Mass Grading Dust	0.00	0.00	0.00	0.00	200.00	0.00	200.00	41.77	0.00	41.77	0.00
Mass Grading Off Road Diesel	5.27	62.85	44.95	0.00	0.00	3.30	3.30	0.00	3.13	3.13	7,540.21
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.14	0.24	4.51	0.01	0.03	0.01	0.04	0.01	0.02	0.02	537.18
Time Slice 6/4/2011-6/4/2011 Active Days: 1											
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89	1.49	22.37	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.01	0.01	0.00	0.00	0.00	102.32
Time Slice 6/6/2011-6/10/2011 Active Days: 5											
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89	1.49	22.37	3,829.82
Fine Grading Dust	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.32
Fine Grading Off Road Diesel	5.41	63.09	49.47	0.01	200.03	3.32	203.34	41.78	3.14	44.92	8,077.40
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	200.00	0.00	200.00	41.77	0.00	41.77	0.00
Fine Grading Worker Trips	5.27	62.85	44.95	0.00	0.00	3.30	3.30	0.00	3.13	3.13	7,540.21
Mass Grading 05/01/2011-06/30/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Dust	0.14	0.24	4.51	0.01	0.03	0.01	0.04	0.01	0.02	0.02	537.18

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Time Slice 6/11/2011-6/11/2011 Active Days: 1	6.53	87.50	47.67	0.00	100.00	3.71	103.71	20.89	3.52	24.40	10,859.61
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89	1.49	22.37	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.01	0.01	0.00	0.00	0.00	102.32
Time Slice 6/13/2011-6/17/2011 Active Days: 5	11.94	150.59	97.14	0.01	<u>300.03</u>	7.02	<u>307.05</u>	<u>62.66</u>	6.66	<u>69.32</u>	18,937.01
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89	1.49	22.37	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.01	0.01	0.00	0.00	0.00	102.32
Time Slice 6/18/2011-6/24/2011 Active Days: 5	6.53	87.50	47.67	0.00	100.00	3.71	103.71	20.89	3.52	24.40	10,859.61
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89	1.49	22.37	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.01	0.01	0.00	0.01	0.01	537.18
Time Slice 6/20/2011-6/24/2011 Active Days: 5	11.94	150.59	97.14	0.01	<u>300.03</u>	7.02	<u>307.05</u>	<u>62.66</u>	6.66	<u>69.32</u>	18,937.01
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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

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Building Worker Trips		Building Off Road Diesel		Building On Road Diesel		Building Vendor Trips			
Fine Grading	06/01/2011-06/30/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Dust		2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89
Fine Grading Off Road Diesel		0.00	0.00	0.00	0.00	100.00	0.00	20.88	0.00
Fine Grading On Road Diesel		2.41	31.86	21.70	0.00	0.00	1.55	1.48	1.48
Fine Grading Worker Trips		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading	05/01/2011-06/30/2011	0.03	0.05	0.86	0.00	0.00	0.01	0.00	0.00
Mass Grading 05/01/2011-06/30/2011		5.41	63.09	49.47	0.01	200.03	3.32	203.34	41.78
Mass Grading Dust		0.00	0.00	0.00	0.00	200.00	0.00	41.77	0.00
Mass Grading Off Road Diesel		5.27	62.85	44.95	0.00	0.00	3.30	0.00	3.13
Mass Grading On Road Diesel		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips		0.14	0.24	4.51	0.01	0.03	0.04	0.01	0.02
Time Slice 6/25/2011-6/25/2011 Active Days: 1									
Building	06/01/2011-08/31/2011	6.53	87.50	47.67	0.00	100.00	3.71	103.71	20.89
Building Off Road Diesel		4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00
Building Vendor Trips		4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00
Building Worker Trips		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading	06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89
Fine Grading Dust		0.00	0.00	0.00	0.00	100.00	0.00	20.88	0.00
Fine Grading Off Road Diesel		2.41	31.86	21.70	0.00	0.00	1.55	1.55	1.48
Fine Grading On Road Diesel		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips		0.03	0.05	0.86	0.00	0.00	0.01	0.00	0.00
Time Slice 6/27/2011-6/30/2011 Active Days: 4									
Building	06/01/2011-08/31/2011	11.94	150.59	97.14	0.01	<u>300.03</u>	7.02	<u>307.05</u>	<u>6.66</u>
Building Off Road Diesel		4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00
Building Vendor Trips		4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00
Building Worker Trips		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading	06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	100.00	1.55	101.56	20.89
Fine Grading Dust		0.00	0.00	0.00	0.00	100.00	0.00	20.88	0.00
Fine Grading Off Road Diesel		2.41	31.86	21.70	0.00	0.00	1.55	1.55	1.48
Fine Grading On Road Diesel		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips		0.03	0.05	0.86	0.00	0.00	0.01	0.00	0.00
Mass Grading	05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	200.03	3.32	203.34	41.78
Mass Grading 05/01/2011-06/30/2011		0.00	0.00	0.00	0.00	200.00	0.00	41.77	0.00
Mass Grading Dust		5.27	62.85	44.95	0.00	0.00	3.30	0.00	3.13
Mass Grading Off Road Diesel		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading On Road Diesel		0.14	0.24	4.51	0.01	0.03	0.04	0.01	0.02
Time Slice 7/1/2011-7/2/2011 Active Days: 2									
Building	06/01/2011-08/31/2011	11.15	148.13	83.32	0.01	200.03	6.39	206.42	41.78
Building Off Road Diesel		4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00

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Time Slice 7/18/2011-7/20/2011 Active Days: 3									
Building 06/01/2011-08/31/2011	203.73	108.43	0.01	200.03	8.55	208.58	41.78	8.08	49.86
Building Off Road Diesel	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
Building Vendor Trips	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	0.00	0.00	0.00	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	0.00	0.00	0.00	7,029.80
Building Vendor Trips	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
Fine Grading 07/01/2011-07/31/2011	3.10	41.09	25.18	0.00	100.01	1.84	101.85	20.89	5,073.16
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84	1.84	0.00	4,842.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.00	230.22
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	332.54
Time Slice 7/21/2011-7/23/2011 Active Days: 3									
Building 06/01/2011-08/31/2011	11.15	148.13	83.32	0.01	200.03	6.39	206.42	41.78	6.05
Building Off Road Diesel	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
Building Vendor Trips	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 07/01/2011-07/31/2011	3.10	41.09	25.18	0.00	100.01	1.84	101.85	20.89	5,073.16
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84	1.84	0.00	4,842.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.00	230.22
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	332.54
Time Slice 7/25/2011-7/27/2011 Active Days: 3									
Building 06/01/2011-08/31/2011	15.24	203.73	108.43	0.01	200.03	8.55	208.58	41.78	8.08
Building Off Road Diesel	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
Building Vendor Trips	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	2.03

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Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03
Building Vendor Trips	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
Fine Grading 07/01/2011-07/31/2011	3.10	41.09	25.18	0.00	100.01	1.84	101.85	20.89	22.63
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	20.88
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84	1.84	0.00	1.74
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.00	0.01
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	23.16
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	20.88
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01
Time Slice 7/28/2011-7/30/2011 Active Days: 3									
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	200.03	6.39	206.42	41.78	6.05
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	2.15	2.15	0.00	2.03
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 07/01/2011-07/31/2011	3.10	41.09	25.18	0.00	100.01	1.84	101.85	20.89	22.63
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	20.88
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84	1.84	0.00	1.74
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.00	0.01
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	22.27
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	20.88
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01
Time Slice 8/1/2011-8/3/2011 Active Days: 3									
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	200.03	<u>9.10</u>	209.14	41.78	<u>8.61</u>
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	2.15	2.15	0.00	2.03
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03
Building Vendor Trips	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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	22.27
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	20.88
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01

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Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 8/4/2011-8/6/2011 Active Days: 3											
Building 06/01/2011-08/31/2011	11.99	158.49	91.16	<u>0.01</u>	200.03	6.95	206.98	41.78	6.58	48.36	19,682.75
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Vendor Trips	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 8/8/2011-8/10/2011 Active Days: 3											
Building 06/01/2011-08/31/2011	<u>16.08</u>	<u>214.08</u>	<u>116.28</u>	<u>0.01</u>	200.03	<u>9.10</u>	209.14	41.78	<u>8.61</u>	50.39	<u>26,712.55</u>
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Vendor Trips	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94

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Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011 Active Days: 3	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	20.88	20.88	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00	0.00	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	0.00	2.27	2.27	0.00	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	332.54
Time Slice 8/29/2011-8/31/2011 Active Days: 3	16.08	214.08	116.28	<u>0.01</u>	200.03	9.10	209.14	41.78	<u>8.61</u>	50.39	<u>26,712.55</u>		
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80		
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80		
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	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	0.00	0.00
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80		
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80		
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	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	0.00	0.00
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	20.88	20.88	6,326.48
Fine Grading Off Road Diesel	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00	0.00	0.00
Fine Grading On Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	0.00	2.27	2.27	0.00	0.00	5,993.94
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	332.54
Time Slice 9/1/2011-9/3/2011 Active Days: 3	7.90	102.89	66.05	<u>0.01</u>	200.03	4.80	204.83	41.78	4.55	46.33	12,652.96		
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	20.88	20.88	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00	0.00	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	0.00	2.27	2.27	0.00	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.02	0.01	0.01	0.00	0.00	332.54
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	332.54
Time Slice 9/5/2011-9/7/2011 Active Days: 3	11.99	158.49	91.16	<u>0.01</u>	200.03	6.95	206.98	41.78	6.58	48.36	19,682.75		
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80		
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80		

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Building Vendor Trips		Building Worker Trips		Fine Grading		Grading Off Road Diesel		Grading On Road Diesel		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	
Fine Grading 07/01/2011-10/15/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips	Fine Grading 08/01/2011-10/31/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3.86	51.30	30.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3.86	51.30	30.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	
Time Slice 9/8/2011-9/14/2011 Active Days: 3	Fine Grading 07/01/2011-10/15/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips	Fine Grading 08/01/2011-10/31/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips
7.90	102.89	66.05	<u>0.01</u>	200.03	4.80	204.83	41.78	4.55	46.33	
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	
3.95	51.45	33.02	0.00	100.00	0.00	100.00	20.88	0.00	20.88	
0.00	0.00	0.00	0.00	0.00	2.39	2.39	0.00	2.27	2.27	
3.86	51.30	30.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	
Time Slice 9/12/2011-9/14/2011 Active Days: 3	Fine Grading 07/01/2011-10/31/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips	Fine Grading 07/01/2011-10/15/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips
11.99	158.49	91.16	<u>0.01</u>	200.03	6.95	206.98	41.78	6.58	48.36	
4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	
4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	
Time Slice 9/15/2011-9/17/2011 Active Days: 3	Fine Grading 07/01/2011-10/31/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips	Fine Grading 08/01/2011-10/31/2011	Fine Grading Dust	Fine Grading Off Road Diesel	Fine Grading On Road Diesel	Fine Grading Worker Trips
7.90	102.89	66.05	<u>0.01</u>	200.03	4.80	204.83	41.78	4.55	46.33	

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Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 9/19/2011-9/21/2011 Active Days: 3											
Building 07/01/2011-10/31/2011	11.99	158.49	91.16	<u>0.01</u>	200.03	6.95	206.98	41.78	6.58	48.36	19,682.75
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Vendor Trips	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 9/22/2011-9/24/2011 Active Days: 3											
Building 07/01/2011-10/15/2011	7.90	102.89	66.05	<u>0.01</u>	200.03	4.80	204.83	41.78	4.55	46.33	12,652.96
Fine Grading Dust	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 9/26/2011-9/28/2011 Active Days: 3											
Building 07/01/2011-10/31/2011	11.99	158.49	91.16	<u>0.01</u>	200.03	6.95	206.98	41.78	6.58	48.36	19,682.75
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80

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Time Slice 10/6/2011-10/8/2011 Active Days: 3

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Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	2.27	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	2.27	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/10/2011-10/12/2011 Active Days: 3	11.99	158.49	91.16	<u>0.01</u>	200.03	6.95	206.98	41.78	6.58	48.36	19,682.75
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	2.27	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/13/2011-10/15/2011 Active Days: 3	7.90	102.89	66.05	<u>0.01</u>	200.03	4.80	204.83	41.78	4.55	46.33	12,652.96
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	2.27	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	0.00	2.27	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/17/2011-10/19/2011 Active Days: 3	8.04	107.04	58.14	0.00	100.02	4.55	104.57	20.89	4.31	25.20	13,356.27
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80

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Building Vendor Trips		Building Worker Trips		Fine Grading 08/01/2011-10/31/2011		Fine Grading Dust		Fine Grading 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	0.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	332.54
Time Slice 10/20/2011-10/22/2011 Active Days: 3									
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	332.54
Time Slice 10/24/2011-10/26/2011 Active Days: 3									
8.04	107.04	58.14	0.00	100.02	4.55	104.57	20.89	4.31	25.20
4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	332.54
Time Slice 10/27/2011-10/29/2011 Active Days: 3									
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	332.54
Time Slice 10/31/2011-10/31/2011 Active Days: 1									
8.04	107.04	58.14	0.00	100.02	4.55	104.57	20.89	4.31	25.20
4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	332.54
Time Slice 10/27/2011-10/29/2011 Active Days: 3									
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	332.54
Time Slice 10/27/2011-10/29/2011 Active Days: 3									
3.95	51.45	33.02	0.00	100.02	2.40	102.41	20.89	2.27	23.16
0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	332.54

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Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	332.54
Time Slice 5/1/2012-5/14/2012 Active Days: 12	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86		
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86		
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00		0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	1.64	0.00	1.57	1.57	3,727.50		
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		102.36
Time Slice 5/15/2012-5/16/2012 Active Days: 2	11.31	140.89	82.23	<u>0.00</u>	<u>200.02</u>	6.40	<u>206.42</u>	<u>41.78</u>	6.09	<u>47.86</u>	17,186.26		
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80		
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80		
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		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		0.00
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86		
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00		0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	1.64	0.00	1.57	1.57	3,727.50		
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61		
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00		0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94		
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.01		332.67
Time Slice 5/17/2012-5/19/2012 Active Days: 3	6.85	84.50	56.51	<u>0.00</u>	<u>200.02</u>	4.15	204.17	<u>41.78</u>	3.95	45.73	10,156.46		
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86		
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00		0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	1.64	0.00	1.57	1.57	3,727.50		
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61		
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00		0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94		
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.01		332.67
Time Slice 5/21/2012-5/23/2012 Active Days: 3	11.31	140.89	82.23	<u>0.00</u>	<u>200.02</u>	6.40	<u>206.42</u>	<u>41.78</u>	6.09	<u>47.86</u>	17,186.26		
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80		
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80		
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		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		0.00

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Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	1.64	0.00	1.57	1.57	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 5/24/2012-5/26/2012 Active Days: 3											
Fine Grading 05/01/2012-05/30/2012	6.85	84.50	56.51	0.00	200.02	4.15	204.17	41.73	3.95	45.73	10,156.46
Fine Grading Dust	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86
Fine Grading Off Road Diesel	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading On Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	1.64	0.00	1.57	1.57	3,727.50
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	0.02	0.04	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.36
Fine Grading Dust	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 5/28/2012-5/30/2012 Active Days: 3											
Building 05/15/2012-10/15/2012	11.31	140.89	82.23	0.00	200.02	6.40	206.42	41.73	6.09	47.86	17,186.26
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	100.00	1.64	101.64	20.89	1.57	22.46	3,829.86
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	1.64	0.00	1.57	1.57	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 5/31/2012-5/31/2012 Active Days: 1											
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	4.23	52.12	33.49	0.00	100.00	2.51	102.52	20.88	2.38	23.27	6,326.61

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Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 6/1/2012-6/2/2012 Active Days: 2									
Building 06/01/2012-06/21/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 6/4/2012-6/6/2012 Active Days: 3									
Building 05/15/2012-10/15/2012	13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.65
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Building 06/01/2012-06/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 6/7/2012-6/9/2012 Active Days: 3									
Building 06/01/2012-06/21/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 6/11/2012-6/13/2012 Active Days: 3									
13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.65	27.54
20	20.386.20	20.386.20							

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Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/14/2012-6/16/2012 Active Days: 3											
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/18/2012-6/20/2012 Active Days: 3											
Building 05/15/2012-10/15/2012	4.46	164.89	84.93	0.00	100.02	<u>7.01</u>	107.03	20.89	<u>6.65</u>	27.54	20,386.20
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/21/2012-6/23/2012 Active Days: 3											
Building 06/01/2012-08/21/2012	4.46	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52	25.41	13,356.40
										2.13	7,029.80

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Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67

Time Slice 6/25/2012-6/27/2012 Active Days: 3

Building 05/13/2012-10/15/2012	13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.65	27.54
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67
Time Slice 6/28/2012-6/30/2012 Active Days: 3	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52	25.41
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67
Time Slice 7/2/2012-7/4/2012 Active Days: 3	13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.65	27.54
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Fine Grading Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67

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Building Vendor Trips		Building Worker Trips		Building Off Road Diesel		Building Vendor Trips		Building Worker Trips	
Fine Grading 05/15/2012-10/15/2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 7/5/2012-7/7/2012 Active Days: 3									
Building 06/01/2012-06/21/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 7/9/2012-7/11/2012 Active Days: 3									
Building 05/15/2012-10/15/2012	13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.66
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 7/12/2012-7/14/2012 Active Days: 3									
Building 06/01/2012-06/21/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 7/12/2012-7/14/2012 Active Days: 3									
Building 06/01/2012-06/21/2012	4.46	51.99	30.94	0.00	100.00	0.00	100.00	20.88	2.38

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Time Slice 7/16/2012-7/18/2012 Active Days: 3	
Building 05/15/2012-10/15/2012	4.46
Building Off Road Diesel	56.38
Building Vendor Trips	56.38
Building Worker Trips	0.00
Building 06/01/2012-08/21/2012	4.46
Building Off Road Diesel	56.38
Building Vendor Trips	56.38
Building Worker Trips	0.00
Building 05/15/2012-10/15/2012	4.46
Fine Grading Dust	164.89
Fine Grading Off Road Diesel	0.00
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	2.56
Time Slice 7/19/2012-7/21/2012 Active Days: 3	
Building 05/15/2012-08/21/2012	4.46
Building Off Road Diesel	56.38
Building Vendor Trips	56.38
Building Worker Trips	0.00
Building 06/01/2012-08/21/2012	4.46
Fine Grading Dust	164.89
Fine Grading Off Road Diesel	0.00
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	0.13
Time Slice 7/23/2012-7/25/2012 Active Days: 3	
Building 05/15/2012-10/15/2012	4.46
Building Off Road Diesel	56.38
Building Vendor Trips	56.38
Building Worker Trips	0.00
Building 06/01/2012-08/21/2012	4.46
Fine Grading Dust	164.89
Fine Grading Off Road Diesel	0.00
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	0.00

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Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 7/26/2012-7/28/2012 Active Days: 3											
Building 06/01/2012-08/21/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52	25.41	13,356.40
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 7/30/2012-8/1/2012 Active Days: 3											
Building 05/15/2012-10/15/2012	13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.65	27.54	20,386.20
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 8/2/2012-8/4/2012 Active Days: 3											
Building 06/01/2012-08/21/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52	25.41	13,356.40
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 8/6/2012-8/8/2012 Active Days: 3											
Building 05/15/2012-10/15/2012	13.14	164.89	84.93	0.00	100.02	7.01	107.03	20.89	6.65	27.54	20,386.20
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80

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Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67
Time Slice 8/30/2012-9/1/2012 Active Days: 3	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67
Time Slice 9/3/2012-9/5/2012 Active Days: 3	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52	25.41
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67
Time Slice 9/6/2012-9/8/2012 Active Days: 3	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67
Time Slice 9/10/2012-9/12/2012 Active Days: 3	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52	25.41
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	332.67

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Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 10/1/2012-10/3/2012 Active Days: 3									
Building 05/15/2012-10/5/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 10/4/2012-10/6/2012 Active Days: 3									
Building 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Building Off Road Diesel	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Building Vendor Trips	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 10/8/2012-10/10/2012 Active Days: 3									
Building 05/15/2012-10/15/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 10/11/2012-10/13/2012 Active Days: 3									
Building 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Building Off Road Diesel	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38
Building Vendor Trips	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Building Worker Trips	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00
Fine Grading Off Road Diesel	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 10/15/2012-10/15/2012 Active Days: 1									
Building 05/15/2012-10/15/2012	8.68	108.51	59.21	0.00	100.02	4.76	104.78	20.89	4.52

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Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	100.02	2.51	102.52	20.89	2.38	23.27	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/1/2013-8/21/2013 Active Days: 70	<u>0.87</u>	<u>6.90</u>	<u>6.98</u>	<u>0.00</u>	<u>100.01</u>	<u>0.52</u>	<u>100.53</u>	<u>20.89</u>	<u>0.48</u>	<u>21.37</u>	<u>1,046.66</u>
Fine Grading 06/01/2013-08/21/2013	0.87	6.90	6.98	0.00	100.01	0.52	100.53	20.89	0.48	21.37	1,046.66
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	0.84	6.84	5.72	0.00	0.00	0.52	0.52	0.00	0.48	0.48	867.47
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.04	0.06	1.26	0.00	0.01	0.00	0.01	0.00	0.01	0.01	179.19

Phase Assumptions

Phase: Fine Grading 6/1/2011 - 6/30/2011 - 650 Line ROW Prep

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlerly\Application Data\Urbermis\Version9a\Data\625 and 650

Off-Road Equipment:

2 Graders (174 hp) operating at a 0.61 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year

2 Excavators (75 hp) operating at a 0.57 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year

Phase: Fine Grading 7/1/2011 - 10/15/2011 - 650 Line Construction

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlerly\Application Data\Urbermis\Version9a\Data\625 and 650

Off-Road Equipment:

4 Aerial Lifts (60 hp) operating at a 0.46 load factor for 5 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

1 Air Compressors (50 hp) operating at a 0.48 load factor for 2 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

1 Graders (174 hp) operating at a 0.61 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year

1 Other General Industrial Equipment (50 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

1 Cranes (250 hp) operating at a 0.43 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year

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- 1 Other General Industrial Equipment (100 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 2 Cranes (150 hp) operating at a 0.43 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
- 2 Excavators (75 hp) operating at a 0.57 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1336 hrs/year

Phase: Fine Grading 7/1/2011 - 7/31/2011 - NSF Construction

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlrey\Application Data\Urbemis\Version9a\Data\625 and 630

Off-Road Equipment:

- 2 Aerial Lifts (60 hp) operating at a 0.46 load factor for 5 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Air Compressors (50 hp) operating at a 0.48 load factor for 2 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Graders (174 hp) operating at a 0.61 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year
- 1 Other General Industrial Equipment (50 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Cranes (250 hp) operating at a 0.43 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
- 1 Other General Industrial Equipment (100 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Cranes (150 hp) operating at a 0.43 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
- 1 Excavators (75 hp) operating at a 0.57 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1336 hrs/year

Phase: Fine Grading 8/1/2011 - 10/31/2011 - 132/650 Line Construction

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlrey\Application Data\Urbemis\Version9a\Data\625 and 630

Off-Road Equipment:

- 4 Aerial Lifts (60 hp) operating at a 0.46 load factor for 5 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Air Compressors (50 hp) operating at a 0.48 load factor for 2 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Graders (174 hp) operating at a 0.61 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year
- 1 Other General Industrial Equipment (50 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 1 Cranes (250 hp) operating at a 0.43 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
- 1 Other General Industrial Equipment (100 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
- 2 Cranes (150 hp) operating at a 0.43 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
- 2 Excavators (75 hp) operating at a 0.57 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1336 hrs/year

Phase: Fine Grading 5/1/2012 - 5/30/2012 - New 625 Line ROW Prep

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

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20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlery\Application Data\Urbemis\Version9a\Data\625 and 650

Off-Road Equipment:

2 Graders (174 hp) operating at a 0.61 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year

2 Excavators (75 hp) operating at a 0.57 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year

Phase: Fine Grading 5/15/2012 - 10/15/2012 - New 625 Line Construction

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlery\Application Data\Urbemis\Version9a\Data\625 and 650

Off-Road Equipment:

4 Aerial Lifts (60 hp) operating at a 0.46 load factor for 5 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

1 Air Compressors (50 hp) operating at a 0.48 load factor for 2 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

1 Graders (174 hp) operating at a 0.61 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year

1 Other General Industrial Equipment (50 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

1 Cranes (250 hp) operating at a 0.43 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year

1 Other General Industrial Equipment (100 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

2 Cranes (150 hp) operating at a 0.43 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year

2 Excavators (75 hp) operating at a 0.57 load factor for 6 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year

Phase: Fine Grading 6/1/2013 - 8/21/2013 - Remove Existing 625 Line

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\curlery\Application Data\Urbemis\Version9a\Data\625 and 650

Off-Road Equipment:

6 Concrete/Industrial Saw/s (10 hp) operating at a 0.73 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 580 hrs/year

1 Other General Industrial Equipment (50 hp) operating at a 0.51 load factor for 10 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

Phase: Mass Grading 5/1/2011 - 6/30/2011 - Tree Removal

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 10

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

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Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\rcurley\Application Data\Urbemis\Version9a\Data\625 and 630

Off-Road Equipment:

1 Skid Steer Loaders (160 hp) operating at a 0.55 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 834 hrs/year

1 Rough Terrain Forklifts (93 hp) operating at a 0.6 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1123 hrs/year

3 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 834 hrs/year

12 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 580 hrs/year

1 Crawler Tractors (175 hp) operating at a 0.64 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1013 hrs/year

1 Crushing/Processing Equip (175 hp) operating at a 0.78 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 955 hrs/year

1 Crushing/Processing Equip (142 hp) operating at a 0.78 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 955 hrs/year

1 Crushing/Processing Equip (115 hp) operating at a 0.78 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 955 hrs/year

Phase: Building Construction 6/1/2011 - 8/31/2011 - Phase 1 Substation

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\rcurley\Application Data\Urbemis\Version9a\Data\625 and 630

Off-Road Equipment:

1 Generator Sets (15 hp) operating at a 0.74 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

2 Aerial Lifts (60 hp) operating at a 0.46 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

2 Cranes (200 hp) operating at a 0.43 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 695 hrs/year

1 Cranes (500 hp) operating at a 0.43 load factor for 12 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year

1 Excavators (125 hp) operating at a 0.57 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year

1 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 834 hrs/year

Phase: Building Construction 7/1/2011 - 10/31/2011 - Phase 1 Foundations

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\rcurley\Application Data\Urbemis\Version9a\Data\625 and 630

Off-Road Equipment:

1 Generator Sets (15 hp) operating at a 0.74 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

2 Aerial Lifts (60 hp) operating at a 0.46 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

2 Cranes (200 hp) operating at a 0.43 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 695 hrs/year

1 Cranes (500 hp) operating at a 0.43 load factor for 12 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1255 hrs/year

1 Excavators (125 hp) operating at a 0.57 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year

1 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 834 hrs/year

Phase: Building Construction 5/5/2012 - 10/15/2012 - Phase 2 Foundations

Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\rcurley\Application Data\Urbemis\Version9a\Data\625 and 630

Off-Road Equipment:

1 Generator Sets (15 hp) operating at a 0.74 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

2 Aerial Lifts (60 hp) operating at a 0.46 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year

- 2 Cranes (200 hp) operating at a 0.43 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
 1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 695 hrs/year
 1 Cranes (500 hp) operating at a 0.43 load factor for 12 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
 1 Excavators (125 hp) operating at a 0.57 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year
 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year
 1 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 834 hrs/year

Phase: Building Construction 6/1/2012 - 8/21/2012 - Phase 2 Substation
 Off Road Diesel calculated using the Named Equipment EMS functions.

The Off Road Equipment was based on the Named Equipment List: C:\Documents and Settings\rcurley\Application Data\Urbemis\Version9\Data\625 and 650

Off-Road Equipment:

- 1 Generator Sets (15 hp) operating at a 0.74 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
 2 Aerial Lifts (60 hp) operating at a 0.46 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 500 hrs/year
 2 Cranes (200 hp) operating at a 0.43 load factor for 4 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
 1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 695 hrs/year
 1 Cranes (500 hp) operating at a 0.43 load factor for 12 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1252 hrs/year
 1 Excavators (125 hp) operating at a 0.57 load factor for 12 hours per day; Engine Built/Rebuilt in 2005 with average usage of 1396 hrs/year
 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 929 hrs/year
 1 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day; Engine Built/Rebuilt in 2005 with average usage of 834 hrs/year

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NO_x</u>	<u>CO</u>	<u>SO₂</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO₂</u>
Time Slice 5/2/2011-5/31/2011 Active Days: 22	5.41	63.09	49.47	0.01	81.71	3.32	85.03	17.07	3.14	20.21	8,077.40
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	81.71	3.32	85.03	17.07	3.14	20.21	8,077.40
Mass Grading Dust	0.00	0.00	0.00	0.00	81.68	0.00	81.68	17.06	0.00	17.06	0.00
Fine Grading Off Road Diesel	5.27	62.85	44.95	0.00	0.00	3.30	3.30	0.00	3.13	3.13	7,540.21
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.14	0.24	4.51	0.01	0.03	0.01	0.04	0.01	0.01	0.02	537.18
Time Slice 6/1/2011-6/30/2011 Active Days: 3	11.94	150.59	97.14	0.01	122.56	7.02	129.58	25.60	6.66	32.26	18,937.01
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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	2.44	31.91	22.56	0.00	40.85	1.55	42.40	8.53	1.49	10.02	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.32
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	81.71	3.32	85.03	17.07	3.14	20.21	8,077.40
Mass Grading Dust	0.00	0.00	0.00	0.00	81.68	0.00	81.68	17.06	0.00	17.06	0.00
Mass Grading Off Road Diesel	5.27	62.85	44.95	0.00	0.00	3.30	3.30	0.00	3.13	3.13	7,540.21

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Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.01	0.00	0.00
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	81.71	3.32	85.03	102.32
Mass Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Off Road Diesel	5.27	62.85	44.95	0.00	81.68	0.00	81.68	8,077.40
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	3.30	3.30	20.21
Mass Grading Worker Trips	0.14	0.24	4.51	0.01	0.03	0.01	0.04	537.18
Time Slice 6/18/2011-6/18/2011 Active Days: 1	6.53	87.50	47.67	0.00	40.85	3.71	44.55	10,859.61
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Vendor Trips	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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	40.85	1.55	42.40	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	40.84	0.00	40.84	3,829.82
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00
Time Slice 6/20/2011-6/24/2011 Active Days: 5	11.94	150.59	97.14	0.01	<u>122.56</u>	7.02	<u>129.58</u>	18,937.01
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Vendor Trips	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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	40.85	1.55	42.40	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	40.84	0.00	40.84	3,829.82
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	81.71	3.32	85.03	8,077.40
Mass Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Off Road Diesel	5.27	62.85	44.95	0.00	81.68	0.00	81.68	17,06
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	3.30	3.30	0.00
Mass Grading Worker Trips	0.14	0.24	4.51	0.01	0.03	0.01	0.04	537.18
Time Slice 6/25/2011-6/25/2011 Active Days: 1	6.53	87.50	47.67	0.00	40.85	3.71	44.55	10,859.61
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Vendor Trips	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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	40.85	1.55	42.40	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	40.84	0.00	40.84	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00
Time Slice 6/27/2011-6/30/2011 Active Days: 4	11.94	150.59	97.14	0.01	<u>122.56</u>	7.02	<u>129.58</u>	18,937.01

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Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Fine Grading 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
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Fine Grading 06/01/2011-06/30/2011	2.44	31.91	22.56	0.00	40.85	1.55	42.40	8.53	1.49	10.02	3,829.82
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.41	31.86	21.70	0.00	0.00	1.55	1.55	0.00	1.48	1.48	3,727.50
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.86	0.00	0.00	0.01	0.01	0.00	0.00	0.00	102.32
Mass Grading 05/01/2011-06/30/2011	5.41	63.09	49.47	0.01	81.71	3.32	85.03	17.07	3.14	20.21	8,077.40
Mass Grading Dust	0.00	0.00	0.00	0.00	81.68	0.00	81.68	17.06	0.00	17.06	0.00
Mass Grading Off Road Diesel	5.27	62.85	44.95	0.00	0.00	3.30	3.30	0.00	3.13	3.13	7,540.21
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.14	0.24	4.51	0.01	0.03	0.01	0.04	0.01	0.01	0.02	537.18
Time Slice 7/1/2011-7/2/2011 Active Days: 2	11.15	148.13	83.32	0.01	81.71	6.39	88.11	17.07	6.05	23.12	18,429.44
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Fine Grading 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
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	3.10	41.09	25.18	0.00	40.85	1.84	42.70	8.53	1.74	10.28	5,073.16
Fine Grading 07/01/2011-07/31/2011	3.95	51.45	33.02	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	1.84	1.84	0.00	1.74	1.74	4,842.94
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.00	0.01	0.01	230.22
Time Slice 7/4/2011-7/6/2011 Active Days: 3	15.24	203.73	108.43	0.01	81.71	8.55	90.26	17.07	8.08	25.15	25,459.23
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Fine Grading 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
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 7/4/2011-7/6/2011 Active Days: 3	15.24	203.73	108.43	0.01	81.71	8.55	90.26	17.07	8.08	25.15	25,459.23
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Fine Grading 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
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Fine Grading 07/01/2011-10/31/2011	3.10	41.09	25.18	0.00	40.85	1.84	42.70	8.53	1.74	10.28	5,073.16
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84	1.84	0.00	1.74	1.74	4,842.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.01	0.01	0.01	230.22
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48

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Fine Grading Dust	0.00	0.00	40.84	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	2.39	2.27
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	5,993.94
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.00
Time Slice 7/7/2011-7/9/2011 Active Days: 3	11.15	148.13	83.32	0.01	81.71	6.39
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15
Fine Grading Dust	4.09	55.59	25.12	0.00	0.00	2.15
Building Off Road Diesel	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
Building Worker Trips	3.10	41.09	25.18	0.00	40.85	1.84
Fine Grading 07/01/2011-07/31/2011					42.70	8.53
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	1.84
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.02
Time Slice 7/11/2011-7/13/2011 Active Days: 3	15.24	203.73	108.43	0.01	81.71	8.55
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15
Fine Grading Dust	4.09	55.59	25.12	0.00	0.00	2.15
Building Off Road Diesel	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
Building Worker Trips	3.10	41.09	25.18	0.00	40.85	1.84
Fine Grading 07/01/2011-07/31/2011					42.70	8.53
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	1.84
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.02
Time Slice 7/14/2011-7/16/2011 Active Days: 3	11.15	148.13	83.32	0.01	81.71	6.39
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15
Fine Grading Dust	4.09	55.59	25.12	0.00	0.00	2.15
Building Off Road Diesel	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
Building Worker Trips	3.10	41.09	25.18	0.00	40.85	1.84
Fine Grading 07/01/2011-07/31/2011					42.70	8.53
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	1.84
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.02
Time Slice 7/14/2011-7/16/2011 Active Days: 3	11.15	148.13	83.32	0.01	81.71	6.39
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15
Fine Grading Dust	4.09	55.59	25.12	0.00	0.00	2.15
Building Off Road Diesel	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
Building Worker Trips	3.10	41.09	25.18	0.00	40.85	1.84
Fine Grading 07/01/2011-07/31/2011					42.70	8.53

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Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	8.53	0.00	4,842.94
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	1.84	1.74	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.02	0.00	230.22
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	6,326.48
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	2.39	2.27	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.01	332.54
Time Slice 7/18/2011-7/20/2011 Active Days: 3	15.24	203.73	108.43	0.01	81.71	8.55	90.26	25.459.23
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Vendor Trips	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
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Vendor Trips	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
Time Slice 7/18/2011-7/23/2011 Active Days: 3	11.15	148.13	83.32	0.01	81.71	6.39	88.11	17.07
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01
Time Slice 7/21/2011-7/23/2011 Active Days: 3	15.24	203.73	108.43	0.01	81.71	6.39	88.11	17.07
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	2.03
Building Vendor Trips	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
Time Slice 7/21/2011-07/31/2011 Active Days: 1	3.10	41.09	25.18	0.00	40.85	1.84	42.70	8.53
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	0.00
Fine Grading Off Road Diesel	3.04	40.99	23.25	0.00	0.00	1.84	0.00	1.74
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.10	1.93	0.00	0.01	0.01	0.02	0.01
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	6,326.48
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	2.39	2.27	0.00	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01
Time Slice 7/25/2011-7/27/2011 Active Days: 3	15.24	203.73	108.43	0.01	81.71	8.55	90.26	17.07

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Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.01	332.54
Time Slice 8/4/2011-8/6/2011 Active Days: 3	11.99	158.49	91.16	<u>0.01</u>	81.72	6.95	88.67	23.65
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Vendor Trips	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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	332.54
Time Slice 8/8/2011-8/10/2011 Active Days: 3	<u>16.08</u>	<u>214.08</u>	<u>116.28</u>	<u>0.01</u>	81.72	<u>9.10</u>	90.82	17.07
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Vendor Trips	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
Fine Grading 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Fine Grading Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80
Building Vendor Trips	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
Fine Grading 08/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	332.54
Time Slice 8/11/2011-8/13/2011 Active Days: 3	11.99	158.49	91.16	<u>0.01</u>	81.72	6.95	88.67	17.07
Building 06/01/2011-08/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	7,029.80

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Time Slice 9/22/2011-9/24/2011 Active Days: 3

Fine Grading 07/01/2011-10/15/2011	7.90	102.89	66.05	<u>0.01</u>	81.72	4.80	86.51	17.07	4.55	21.62	12,652.96
Fine Grading Dust	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Off Road Diesel	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading On Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 9/26/2011-9/28/2011 Active Days: 3	11.99	158.49	91.16	<u>0.01</u>	81.72	6.95	88.67	17.07	6.58	23.65	19,682.75
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 9/29/2011-10/1/2011 Active Days: 3	7.90	102.89	66.05	<u>0.01</u>	81.72	4.80	86.51	17.07	4.55	21.62	12,652.96
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/3/2011-10/5/2011 Active Days: 3	11.99	158.49	91.16	<u>0.01</u>	81.72	6.95	88.67	17.07	6.58	23.65	19,682.75
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 07/01/2011-10/15/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00

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Time Slice 10/17/2011-10/19/2011 Active Days: 3	8.04	107.04	58.14	0.00	40.86	4.55	45.41	8.54	4.31	12.84	13,356.27
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/20/2011-10/22/2011 Active Days: 3	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/24/2011-10/26/2011 Active Days: 3	8.04	107.04	58.14	0.00	40.86	4.55	45.41	8.54	4.31	12.84	13,356.27
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/27/2011-10/29/2011 Active Days: 3	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 10/31/2011-10/31/2011 Active Days: 1	8.04	107.04	58.14	0.00	40.86	4.55	45.41	8.54	4.31	12.84	13,356.27
Building 07/01/2011-10/31/2011	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
Building Off Road Diesel	4.09	55.59	25.12	0.00	0.00	2.15	2.15	0.00	2.03	2.03	7,029.80
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
Fine Grading 08/01/2011-10/31/2011	3.95	51.45	33.02	0.00	40.86	2.40	43.26	8.54	2.27	10.81	6,326.48
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	3.86	51.30	30.23	0.00	0.00	2.39	2.39	0.00	2.27	2.27	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.09	0.15	2.79	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.54
Time Slice 5/1/2012-5/14/2012 Active Days: 12	2.62	32.38	23.01	0.00	40.85	1.64	42.49	8.53	1.57	10.10	3,829.86

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Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	40.85	1.64	42.49	8.53	1.57	10.10	3,829.86
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	0.00	1.57	1.57	3,727.50	
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.01	0.00	0.00	0.00	0.00	102.36
Time Slice 5/15/2012-5/16/2012 Active Days: 2	11.31	140.89	82.23	<u>0.00</u>	<u>81.71</u>	6.40	<u>88.11</u>	<u>17.07</u>	6.09	<u>23.15</u>	17,186.26
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	40.85	1.64	42.49	8.53	1.57	10.10	3,829.86
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	0.00	1.57	1.57	3,727.50	
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.01	0.00	0.00	0.00	0.00	102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 5/17/2012-5/19/2012 Active Days: 3	6.85	84.50	56.51	<u>0.00</u>	<u>81.71</u>	4.15	<u>85.85</u>	<u>17.07</u>	3.95	<u>21.02</u>	10,156.46
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	40.85	1.64	42.49	8.53	1.57	10.10	3,829.86
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	0.00	1.57	1.57	3,727.50	
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.01	0.00	0.00	0.00	0.00	102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 5/21/2012-5/23/2012 Active Days: 3	11.31	140.89	82.23	<u>0.00</u>	<u>81.71</u>	6.40	<u>88.11</u>	<u>17.07</u>	6.09	<u>23.15</u>	17,186.26
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/01/2012-05/30/2012	2.62	32.38	23.01	0.00	40.85	1.64	42.49	8.53	1.57	10.10	3,829.86
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	2.60	32.34	22.22	0.00	0.00	1.64	0.00	1.57	1.57	3,727.50	
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.79	0.00	0.00	0.01	0.00	0.00	0.00	0.00	102.36
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67

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Time Slice 6/4/2012-6/6/2012 Active Days: 3	<u>13.14</u>	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>.701</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20,386.20</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/7/2012-6/9/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	4.52	13.05	13,356.40
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/11/2012-6/13/2012 Active Days: 3	<u>13.14</u>	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20,386.20</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	332.67
Time Slice 6/14/2012-6/16/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	4.52	13.05	13,356.40
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.00	0.00	0.00	0.00	0.01	0.01	332.67
Time Slice 6/14/2012-6/16/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	4.52	13.05	13,356.40

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Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	2.50	2.38	0.00	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 6/18/2012-6/20/2012 Active Days: 3	13.14	<u>164.89</u>	<u>84.93</u>	0.00	<u>40.86</u>	<u>7.01</u>	<u>47.87</u>	<u>8.54</u>	<u>6.65</u>	<u>15.18</u>	<u>20,386.20</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 6/21/2012-6/23/2012 Active Days: 3	8.68	<u>108.51</u>	<u>59.21</u>	0.00	<u>40.86</u>	<u>4.76</u>	<u>45.62</u>	<u>8.54</u>	<u>4.52</u>	<u>13.05</u>	<u>13,356.40</u>
Fine Grading Dust	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading 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
Fine Grading On Road Diesel	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Fine Grading 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 6/25/2012-6/27/2012 Active Days: 3	13.14	<u>164.89</u>	<u>84.93</u>	0.00	<u>40.86</u>	<u>7.01</u>	<u>47.87</u>	<u>8.54</u>	<u>6.65</u>	<u>15.18</u>	<u>20,386.20</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 6/28/2012-6/30/2012 Active Days: 3	8.68	<u>108.51</u>	<u>59.21</u>	0.00	<u>40.86</u>	<u>4.76</u>	<u>45.62</u>	<u>8.54</u>	<u>4.52</u>	<u>13.05</u>	<u>13,356.40</u>

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Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Time Slice 7/2/2012-7/4/2012 Active Days: 3	13.14	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20.38620</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 7/2/2012-7/4/2012 Active Days: 3	13.14	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20.38620</u>
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 7/5/2012-7/7/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	4.52	13.05	13,356.40
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01	0.01	332.67
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	2.38	10.92	6,326.61
Time Slice 7/5/2012-7/7/2012 Active Days: 3	8.68	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20.38620</u>
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 7/5/2012-7/7/2012 Active Days: 3	8.68	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20.38620</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 7/9/2012-7/11/2012 Active Days: 3	13.14	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20.38620</u>
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13	2.13	7,029.80
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 7/9/2012-7/11/2012 Active Days: 3	13.14	<u>164.89</u>	<u>84.93</u>	0.00	40.86	<u>7.01</u>	47.87	8.54	<u>6.65</u>	15.18	<u>20.38620</u>
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00	8.53	0.00

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Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	332.67
Time Slice 7/12/2012-7/14/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	13,356.40
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	332.67
Time Slice 7/16/2012-7/18/2012 Active Days: 3	13.14	164.89	84.93	0.00	40.86	7.01	47.87	15.18
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	20,386.20
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	2.13
Building Vendor Trips	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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	7,029.80
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	332.67
Time Slice 7/19/2012-7/21/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	13,356.40
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	332.67
Time Slice 7/23/2012-7/25/2012 Active Days: 3	13.14	164.89	84.93	0.00	40.86	7.01	47.87	20,386.20
Building 05/15/2012-10/5/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	2.13
Building Vendor Trips	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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	7,029.80
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	2.13

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Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	0.01	332.67
Time Slice 8/20/2012-8/21/2012 Active Days: 2	13.14	164.89	84.93	0.00	40.86	7.01	47.87	8.54	20,386.20
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Building 06/01/2012-08/21/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	7,029.80
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,993.94
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.00
Time Slice 8/22/2012-8/22/2012 Active Days: 1	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	332.67
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,993.94
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01
Time Slice 8/23/2012-8/25/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	13,356.40
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	10.92
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01
Time Slice 8/27/2012-8/29/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	13,356.40
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6,326.61
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,993.94
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	0.01
Time Slice 8/30/2012-9/1/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	10.92
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6,326.61

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Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	8.53	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	2.38	2.38	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.02	0.01	0.01	332.67
Time Slice 9/3/2012-9/5/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	13.356.40
Building 05/15/2012-10/15/2012									
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	0.00	2.38	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 9/6/2012-9/8/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	0.00	2.38	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 9/10/2012-9/12/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	13.356.40
Building 05/15/2012-10/15/2012									
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	0.00	2.38	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 9/13/2012-9/15/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	0.00	2.38	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 9/17/2012-9/19/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	13.356.40
Building 05/15/2012-10/15/2012									
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54	6.326.61
Fine Grading Dust	0.00	0.00	0.00	40.84	0.00	40.84	0.00	8.53	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	2.50	2.50	0.00	2.38	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01	332.67
Time Slice 9/17/2012-9/19/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54	13.356.40

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Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	332.67
Time Slice 9/20/2012-9/22/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	10.92
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	10.92
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.38	5,993.94
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01	332.67
Time Slice 9/24/2012-9/26/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01
Time Slice 9/27/2012-9/29/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01
Time Slice 10/1/2012-10/3/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00
Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01
Time Slice 10/4/2012-10/6/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	43.37	8.54
Fine Grading Dust	0.00	0.00	0.00	0.00	40.84	0.00	40.84	8.53
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	0.00	2.50	2.50	0.00
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.02	0.01
Time Slice 10/8/2012-10/10/2012 Active Days: 3	8.68	108.51	59.21	0.00	40.86	4.76	45.62	8.54
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.25	0.00

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Building Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	10.92
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	40.84	2.50	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01
Time Slice 10/11/2012-10/13/2012 Active Days: 3	4.23	52.12	33.49	0.00	40.86	2.51	10.92
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	10.92
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	40.84	2.50	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01
Time Slice 10/15/2012-10/15/2012 Active Days: 1	8.68	108.51	59.21	0.00	40.86	4.76	45.62
Building 05/15/2012-10/15/2012	4.46	56.38	25.72	0.00	0.00	2.25	2.13
Fine Grading Off Road Diesel	4.46	56.38	25.72	0.00	0.00	2.25	2.13
Building Vendor Trips	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
Fine Grading 05/15/2012-10/15/2012	4.23	52.12	33.49	0.00	40.86	2.51	10.92
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	4.15	51.99	30.94	0.00	40.84	2.50	2.38
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.08	0.13	2.56	0.00	0.02	0.01	0.01
Time Slice 6/1/2013-8/21/2013 Active Days: 70	0.87	<u>6.90</u>	<u>6.98</u>	<u>0.00</u>	<u>40.85</u>	<u>0.52</u>	<u>41.37</u>
Fine Grading 06/01/2013-08/21/2013	0.87	6.90	6.98	0.00	40.85	0.52	41.37
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	0.84	6.84	5.72	0.00	0.00	0.52	0.48
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.04	0.06	1.26	0.00	0.01	0.00	0.01

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/1/2011 - 6/30/2011 - 650 Line ROW Prep
For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:
PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:
PM10: 44% PM25: 44%

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 7/1/2011 - 10/15/2011 - 650 Line Construction
For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:
PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:
PM10: 44% PM25: 44%

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 7/1/2011 - 10/15/2011 - 650 Line Construction
For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:
PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:
PM10: 44% PM25: 44%

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For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 7/1/2011 - 7/31/2011 - NSF Construction

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 8/1/2011 - 10/31/2011 - 132/050 Line Construction

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 5/1/2012 - 5/30/2012 - New 625 Line ROW Prep

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 5/15/2012 - 10/15/2012 - New 625 Line Construction

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Fine Grading 6/1/2013 - 8/21/2013 - Remove Existing 625 Line

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Mass Grading 5/1/2011 - 6/30/2011 - Tree Removal

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

COMPOSITE ON-ROAD AND OFF-ROAD EMISSIONS

Subtask		Subtask Daily Emission Rate (pounds per day)							Subtask Daily Emission Rate (pounds per day)								
		May	June	July	August	September	October	May	June	July	August	September	October	May	June	July	August
SO _x (Pounds per Day)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 1	Placer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 2	Off-Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 3	On-Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Truck Trips	Nevada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thresholds	Aggregate SO _x Emission (Lbs per Day)		0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NA	Placer	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Road	Off-Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Road	On-Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NA	Nevada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Road	Off-Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Road	On-Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Subtask		Subtask Daily Emission Rate (pounds per day)							Subtask Daily Emission Rate (pounds per day)								
		May	June	July	August	September	October	May	June	July	August	September	October	May	June	July	August
PM ₁₀ (Pounds per Day)		129.6	129.6	129.6	129.6	129.6	129.6	86.4	86.4	86.4	86.4	86.4	86.4	41.4	41.4	41.4	41.4
Phase 1	Placer	129.6	129.6	129.6	129.6	129.6	129.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Phase 2	Off-Road	124.8	124.8	124.8	124.8	124.8	124.8	121.8	121.8	121.8	121.8	121.8	121.8	81.2	81.2	81.2	81.2
Phase 3	On-Road	121.8	121.8	121.8	121.8	121.8	121.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Truck Trips	Nevada	8.0	8.0	8.0	8.0	8.0	8.0	7.8	7.8	7.8	7.8	7.8	7.8	5.4	5.4	5.4	5.4
Thresholds	Aggregate PM Emission (Lbs per Day)		132.8	132.8	132.8	132.8	132.8	132.8	89.6	89.6	89.6	89.6	89.6	89.6	44.6	44.6	44.6
82	Placer	124.8	124.8	124.8	124.8	124.8	124.8	121.8	121.8	121.8	121.8	121.8	121.8	84.1	84.1	84.1	84.1
Off-Road	Off-Road	2.9	2.9	2.9	2.9	2.9	2.9	8.0	8.0	8.0	8.0	8.0	8.0	2.9	2.9	2.9	2.9
On-Road	On-Road	7.8	7.8	7.8	7.8	7.8	7.8	0.3	0.3	0.3	0.3	0.3	0.3	5.2	5.2	5.2	5.2
136	Nevada	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Off-Road	Off-Road	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
On-Road	On-Road	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Subtask		Subtask Daily Emission Rate (pounds per day)							Subtask Daily Emission Rate (pounds per day)								
		May	June	July	August	September	October	May	June	July	August	September	October	May	June	July	August
PM _{2.5} (Pounds per Day)		32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	21.5	21.5	21.5	21.5
Phase 1	Placer	32.3	32.3	32.3	32.3	32.3	32.3	30.3	30.3	30.3	30.3	30.3	30.3	20.2	20.2	20.2	20.2
Phase 2	Off-Road	2.6	2.6	2.6	2.6	2.6	2.6	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.6	2.6	2.6
Phase 3	On-Road	2.2	2.2	2.2	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.5
Truck Trips	Nevada	1.9	1.9	1.9	1.9	1.9	1.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Thresholds	Aggregate PM Emission (Lbs per Day)		35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	24.4	24.4	24.4	24.4
NA	Placer	32.9	32.9	32.9	32.9	32.9	32.9	30.3	30.3	30.3	30.3	30.3	30.3	22.9	22.9	22.9	22.9
Off-Road	Off-Road	30.3	30.3	30.3	30.3	30.3	30.3	2.6	2.6	2.6	2.6	2.6	2.6	2.0.2	20.2	20.2	20.2
On-Road	On-Road	2.6	2.6	2.6	2.6	2.6	2.6	2.2	2.2	2.2	2.2	2.2	2.2	1.5	1.5	1.5</	

Subtask		Subtask Daily Emission Rate (pounds per day)		May June July August September October				May June July August September October				June July August September October					
CO ₂ (Pounds per Day)		Phase 1	Phase 2	26712.6	26712.6	26712.6	26712.6	26712.6	26712.6	20386.2	20386.2	20386.2	20386.2	20386.2	20386.2	1046.7	1046.7
	Phase 1	29620.6	29620.6	29620.6	29620.6	29620.6	29620.6	29620.6	29620.6	23673.8	23673.8	23673.8	23673.8	23673.8	23673.8	5494.7	5494.7
	Phase 2	25109.8	25109.8	25109.8	25109.8	25109.8	25109.8	25109.8	25109.8	19163.0	19163.0	19163.0	19163.0	19163.0	19163.0	983.9	983.9
	Phase 3	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0	4903.0
	Truck Trips																
Thresholds		Aggregate CO₂ Emission (Lbs per Day)															
NA	Placer	31615.6	31615.6	31615.6	31615.6	31615.6	31615.6	31615.6	31615.6	25289.2	25289.2	25289.2	25289.2	25289.2	25289.2	5949.7	5949.7
	Off-Road	2995.0	1995.0	1995.0	1995.0	1995.0	1995.0	1995.0	1995.0	23673.8	23673.8	23673.8	23673.8	23673.8	23673.8	5494.7	5494.7
NA	On-Road	1602.8	1602.8	1602.8	1602.8	1602.8	1602.8	1602.8	1602.8	1223.2	1223.2	1223.2	1223.2	1223.2	1223.2	62.8	62.8
	Nevada	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	4510.8	4510.8
	Off-Road															4510.8	4510.8
	On-Road															4510.8	4510.8

EDMS SIMULATION RESULTS

Emissions Inventory Summary (Short Tons per Year) Baseline - Truckee-Tahoe 2009

Category	CO2	CO	THC	NM...	VOC	TOG	NOx	SOx	PM-...	PM-...	Fuel Consu...
Aircraft	76.714	0.302	0.016	0.019	0.019	0.019	0.125	0.031	N/A	N/A	24.315
GSE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
APUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parking Facilities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roadways	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Stationary Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	76.714	0.302	0.016	0.019	0.019	0.019	0.125	0.031	N/A	N/A	24.315

GHG CALCULATIONS

Table of Constants and Assumptions

Constant	Value	Units	Source
Breaker Annual Leak Rate	0.50%	-	Manufacturer
Cylinder Annual Leak Rate	-	-	-
SF6 Global Warming Potential	23900	-	CCAR GRP v3.1 Table C.1
Metric tons to pounds	2204.62	-	-

	Equipment SF6 Capacity (pounds)	Quantity	Total SF6 (pounds)	Annual SF6 Leaked (pounds)	Annual SF6 Leaked (metric tons)	Annual CO2E Tons
Substation Equipment						
Breakers	64	8	512	2.560	0.001	27.75
Cylinders	0	0	0	0.000	0.000	0.00
Total			512	2.560	0.001	27.75

No cylinders will be kept onsite

Table of Constants and Assumptions

Constant	Value	Units	Source
eGRID Subregion	NWPP	902.24 lbs CO2/MWh	- CCAR GRP v3.1 Page 34
CO2 Electricity Emission Factor	0.0149 lbs N2O/MWh	CCAR GRP v3.1 Table C.2	
N2O Electricity Emission Factor	0.0191 lbs CH4/MWh	CCAR GRP v3.1 Table C.2	
CH4 Electricity Emission Factor	2204.62	-	- CCAR GRP v3.1 Table C.1
pounds to metric ton	310	-	- CCAR GRP v3.1 Table C.1
N2O Global Warming Potential	21	-	- CCAR GRP v3.1 Table C.1
CH4 Global Warming Potential	12.13 kWh/ft^2*year	CCAR GRP v3.1 Page 37	
SDG&E Small Office Electrical Intensity			

Annual Electricity Consumption

Facility	Consumption	Units	Consumption	Units
Kings Beach	483,530.00	kWh/year	483.53	MWh/year
Northstar	123,529.00	kWh/year	123.53	MWh/year
Tahoe City	37,000.00	kWh/year	37.00	MWh/year
Squaw Valley	-	kWh/year	-	MWh/year
North Truckee	-	kWh/year	-	MWh/year
Truckee	-	kWh/year	-	MWh/year
Total	644,059.00		644.06	

Annual GHG Emissions from Electrical Consumption

Constant	Value	Units	Source
g of CO2 per Gallon of Diesel Fuel	10.15	kg/gallon	CCAR GRP v3.1 Ta
N2O per Gallon of Diesel Fuel - Off-Road	0.26	g/gallon	CCAR GRP v3.1 Ta
CH4 per Gallon of Diesel Fuel - Off-Road	0.58	g/gallon	CCAR GRP v3.1 Ta
N2O per Gallon of Diesel Fuel - HD Trucks	0.332	-	California Greenh
CH4 per Gallon of Diesel Fuel - HD Trucks	0.303	-	California Greenh
N2O per Gallon of Diesel Fuel - LD trucks/cars*	0.332	-	California Greenh
CH4 per Gallon of Diesel Fuel - LD trucks/cars*	0.196	-	California Greenh
N2O Global Warming Potential	310	-	CCAR GRP v3.1 Ta
CH4 Global Warming Potential	21	-	CCAR GRP v3.1 Ta
convert tons to kg	907.2	-	
convert g to kg	0.001	-	

Values from light duty trucks and passenger vehicles were averaged to develop these emission rates in order to be more conservative

Carbon Content By Stores

Habitat Type	Hectares Removed	Volume (cubic meters/hectare)	Carbon Content (tonnes/hectare)				TOTAL	
			Live Tree	Dead Tree	Understory	Dead down wood	Forest Floor	Soil
Jeffry Pine	3.18	225.5	85.8	0.3	3.6	10.5	21.6	42.2
Red Fir	38.70	382.4	130.4	15	2.6	14.6	36.9	51.8
California Mixed Conifer	22.84	312.4	116.2	9.4	3.6	12.5	35.6	49.5
TOTAL	64.72							15426.54

Total Carbon Removed

Habitat Type	Volume (cubic feet)	Carbon Content Removed (tonnes)				TOTAL	
		Live Tree	Dead Tree	Understory	Dead down wood	Forest Floor	Soil
Jeffry Pine	25298.17	272.57	0.95	11.44	33.36	68.62	134.06
Red Fir	522618.70	5046.49	580.50	100.62	565.02	1428.03	2004.66
California Mixed Conifer	251982.82	2654.06	214.70	82.23	285.51	813.12	1130.60
TOTAL	799899.70	7973.12	796.15	194.28	883.88	2309.77	3269.33

Carbon by Stores - Replacement

Habitat Type	Hectares Revegetated	Volume (cubic meters/hectare)	Carbon Content (tonnes/hectare)				TOTAL	
			Live Tree	Dead Tree	Understory	Dead down wood	Forest Floor	Soil
Combination - 35 years of maturity (assisted veg)	60.4	101.42	50.05	8.47	4.75	6.09	25.9	43.33
Combination - 30 years of maturity (natural veg)	88.37	77.26	39.39	8.47	5.04	5.5	25.31	43.33

Carbon Restored

Habitat Type	Hectares Revegetated	Volume (cubic meters/hectare)	Carbon Content (tonnes/hectare)				TOTAL	
			Live Tree	Dead Tree	Understory	Dead down wood	Forest Floor	Soil
Combination - 35 years of maturity (assisted veg)	60.4	125.82	3025.02	511.93	287.09	368.08	1565.40	2618.87
Combination - 30 years of maturity (natural veg)	88.4	77.26	3480.89	748.49	445.38	486.04	2236.64	3829.07

Chipped Live Tree Spread on ROW

Area removed	155	acres
Depth of chip	0.25	inches
Depth of chip	0.021	feet
Volume of chip	137433.3	cubic feet
% of chip required	18%	

Live Tree Conversion to Products

Live trees to mill	7793.47 tonnes carbon
% merchantable	5455.43 tonnes carbon
% sawdust/chips	2338.04 tonnes carbon
% to MDF	0.00 tonnes carbon
% to Energy	2338.04 tonnes carbon
Carbon to Lumber	5455.43 tonnes carbon
% lost when made into products	436.43 tonnes carbon
Carbon as Products	5019.00 tonnes carbon
Carbon as Energy	2774.48 tonnes carbon

Other Bio Mass

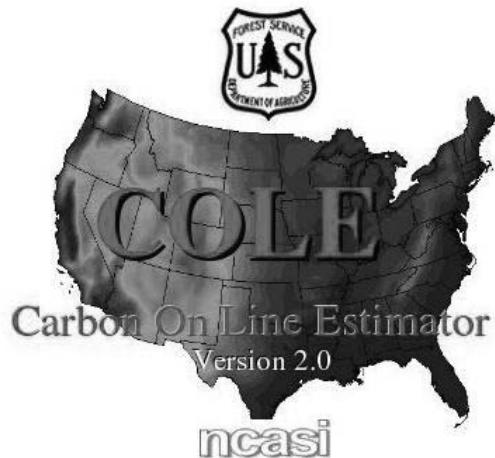
Total Bio Mass	4094.68 tonnes carbon
Percent chipped and spread	18%
Bio Mass spread	718.90 tonnes carbon
Bio Mass Energy Gen	3375.77 tonnes carbon
Total Carbon Decaying	5737.90 tonnes carbon
Total Carbon Energy	6150.25 tonnes carbon
Percent carbon released from final products	3%
Total Carbon Lost	6333.86 tonnes carbon
Net flux after 30 years	6796.83 tonnes carbon
Total Carbon to Energy over 3 Years	2050.08 tonnes carbon

ATTACHMENT 4.3-B: CARBON ON LINE ESTIMATOR REPORT

COLE 1605(b) Report for California

COLE Development Group *

October 2, 2009



1 Abstract

This is a standard report produced by COLE, **The Carbon Online Estimator**. COLE is an online package that was developed under a cooperative agreement between NCASI and the USDA Forest Service, RWU-4104 in Durham, NH.

*NCASI: <http://ncasi.uml.edu/>, USDA Forest Service: <http://www.fs.fed.us/ne/durham/4104/>

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2 Introduction

This report includes numerous tables that portray various components of forest carbon. A carbon map is given to show the distribution of aboveground carbon. The map also shows approximately where the FIA plots were located that contributed data to this report. Each plot is assigned to a hexagon (each hex covers 2428 hectares), which is colored to indicate the amount of carbon at that location.

This report is based on data from the states and counties that were selected. The tables may be useful for 1605(b) reporting, but it is important to consider the nature of the data before using these tables. The data originate from USDA Forest Inventory and Analysis (FIA) plots that are part of an annual forest inventory system. Therefore they are a representative sample from forest land in the U.S. The database for COLE includes all plots in the most recent FIA evaluation group for each state. This report reflects the forest type and site characteristics of stands within the selected region that also meet the filter criteria. The COLE data set is derived from the public FIADB and is updated on a regular basis. The format of the tables and the methods used to develop them are similar to those in (Smith et al. , 2006).

Any filters that were selected by the user will impact the tables. Filters can be used to specify characteristics of your land within the limitations of the filter variables. For example, you could generate 2 reports to examine differences in total forest carbon between private and public land. To do this, set the Ownership Group filter to Private and generate a report. Go back to the Filters tab and select public ownership groups. Generate another report. Now you can compare the differences in carbon stocks. This method can be applied using any of the filters. Consult the COLE Filters Tab Help File for details on filter availability and use.

Data provided in these tables will generally not be valid for reporting on forests outside of the U.S. unless the conditions of the forest are consistent with conditions and forest types covered by the tables.

3 Regional Carbon Tables

The following tables are made from data from the counties selected in California. Each of the 8 columns in the tables are defined as follows:

1. Mean volume: volume of growing stock. This is derived by converting net cubic foot volume per acre (VOLCFNET) from the FIADB to cubic meters per hectare.
2. Live tree: carbon in boles, crowns and coarse roots of live trees dbh at least 2.5cm. This is derived by multiplying the dry biomass variable (DRYBIOT) in the FIADB by 0.5 to get carbon. Foliage and root carbon is estimated with equations (Jenkins et al. , 2003). Units are metric tonnes per hectare.
3. Standing dead tree: carbon in boles, crowns and course roots of standing dead trees with dbh at least 2.5cm. Units are metric tonnes per hectare. This is estimated analogously to live tree carbon, except foliage is excluded.
4. Understory: carbon in boles, crowns and coarse roots of trees (dbh less than 2.5cm), shrubs and bushes. Units are metric tonnes per hectare.
5. Down dead wood: carbon in woody debris (includes logging residue and coarse woody debris larger than 7.5 cm diameter), stumps and coarse roots of stumps. Units are metric tonnes per hectare.
6. Forest floor: carbon in fine woody debris (dbh less than 7.5 cm), litter, fine roots above mineral soil. Units are metric tonnes per hectare.
7. Soil organic: organic C (including fine roots) in the surface 1 meter. Excludes coarse roots. Units are metric tonnes per hectare.
8. Total nonsoil: sum of carbon contained in live tree, standing dead tree, understory, down dead wood and forest floor pools. Units are metric tonnes per hectare.

The COLE database values for live tree and standing dead carbon are derived from a combination of FIA data and published equations. The FIA data provide a total gross biomass oven dry weight (DRYBIOT) value for each tree in the FIA database (Anonymous , 2007). DRYBIOT gives the total above ground biomass for a tree 1.0 inch and larger including all tops and limbs, but excluding foliage. DRYBIOT is multiplied by 0.5 to convert it to carbon. Carbon in foliage and roots is then estimated for each tree using published equations (Jenkins et al. , 2003). Live tree carbon is the sum of $0.5 \times \text{DRYBIOT} + \text{foliage} + \text{roots}$. Dead tree carbon is $0.5 \times \text{DRYBIOT} + \text{roots}$. These tree carbon values are summed for each plot and expanded to represent per hectare values.

The data for the other carbon components, i.e. forest floor, down dead wood, and soil organic, is estimated at the plot level using methods developed for Smith et al. (2006). Mean volume comes from what FIA calls VOLCFNET, which is net cubic foot volume and is provided for each tree in the FIA public data base.

The tables are derived from the COLE database by fitting an equation to the data for the selected region. Therefore, the tables are presenting expected values rather than raw data averages. Any filters that are in place affect the data used to fit the table equations. The equation used for mean volume, live tree carbon and standing dead tree carbon has the form $y = a(1 - e^{-b*AGE})^3$, which is the well known Von Bertalanffy growth equation. The a-coefficient gives the asymptote, and the b-coefficient controls the rate of approach to the asymptote. One can compute the time it takes to reach a certain percentage of the asymptote with the following equation, $t(p) = -\log(1 - p^{1/3})/b$, where p is the desired proportion and b is the estimate for the b-coefficient. The coefficient values are given at the bottom of each carbon stock column. The assumption is that the trend for these components begins at 0.0 at age 0 and eventually asymptotes.

Other carbon components follow different trends which are estimated using methods described in (Smith et al. , 2006). Understory will generally decline over time as the canopy matures. The following equation is used to estimate understory, $underC = liveTreeC * e^{c_1 - c_2 * ln(liveTreeC)}$, where liveTreeC is the estimate for live tree carbon, and c_1 and c_2 are coefficients that must be estimated from the selected COLE data.

Tables are given for each forest type for both reforestation and afforestation. It is assumed that the following carbon component trends differ for reforestation and afforestation: down dead wood, forest floor, and soil organic. Down dead wood trends for afforestation are estimated with $ddC_A = r * liveTreeC$, where r is a coefficient that is estimated from the selected data. Reforestation down dead trends are estimated with $ddC = ddC_A + d_1 * e^{-age/d_2}$, where d_1 and d_2 are coefficients that must be estimated and age is stand age. Adding an additional component for reforestation accounts for the fact that there would be down dead wood following a clearcut harvest.

Forest floor carbon after afforestation is modeled as $ffC_A = f_1 * age / (f_2 + age)$. Forest floor carbon after reforestation requires an additional component to account for the fact that there will be residual forest floor carbon following a clearcut. It is modeled as, $ffC = ffC_A + f_3 * e^{-(age/f_4)}$, where f_1, \dots, f_4 are coefficients that must be estimated from the data.

The soil organic carbon value in the reforestation table is based on the assumption that this component will remain relatively constant over time. For afforestation, it is assumed that soil organic carbon will start off at 75% of the reforestation value and gradually increase to the reforestation value. This is modeled with $soc_A = soc * (0.75 + 0.25 * (1 - e^{-(age/50)^2}))$

Table 1: Carbon Stocks by Age Class for California

Age Class	Mean volume	Live tree	Dead tree	Under story	Down dead wood	Forest floor	Soil	Total non soil
years	m ³ /hectare	tonnes carbon/hectare						
0	0	0	8.47	0	8.56	24.15	43.33	41.18
5	1.01	0.63	8.47	4.79	6.66	23.98	43.33	44.52
10	6.48	3.86	8.47	7.31	5.45	23.94	43.33	49.03
15	17.68	10.09	8.47	6.69	4.87	24.07	43.33	54.19
20	34.06	18.68	8.47	5.97	4.78	24.37	43.33	62.25
25	54.39	28.72	8.47	5.43	5.03	24.79	43.33	72.43
30	77.26	39.39	8.47	5.04	5.5	25.31	43.33	83.71
35	101.42	50.05	8.47	4.75	6.09	25.9	43.33	95.26
40	125.82	60.26	8.47	4.54	6.73	26.53	43.33	106.52
50	172.47	78.31	8.47	4.25	7.99	27.83	43.33	126.84
60	213.5	92.7	8.47	4.06	9.08	29.1	43.33	143.41
70	247.66	103.6	8.47	3.95	9.95	30.28	43.33	156.25
80	275.11	111.62	8.47	3.87	10.61	31.36	43.33	165.94
90	296.65	117.4	8.47	3.82	11.1	32.33	43.33	173.12
100	313.26	121.5	8.47	3.79	11.45	33.19	43.33	178.4
a	363.59	131.04						
b	0.03	0.04						
se	210.13	74.56						
n	145							

Table 1 shows the regression-based volume and carbon pool estimates by age class for the entire area you have selected, as noted in the table title. Table 1 is based on reforestation assumptions. The number of plots used in calculating the regression is denoted at the bottom of the table as row n . The se value is the residual standard error, provided to help you judge the strength of the relationship between stand age and the various carbon pools. However, many of the carbon components lack regression coefficients. Coefficients and standard errors are provided for the components that are estimated with the Von Bertalanffy equation, i.e. the *Mean volume*, *Live tree*, and *Standing dead* columns. No coefficients are given for the remaining components, since they are only loosely tied to the actual FIA data. The remaining component values are largely based on models and assumptions.

Table 2 is the mean value of the volume and carbon pools for all forest types occurring over the entire area you selected. The next set of tables giving carbon components by forest type are not generated unless there are at least 20 plots. Sample size by forest type in Table 2 is shown in column n .

Table 2: Carbon Stocks by Forest Type for California

Forest Type	Mean volume	Live tree	Dead tree	Under story	Down dead wood	Forest floor	Soil	Total non soil	n		
	m ³ /ha			tonnes carbon/ha							
Ponderosa pine	225.5	85.8	0.3	3.6	10.5	21.6	42.2	121.7	9		
retired (Jeffrey pine / Coulter pine / bigcone Douglas-fir)	12.3	4.5	0	13	0.5	25.6	41.3	43.5	1		
Western white pine	157.1	68.8	5.7	2.8	7	20.9	49	105.2	2		
White fir	368.3	130.4	15	2.6	14.6	36.9	51.9	199.6	11		
Red fir	382.4	129.3	11.1	4.1	14.1	38.8	51.8	197.4	10		
Lodgepole pine	256.6	85.6	8.2	2.5	8.6	26.3	35.2	131.3	7		
Western juniper	77	34.1	6.6	2.4	3.4	41.5	49.8	88.1	1		
California mixed conifer	312.4	116.2	9.4	3.6	12.5	35.6	49.5	177.3	59		
California black oak	257.1	120.5	4.9	4.2	5.3	28.3	27.9	163.1	13		
Blue oak	81.4	54.6	0	6.2	2.3	28.8	27.6	91.9	3		
Pacific madrone	363.3	158.2	2.9	6.2	7.7	28.8	33.1	203.8	1		
Nonstocked	3	1.1	43.8	4.4	0	17.3	35.1	66.7	3		

3.1 Regional carbon tables by forest type

The following tables are broken down by forest type and given for reforestation and afforestation assumptions.

There are 2 reasons that a forest type listed in Table 2 is not broken out in the following series of tables.

1. Sample size is less than 20. The regression needs at least 20 samples to produce a reliable estimate.
2. Missing values in the data may prevent the regression from converging. This is especially important for a forest type that has close to the 20 sample threshold explained above.

Table 3: California mixed conifer - Carbon Stocks by Age Class for California: Reforestation

Age Class	Mean volume	Live tree	Dead tree	Under story	Down dead wood	Forest floor	Soil	Total non soil
years	m ³ /hectare				tonnes carbon/hectare			
0	0	0	9.36	0	26.99	36.19	49.46	72.54
5	1.45	0.54	9.36	10.5	17.91	35.41	49.46	73.72
10	9.11	3.38	9.36	12.81	12.16	34.74	49.46	72.44
15	24.37	9.04	9.36	9.34	8.72	34.17	49.46	70.63
20	46.07	17.09	9.36	7.02	6.88	33.72	49.46	74.06
25	72.25	26.81	9.36	5.61	6.1	33.36	49.46	81.24
30	100.93	37.46	9.36	4.72	6.01	33.1	49.46	90.65
35	130.44	48.42	9.36	4.12	6.33	32.94	49.46	101.17
40	159.49	59.22	9.36	3.7	6.9	32.85	49.46	112.03
50	213.04	79.13	9.36	3.16	8.33	32.88	49.46	132.87
60	257.97	95.86	9.36	2.84	9.76	33.14	49.46	150.96
70	293.75	109.19	9.36	2.64	10.98	33.55	49.46	165.73
80	321.32	119.46	9.36	2.52	11.96	34.08	49.46	177.38
90	342.08	127.2	9.36	2.43	12.72	34.69	49.46	186.4
100	357.49	132.95	9.36	2.37	13.28	35.35	49.46	193.32
a	398.4	148.25						
b	0.03	0.03						
se	218.21	78.91						
n	59							

Table 4: California mixed conifer - Carbon Stocks by Age Class for California: Afforestation

Age Class	Mean volume	Live tree	Dead tree	Under story	Down dead wood	Forest floor	Soil	Total non soil
years	m ³ /hectare				tonnes carbon/hectare			
0	0	0	9.36	0	0	0	37.09	9.36
5	1.45	0.54	9.36	10.5	0.05	1.27	37.22	21.71
10	9.11	3.38	9.36	12.81	0.34	1.38	37.58	27.27
15	24.37	9.04	9.36	9.34	0.9	1.42	38.16	30.06
20	46.07	17.09	9.36	7.02	1.71	1.45	38.92	36.62
25	72.25	26.81	9.36	5.61	2.68	1.46	39.83	45.92
30	100.93	37.46	9.36	4.72	3.74	1.47	40.83	56.75
35	130.44	48.42	9.36	4.12	4.83	1.48	41.88	68.21
40	159.49	59.22	9.36	3.7	5.91	1.48	42.94	79.67
50	213.04	79.13	9.36	3.16	7.9	1.49	44.91	101.04
60	257.97	95.86	9.36	2.84	9.57	1.49	46.53	119.12
70	293.75	109.19	9.36	2.64	10.9	1.5	47.72	133.59
80	321.32	119.46	9.36	2.52	11.93	1.5	48.5	144.76
90	342.08	127.2	9.36	2.43	12.7	1.5	48.97	153.2
100	357.49	132.95	9.36	2.37	13.27	1.5	49.23	159.46
a	398.4	148.25						
b	0.03	0.03						
se	218.21	78.91						
n	59							

4 Carbon Map

The carbon map gives an indication of the distribution of above ground carbon by coloring hexagons that cover each state. Each FIA plot that contributed data to this report is assigned to a hex. Hexes that aren't filled in contributed no data to this report. A hex is left out of the analysis because it was (1) not selected for inclusion or (2) it has no data in the COLE data base (it might be a non-forest area). It is important to look at this map to understand what data were included when the tables were made for this report. It is possible that 2 reports with exactly the same title were, in fact, made with data from different parts of the state. The report title indicates the state(s) and the filters that were applied. The carbon map definitively indicates the FIA plots that were included.

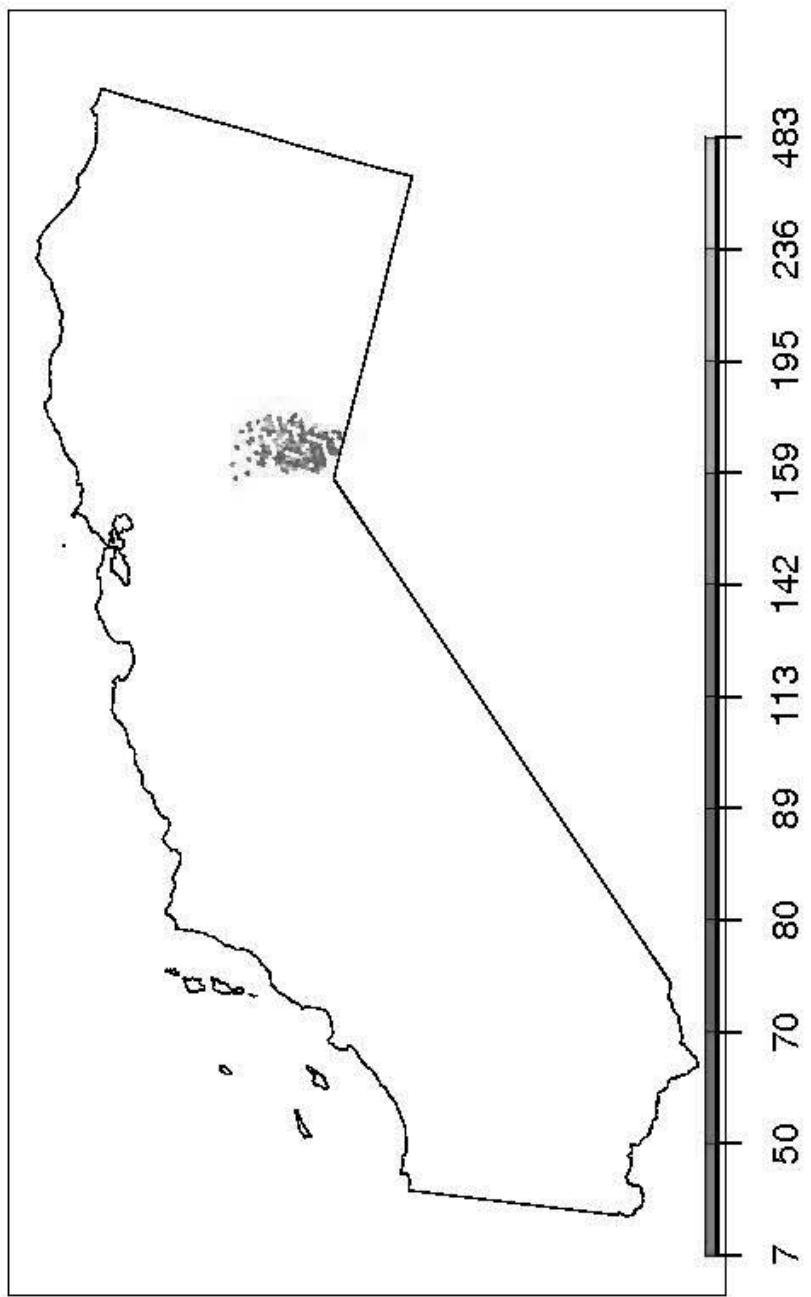


Figure 1: Hex map of Total Aboveground Carbon (metric tons/hectare) for California

References

- Smith, J.E., Heath, L.S., Skog, K.E. and Birdsey, R.A. (2006). Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. Gen. Tech. Rep. NE-343. Newtown Square, PA: USDA, Forest Service, Northern Research Station. 216p.
- Anonymous (2007). The Forest Inventory and Analysis Database: Database Description and Users Guide Version 3.0. [Available on internet: www.ncrs2.fs.fed.us/4801/fiadb/index.htm]
- Jenkins, J.C., Chojnacky, D.C., Heath, L.S., and Birdsey, R.A. (2003). National-scale biomass estimators for United States tree species. Forest Science 49(1): 12-35.