

## **BUREAU OF INDIAN AFFAIRS**

### **DRAFT CONFORMITY DETERMINATION for the Spokane Tribe of Indian's West Plains Casino and Mixed-Use Development Project, Airway Heights, Spokane County, Washington.**

**AGENCY:** Bureau of Indian Affairs, Department of the Interior

**ACTION:** Notice of Availability of Draft Conformity Determination

---

**SUMMARY:** This notice advises the public that the Bureau of Indian Affairs (BIA), in accordance with Section 176 of the Clean Air Act 42 U.S.C. 7506, and the EPA general conformity regulations 40 CFR Part 93, Subpart B, has prepared a Draft Conformity Determination (DCD) for the Spokane Tribe of Indian's (Tribe) proposed West Plains Casino and Mixed-Use Development project in the City of Airway Heights, Spokane County, Washington.

**DATES:** The Final Conformity Determination on the proposed action will be issued no sooner than 30 days after the release of the DCD. All comments on the DCD should be postmarked by February 15, 2013.

**ADDRESSES:** Mail or hand carry written comments to Dr. B.J. Howerton, Environmental Protection Specialist, Bureau of Indian Affairs, Northwest Regional Office, 911 NE 11<sup>th</sup> Avenue, Portland, Oregon 97232-4169. See SUPPLEMENTARY INFORMATION for directions on submitting comments and public availability of the DCD.

**FOR FURTHER INFORMATION CONTACT:** Dr. B.J. Howerton, (503) 231-2275.

**SUPPLEMENTARY INFORMATION:** The DCD was prepared for the proposed issuance of a two-part determination under Section 20 of the Indian Gaming Regulatory Act (IGRA) (proposed action), and the subsequent development of the West Plains Casino and Mixed-Use Development by the Tribe. The 145-acre project site is held in federal trust for the Tribe and is located within the city limits of the City of Airway Heights immediately adjacent to the unincorporated West Plains area of Spokane County, Washington, northwest of the intersection of U.S. Highway 2 (US-2) and Craig Road. Alternative 1, the Proposed Project, consists of a casino/hotel, retail, tribal cultural center, police and fire station, and commercial buildings. The casino/hotel would include restaurants, a 300-room hotel, a convention/banquet space, as well as a pool and spa.

The Clean Air Act requires federal agencies to assure that their actions conform to applicable implementation plans for achieving and maintaining the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. Conformity regulations apply to Federal actions that would cause emissions of criteria air pollutants above certain levels in locations designated as non-attainment or maintenance areas for the emitted pollutants. The project site is located in an area that is classified as attainment or unclassifiable for all NAAQS. However, the project site is located two miles west of an area designated as maintenance for carbon monoxide (CO) and particulate matter 10 microns in size (PM10). Because project-related vehicle trips would originate or pass through the maintenance areas, the BIA has prepared a DCD for the proposed action/project described above.

**Directions for Submitting Comments**

Please include your name, return address and the caption, “Draft Conformity Determination Comments, West Plains Casino and Mixed-Use Development project,” on the first page of your written comments. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**DCD Public Availability**

The DCD is available on the following website: <http://www.westplainseis.com>. To obtain a copy of the DCD, please provide your name and address in writing or by voicemail to Dr. B.J. Howerton, Environmental Protection Specialist, at the address listed in the ADDRESSES section of this notice, or at the telephone number listed in the FOR FURTHER INFORMATION CONTACT section of this notice.

Dated: January 15, 2013

**DRAFT GENERAL CONFORMITY REVIEW AND DETERMINATION  
FOR THE SPOKANE TRIBE OF INDIANS  
WEST PLAINS CASINO AND MIXED-USE DEVELOPMENT PROJECT**

January 9, 2013

Lead Agency:  
Bureau of Indian Affairs  
Northwest Regional Office  
911 Northeast 11<sup>th</sup> Avenue  
Portland, Oregon 97232  
(503) 231-6702

Prepared By:  
Analytical Environmental Services  
1801 7<sup>th</sup> Street  
Sacramento, California 95811  
(916) 447-3479

## TABLE OF CONTENTS

---

# SPOKANE TRIBE OF INDIANS WEST PLAINS CASINO AND MIXED-USE DEVELOPMENT DRAFT CONFORMITY REVIEW AND DETERMINATION

1.0 Introduction.....	1
2.0 General Conformity – Regulatory Background.....	2
3.0 General Conformity Review and Applicability of Proposed Project .....	5
4.0 CO General Conformity Determination.....	11
5.0 Conclusion .....	13

## LIST OF TABLES

---

Table 1: CO AND PM <sub>10</sub> Operational Mobile Emissions .....	7
Table 2: CO Emissions Occuring in the SMA .....	10

## LIST OF FIGURES

---

Figure 1: Spokane PM <sub>10</sub> and CO Maintenance Areas .....	6
Figure 2: Trip Distribution.....	8

## ATTACHMENT

---

Attachment 1: Air Quality Emission Calculations

## 1.0 INTRODUCTION

An Environmental Impact Statement (EIS) has been prepared pursuant to the National Environmental Policy Act (NEPA) to assess the environmental consequences of the approval of issuing a two-part determination under Section 20 of the Indian Gaming Regulatory Act (IGRA) and the subsequent development of the West Plains Mixed-Use Development by the Spokane Tribe of Indians (Tribe). The foreseeable consequence of this federal action would be development of a casino/hotel within a 145-acre parcel of land currently held in trust for the Tribe within the city limits of Airway Heights, Spokane County (project site). The Bureau of Indian Affairs (BIA) is the lead agency for compliance with NEPA. The effects of three alternatives and a No Action alternative are analyzed within the EIS.

Alternative 1, the Proposed Project, consists of a casino/hotel, retail, tribal cultural center, police and fire station, and commercial buildings, which would total approximately 2,350,000 square feet in area. The casino/hotel would include restaurants, a 300-room hotel, a convention/banquet space, as well as a pool and spa.

The project site is located northwest of the intersection of US-2 and Craig Road. US-2 is the main east/west artery in the region. The project site is approximately eight miles west of the City of Spokane. The Spokane Regional Clean Air Agency (SRCAA) has local jurisdiction over the region's air quality, including the City of Airway Heights; however, since the project site is located on Tribal trust land, the Tribe and the U.S. Environmental Protection Agency (USEPA) exercise jurisdiction over matters related to air quality within the project site.

Conformity regulations apply to Federal actions that would cause emissions of criteria air pollutants above certain levels in locations designated as non-attainment or maintenance areas for the emitted pollutants. The project site is located in an area that is classified as attainment or unclassifiable for all National Ambient Air Quality Standards (NAAQS). However, the project site is located two miles west of an area designated as maintenance for carbon monoxide (CO) and particulate matter 10 microns in size (PM<sub>10</sub>). Because project-related vehicle trips would originate or pass through the maintenance areas, the USEPA has requested that a conformity review be completed for the project's mobile emissions. The Spokane region is in attainment for all other criteria air pollutant (CAPs); therefore, a conformity review will be conducted only for CO and PM<sub>10</sub>.

## 2.0 GENERAL CONFORMITY – REGULATORY BACKGROUND

The USEPA promulgated the General Conformity Rule on November 30, 1993 to implement the conformity provision of Title I, Section 176 (c)(1) of the Federal Clean Air Act (CAA), which requires that the Federal government not engage, support, or provide financial assistance for licensing, permitting, or approving any activity not conforming to an approved CAA implementation plan. CAA conformity is an issue that may be addressed prior, during, or after the NEPA process.

The USEPA issued a final revised General Conformity Rule on April 5, 2010. Amendments to the General Conformity Rule that may be applicable to the Proposed Project are as follows:

- Allows states and tribes to develop their own “presumed to conform” list for actions covered by the state’s State Implementation Plan (SIP) (40 CFR 51.851).
- Provides for the use of early emissions reduction credits (40 CFR 93.165).
- With certain limits, allows emissions from one precursor of a criteria pollutant to be offset by a reduction in the emissions of another precursor of that pollutant (40 CFR 93.164).
- Eliminated the requirement that a federal agency submit a conformity determination for regionally significant actions where the direct and indirect emission of any pollutant represents ten percent or more of the area’s emissions inventory for that pollutant (40 CFR 93.153).
- Provides alternative methods to demonstrate conformity for time periods beyond those covered by the SIP (40 CFR 93.162).
- Allows federal agencies to obtain emissions offsets for General Conformity requirements from a nearby nonattainment or maintenance area of equal or higher classification, provided that the emissions from the nearby area contribute to the violations of the NAAQS in the area where the federal action is located (40 CFR 93.158 (a)(2) and (a)(5)(iii)).

### General Conformity Process

The conformity process involves two phases. The first phase is the conformity review process, which evaluates whether the conformity regulations would apply to the federal action (i.e. whether a determination is warranted). The second phase is the conformity determination process (if determined applicable under the first phase) which demonstrates how a Federal action conforms to the applicable SIP.

### *Conformity Review*

The purpose of a conformity review is to evaluate whether the conformity determination requirements would apply to a federal action under 40 CFR 93.153. There are four steps in the review process, of which the first three can be performed in any order. The four steps are identified below:

- Determine whether the proposed action causes emissions of CAPs.

- Determine whether the emissions of a criteria pollutant or its precursor (i.e. nitrogen oxides [NO<sub>x</sub>] and reactive organic gases [ROG] for ozone [O<sub>3</sub>]) would occur in a non-attainment or maintenance area for that CAP.
- Determine whether the federal action is exempt from the conformity requirement as per 40 CFR 93.153 (c)(2)-(e).
- Estimate the total emissions of the pollutants of concern from the proposed action and compare the estimates to the *de minimus* threshold of 40 CFR 93.153 (b)(1) and (2) and to the non-attainment or maintenance area's emissions inventory for each CAP.

If the proposed project does not emit pollutants or is exempt under 40 CFR 93.153 (c)(2)-(e), or if the affected region is in attainment for all criteria pollutants, no further action is necessary. Otherwise, the proposed project's estimated emissions must be compared to the *de minimus* thresholds set forth in 40 CFR 93.153 (b)(1) and (2). If the emissions are greater than or equal to the *de minimus* threshold, a conformity determination must be performed.

### **Conformity Determination**

The purpose of the conformity determination, if needed, is to show if the Proposed Project conforms to the SIP. Conformity can be shown for CO and directly emitted PM<sub>10</sub> by one of following four options:

- The applicable SIP specifically includes an allowance for emissions of the Proposed Project (40 CFR 93.158 (a)(1));
- The Proposed Project (or portion thereof), as determined by the Metropolitan Planning Organization (MPO), is specifically included in a current transportation plan and transportation improvement program which have been found to conform to the applicable SIP under 40 CFR part 51, subpart T, or 40 CFR part 93, subpart A (40 CFR 93.158 (a)(5)(ii));
- For CO and PM<sub>10</sub>:
  - Where the State agency primarily responsible for the applicable SIP determines that an area-wide air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (b) of this section, based on local air quality modeling analysis; or
  - Where the State agency primarily responsible for the applicable SIP determines that an area-wide air quality modeling analysis is appropriate and that a local air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (b) of this section, based on area-wide modeling, or meet the requirements of paragraph (a)(5) of this section (40 CFR 93.58 (a)(4)(i) and (i)); or
  - Emissions from the Proposed Project coupled with the current emissions in the non-attainment area would not exceed the emissions budget in the SIP (40 CFR 93.158 (a)(5)(i)(A)); or

- The area-wide and/or local air quality modeling analyses must (40 CFR 93.58 (b) (1) and (2)):
  - (1) Meet the requirements in § 93.159; and
  - (2) Show that the action does not:
    - (i) Cause or contribute to any new violation of any standard in any area; or
    - (ii) Increase the frequency or severity of any existing violation of any standard in any area; or
- The Proposed Project can request that the SIP be changed by the State Governor or the State Governor’s designee to include the emissions budget of the Federal action (40 CFR 93.158 (a)(5)(i)(B)).

Even if a project is shown to conform to the SIP by the above methods, the project may not be determined to conform to the applicable SIP unless the total direct and indirect emissions for the action are in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP (40 CFR 93.158(c)). Compliance may include but is not limited to:

- The use of baseline emissions that reflect the historical activity levels that occurred in the geographic area;
- Reasonable further progress schedules;
- Assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and
- Work practice requirements.

### **State Implementation Plan**

The USEPA classified the Spokane area as nonattainment for PM<sub>10</sub> in November 1991. The nonattainment classification was based on violation of the PM<sub>10</sub> NAAQS in the 1980s. Monitoring data showed that the Spokane area attained the PM<sub>10</sub> NAAQS in 1994. The USEPA approved the current applicable SIP for PM<sub>10</sub> in October 2004, titled *A Plan for Maintaining Particulate Matter (PM<sub>10</sub>) National Ambient Air Quality Standards in the Spokane Moderate Nonattainment Area*.

The USEPA originally classified the Spokane area as moderate nonattainment for CO in 1990 based on monitoring data from 1988 and 1989. Washington State developed a CO SIP in 1993 with an attainment date of December 31, 1995. The Spokane area was reclassified serious nonattainment by the USEPA in February, 1998 for CO based on violations of the CO NAAQS and Washington State amended its 1993 CO SIP.

The Spokane area has been monitored for CO since 1987 and attained the CO NAAQS as of December 31, 2000. In 2004, Washington State developed the *Spokane CO Nonattainment Area Maintenance Plan*, which is the current applicable SIP for CO.



## 3.0 GENERAL CONFORMITY REVIEW AND APPLICABILITY OF PROPOSED PROJECT

### Emissions

The Proposed Project's emissions are evaluated in two phases, construction and operation. CAPs will be emitted during both phases. During construction, CO and PM<sub>10</sub> are products of combustion, in this case from operation of heavy equipment. PM<sub>10</sub> emissions are also produced during earthmoving activities during the construction phase. Operational CO and PM<sub>10</sub> emissions are primarily emitted from vehicles traveling to and from the project site, while CO and PM<sub>10</sub> emissions from stationary sources are negligible and are emitted at the project site. The Final EIS provides a detailed account of CO and PM<sub>10</sub> emissions from both construction and operations.

### Maintenance Areas

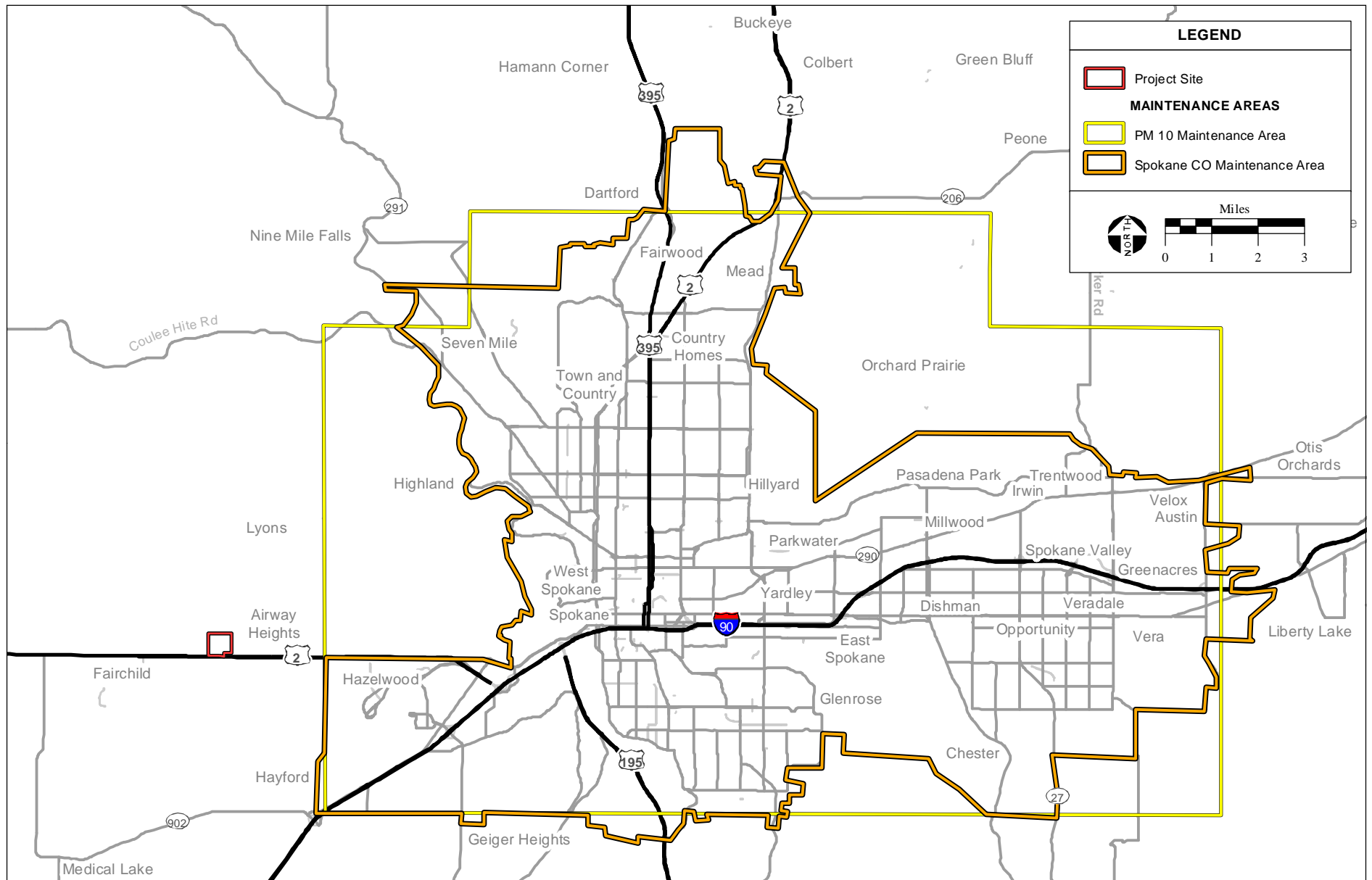
Areas designated within the applicable SIPs as maintenance for CO and PM<sub>10</sub> near the project site are shown in **Figure 1**. As shown in the figure, the Proposed Project would not be constructed or operated within the boundaries of a nonattainment or maintenance area. However, mobile emissions from vehicles traveling to and from the project site could originate or pass through the areas designated as maintenance CO and PM<sub>10</sub>. In this report these areas are generally referred to as the Spokane maintenance areas or SMAs. The western boundary of the SMAs is located approximately two miles east of the project site (refer to **Figure 1**).

### Exemption

The Federal action that is described in **Section 1.0** could result in CO and/or PM<sub>10</sub> emissions greater than de minimus thresholds, does not have emissions that are associated with a conforming program, cannot be analyzed under certain other environmental regulations, and is not in response to an emergency or natural disaster. Therefore, the Proposed Project is not exempt from a conformity determination under 40 CFR 93.153 (c)(2)-(e).

### De Minimis Thresholds

The USEPA approved Mobile6.2 air quality model was used to determine project-related construction, area, and mobile source emissions. The Mobile6.2 output files are provided in **Attachment 1**. Because the project site is not located within the SMAs, stationary source CO and PM<sub>10</sub> emissions from the Proposed Project would not occur within a designated non-attainment or maintenance area; therefore, stationary source emissions are not included in this conformity review. In addition, CO and PM<sub>10</sub> emissions from project-related mobile emissions occurring outside the SMAs are not included in this conformity review. Only project-related mobile source CO and PM<sub>10</sub> emissions that occur inside the SMAs are required to be included in the conformity review (40 CFR 93.153 (b)).



SOURCE: E.H. Pechan & Associates, 2004; StreetMap North America, 2010

West Plains Mixed Use Development Final EIS / 210553 ■

**Figure 1**  
Spokane PM10 and CO Maintenance Areas

Project-related mobile source emissions were estimated using the Mobile6.2 USEPA air quality model. The model output files are provided in **Attachment 1**. As shown in **Table 1**, total project-related mobile PM<sub>10</sub> emissions would not exceed the 100 tons per year (tpy) *de minimis* level established under 40 CFR 93.153 (b)(1). Therefore, a conformity determination is not required for PM<sub>10</sub> emissions. As shown in **Table 1**, total project-related mobile CO emissions would exceed the 100 tpy *de minimis* level established under 40 CFR 93.153 (b)(1); therefore, project-related mobile emissions emitted within the CO SMA could be greater than 100 tpy and further CO conformity review is warranted.

**TABLE 1**  
CO AND PM<sub>10</sub> TOTAL OPERATIONAL MOBILE EMISSIONS

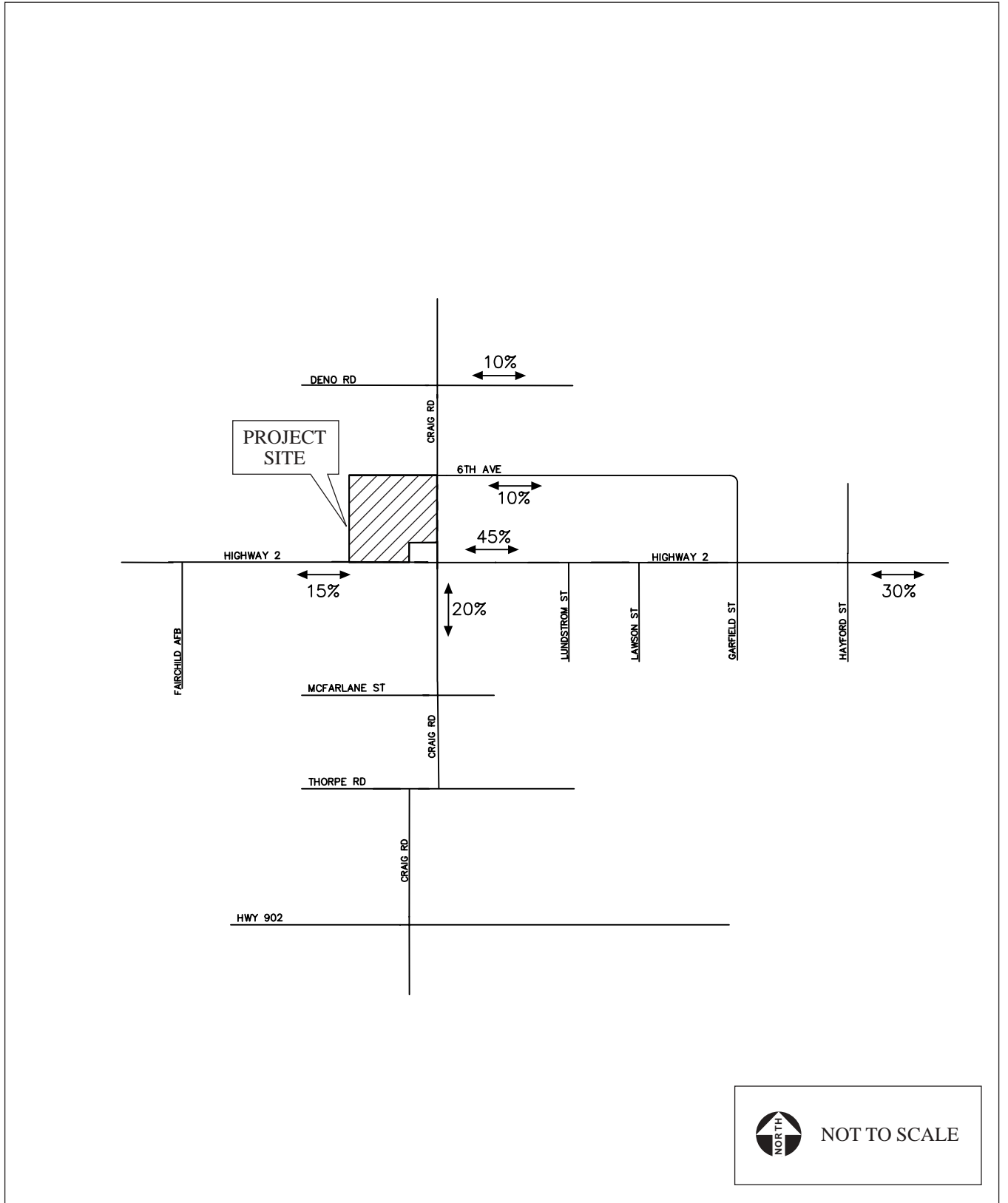
Source	CO	PM <sub>10</sub>
	tons per year (tpy)	
Mobile	750.20	2.33
<i>Applicable Conformity Thresholds</i>	<i>100</i>	<i>100</i>
Exceedance of Threshold	Yes	No
Source: Final EIS, 2012; AES, 2012.		

***Determination of CO Emissions occurring within the SMA***

***Methodology***

To determine the quantity of project-related mobile CO emissions that would occur within the CO SMA, an assessment of the vehicle miles traveled (vmt) within the SMA based on the vehicle trip distribution identified in the Final EIS was conducted. Since the vmt is directly related to the quantity of project-related CO emissions, then the percentage of the vmt traveled within the SMA would be equivalent to the percentage of project-related mobile CO emissions emitted within the SMA. To determine the vmt within the SMA it was assumed that all trips distributed east of the project site have the potential to originate or pass through the SMA. The trip distribution identified in the Spokane Tribe West Plains Development, Traffic Impact Analysis, Appendix D of the Draft EIS, is provided as **Figure 2** of this conformity review and determination. As shown in **Figure 2**, project-related traffic accesses the site via five primary routes:

- 1) Craig Road: Approximately 20% of project-related traffic is expected to travel north to the project site along Craig Road. This traffic is expected to originate from the Medical Lake and Cheney market areas, as well as travelers heading east on SR-902 and I-90;
- 2) 6<sup>th</sup> Avenue: Approximately 10 percent of project-related traffic is expected to travel west to the project site via 6<sup>th</sup> Avenue. This traffic is expected to originate in the City of Airway Heights and includes trips to and from the Northern Quest Casino. 6th Avenue is a minor arterial that does not have direct regional access to the City of Spokane metropolitan area.



- 3) Deno Road: Approximately 10 percent of project-related traffic is expected to travel west to the project site via Deno Road. This traffic is expected to originate in the unincorporated areas of the County north of the project site. Deno Road is a minor arterial that does not have direct regional access to the City of Spokane metropolitan area.
- 4) State Route 2 (SR-2) (west of Craig Road): Approximately 15 percent of project-related traffic is expected to travel east to the project site along SR-2. This traffic is expected to originate from the Fairchild Air Force Base and market areas to the west;
- 5) SR-2 (east of Craig Road): Approximately 45 percent of project-related traffic is expected to travel west to the project site along SR-2. This traffic is expected to originate from the City of Airway Heights (15 percent), the City of Spokane metropolitan area, and other market areas to the east (30 percent).

Project-related traffic accessing the project site via Craig Road, 6<sup>th</sup> Avenue, Deno Road, and SR-2 west of Craig Road would not pass through the designated maintenance areas; therefore, vmt on these roadways will not be included in the conformity determination. SR-2 is a regional roadway that directly accesses the SMA; therefore, vehicle trips on SR-2 originating or passing through the maintenance areas are included in the conformity review. The total project related CO emissions was multiplied by the percentage of the total vmt traveled within the SMA to determine the project-related CO emissions that occur within the SMA. Project-related mobile CO emissions emitted inside the SMA will be compared to the *de minimis* level of 100 tpy. If CO emissions within the SMA are found to be greater than the *de minimis* level, then a conformity determination will be performed in accordance with 40 CFR 93.153.

#### *Analysis*

Air modeling was performed for the Final EIS. The results of this analysis are summarized in the Final EIS Sections 3.4, 4.4, 5.2.3, and Volume II, Appendix T and **Attachment 1** of this conformity analysis. In accordance with 40 CFR 93.153, conformity with the SIP can be shown if CO emissions are below the *de minimis* threshold or comply with the conformity determination criteria detailed in **Section 2.0**.

As shown in **Figure 2**, 45 percent of project-related traffic would travel to and from the project site along SR-2 east of Craig Road. Of the 45 percent of project-related traffic traveling on SR-2 east of the project site, only 30 percent would travel east of Hayford Road, which is inside the SMA. The 30 percent of project-related traffic that would originate or pass through the SMA would account for 226 tpy of mobile source CO emissions.<sup>1</sup> As shown in **Table 2**, using this assumption project-related emissions occurring within the SMA would be greater than the CO *de minimis* level of 100 tpy set forth in the 40 CFR 93.153; therefore, in accordance with 40 CFR 93.153 a conformity determination is warranted for project-related mobile CO emissions.

---

<sup>1</sup> It is not expected that all 229 tpy of mobile emissions from these trips would occur within the SMA (a certain number of the vmt would occur outside the maintenance area boundaries); however, to provide a conservative analysis it is assumed that all 226 tpy would occur within the SMA.

**TABLE 2**  
CO EMISSIONS OCCURRING INSIDE THE SMA

<b>SOURCE</b>	<b>CO</b>
	<b>tons per year</b>
Mobile	226
<i>Applicable Conformity Threshold</i>	100
<b>Exceedance of Threshold</b>	<b>Yes</b>
Source: AES, 2012.	

## 4.0 CO GENERAL CONFORMITY DETERMINATION

Because project-related CO emissions occurring within the SMA would exceed *de minimis* levels, a CO conformity determination is warranted. Conformity to the applicable SIP can be shown through compliance with the conformity determination criteria detailed in **Section 2.0**.

The current SIP, *Spokane CO Nonattainment Area Maintenance Plan* (2004), does not specifically include an allowance for emissions of the Proposed Project. The Proposed Project is not specifically included in the current transportation plan and transportation improvement program which have been found to conform to the applicable SIP under 40 CFR part 51, subpart T, or 40 CFR part 93. However, project-related emissions coupled with the current emissions in the maintenance area would not exceed the emissions budget provided in the SIP, 40 CFR 93.58 (a)(4)(i) and (ii) and 40 CFR 93.158 (a)(5)(i)(A). Since project-related CO emissions emitted within the SMA are from mobile sources, a review of the SIP's motor vehicle emissions budget (MVEB) was performed. Section 5.8 of the SIP provides the MVEB for the SMA. The MVEB for the SMA is 279 tons per planning period daily (tons/PPD). The MVEB includes 217 tons/PPD for the baseline year of 2002 and 62 tons/PPD of excess emissions allotted to the on-road mobile sector. When considered together with all other emission sources, the MVEB of 279 tons/PPD meets the requirements for maintaining the attainment status of the SMA. The Proposed Project would emit approximately 226 tons per year or 0.51 tons/PPD of CO from mobile sources within the SMA.

The SIP provides projection year emissions summaries for on-road mobile sources of 192 tons/PPD and 170 tons/PPD for the years 2010 and 2015, respectively. With the addition of project-related on-road mobile CO emissions, the total SMA CO emissions would be 192.51 tons/PPD and 170.51 tons/PPD for the years 2010 and 2015, respectively. Project-related emissions when coupled with the CO emissions in the maintenance area provided in the SIP would not exceed the SIP's CO MVEB; therefore, project-related mobile CO emissions that occur within the SMA are considered to conform with the applicable SIP in accordance with 40 CFR 93.158 (a)(5)(i)(A).

The Spokane Regional Transportation Council's *The Metropolitan Planning Area, 2011-2035 Spokane Metropolitan Transportation Plan Update* (SMTPU) provides a CO conformity analysis within the SMA. CO emissions estimated for the SMA were calculated in pounds per day for the years 2008, 2015, 2025, and 2035 and provided in Table 5.1 of the SMTPU. According to Table 5.1 of the SMTPU, emissions in the year 2008 would be greatest at 252,347 pounds per day or 126 tons/PPD; therefore, with the addition of project-related CO emissions the total mobile source emissions would be 126.51 tons/PPD. Project-related CO emissions when coupled with the 2015 CO emission estimates provided in the SMTPU would not exceed the MVEB of 279 tons/PPD. Project-related mobile CO emissions when coupled with the SMA estimated 2008, 2025, and 2035 CO emissions would also not exceed the MVEB of 279 tons/PPD. Therefore, project-related mobile CO emissions that occur within the SMA are considered to conform with the applicable SIP in accordance with 40 CFR 93.158 (a)(5)(i)(A).

To further exemplify that project-related traffic operating within the SMA would not cause an exceedance of the NAAQS, three intersections located within the SMA where CO hotspot analyses was conducted were compared with an intersection within the SMA that accommodates project-related traffic. The intersections of Sullivan Road and Wellesley Avenue, West Second Avenue at South Monroe Street, and west Boon Avenue and north Washington Street were compared with the intersection of SR-2 and Hayford Road. The intersection at SR-2 and Hayford Road is the nearest intersection to the project site located within or directly adjacent to the SMA. The intersection includes the greatest quantity of project-related traffic of any modeled intersection (refer to Appendix D of the Draft EIS) within or adjacent to the SMA. The Proposed Project would add an additional 1,108 vehicles per hour to this intersection (Appendix D of the Draft EIS). According to the Spokane Regional Transportation Council (SRTC), the approved background CO concentration within the suburban portion of the SMA in 2020 is 1.44 parts per million (ppm); project buildout is expected to occur in the year 2019<sup>2</sup>. The project-related traffic volumes at Sullivan Road and Wellesley Avenue, West Second Avenue at South Monroe Street, and west Boon Avenue and north Washington Street are 1,633, 35, and 335 vehicles per peak hour, respectively.

The SRTC and ICF Jones and Stokes Associates (in support of the Bigelow Road/Forker Road Project Finding of No Significant Impact)<sup>3</sup> modeled CO concentrations at the three intersections using the USEPA approved dispersion model Cal3HQC and Spokane specific meteorology data, year specific background CO concentrations, roadway conditions, and traffic volumes.

The increase in the 8-hour CO concentration at the three intersections due to project-related traffic was found to be 0.6 ppm at Sullivan Road and Wellesley Avenue, 0.3 ppm at Boon Avenue and north Washington Street, and 0.0 ppm at west Second Avenue at south Monroe Street. To determine if project-related traffic at the intersection of SR-2 and Hayford Road would cause an exceedance of the 9 ppm NAAQS, a graph of project-related vehicles per peak hour versus the increase in CO concentration was plotted. A regression equation was determined from these data points and it was calculated that the increase in CO concentration at the intersection from project-related traffic would be 0.41 ppm. Factoring in the background CO concentration at the intersection of SR-2 and Hayford Road in 2020 using traffic volumes in the Spokane Tribe West Plains Development, Traffic Impact Analysis (provided in Appendix D of the EIS), the CO concentration at the intersection is estimated to be 1.85 ppm at buildout of the Proposed Project. This is significantly less than the NAAQS of 9.0 ppm; therefore, project-related traffic that operates within the SMA would not cause an exceedance of the CO NAAQS or delay or hinder the regions maintenance efforts.

---

<sup>2</sup> Spokane Regional Transportation Council, 2012. Background Carbon Monoxide Levels. Available online at: [http://www.srtc.org/air\\_quality.html](http://www.srtc.org/air_quality.html). Viewed on January 9, 2013.

<sup>3</sup> Transportation Conformity Analysis for Carbon Monoxide and Particulate Matter – Bigelow Gulch Road/Forker Road Urban Connector, Spokane WA, 2008. Appendix A – Additions and Errata to Revised Environmental Assessment, 2008. Available online at: <https://www.spokanecounty.org/engineer/content.aspx?c=1507>. Viewed on January 9, 2013.



## 5.0 CONCLUSION

Project-related PM<sub>10</sub> emissions would not exceed the *de minimis* levels within the PM<sub>10</sub> SMA; therefore, in accordance with 40 CFR 93.153, the Proposed Project would conform to the SIP for PM<sub>10</sub> and a conformity determination is not warranted.

Project-related CO emissions when coupled with CO emissions estimates within the CO SMA are less than the SIP's emission budget; therefore, the Proposed Project would conform to the SIP for CO. The total CO emissions from the Proposed Project would not hinder the State's efforts to comply with relevant requirements and milestones contained in the SIP. Mitigation to reduce project-related CO emissions is not warranted to show conformity with the CO SIP; however, mitigation measures are recommended in the EIS which would minimize CO mobile emissions.

This Draft Conformity Determination will be submitted to the USEPA, Washington Department of Natural Resources, and Spokane Regional Clean Air Agency per 40 CFR 93.155 (a). After the 30-day comment period for this Draft Conformity Determination, the BIA may make a Final Conformity Determination per 40 CFR 93.150 (b), prior to the federal action being taken.

# Attachment 1

---

**Air Quality Emission Calculation and Mobile6.2 Model Output**

**Table 1a**  
Alternative 1 - Percent Distribution, Patrons, and Vehicle Miles Travels per Year

Routes <sup>1</sup>	Market Areas	Trip Distribution <sup>1</sup>	Distance (miles)	Phase I and Alternative 2		Phase II		Phase III	
				Patrons	VMT/Year	Patrons	VMT/Year	Patrons	VMT/Year
Craig Road/Deno Road		0.10	33.4	188340	4,193,704	227760	5,071,456	282291	6,285,680
Highway 2 - West	Fairchild's Air Force Base	0.15	6.5	282510	1,224,210	341640	1,480,440	423436.5	1,834,892
6th Avenue	City of Spokane, Idaho	0.10	17.5	188340	2,197,300	227760	2,657,200	282291	3,293,395
Highway 2 - East	City of Spokane, Idaho	0.45	7.9	847530	4,463,658	1024920	5,397,912	1270310	6,690,297
Craigs Road - South	Fairchild's Air Force Base, City of Medical Lake	0.20	5.5	376680	1,381,160	455520	1,670,240	564582	2,070,134
<b>Total VMT (miles)</b>					13,460,032		16,277,248		20,174,397

<sup>1</sup> Traffic Impact Analysis, trip distribution (David Evans and Associates, 2011)  
Source: AES, 2011

**Table 1b**  
Alternative 3 - Percent Distribution, Patrons, and Vehicle Miles Travels per Year

Routes	Market Areas	Trip Distribution <sup>1</sup>	Patrons <sup>1</sup>	Distance (miles)	VMT/Year
Craig Road/Deno Road		0.10	312393.1106	33.4	10,433,930
Highway 2 - West	Fairchild's Air Force Base	0.15	468589.666	6.5	3,045,833
6th Avenue	City of Spokane, Idaho	0.10	312393.1106	17.5	5,466,879
Highway 2 - East	City of Spokane, Idaho	0.45	1405768.998	7.9	11,105,575
Craigs Road - South	Fairchild's Air Force Base, City of Medical Lake	0.20	624786.2213	5.5	3,436,324
<b>Total VMT (miles)</b>					33,488,541

<sup>1</sup> Traffic Impact Analysis, trip distribution (David Evans and Associates, 2011)  
Source: AES, 2011

**Table 2a**  
**Mobile Operations Criteria Pollutant and GHG Emissions**

Alternatives	1, Phase I	1, Phase II	1, Phase III	2	3
Speed (mph)	Freeway, Arterial, and Local	Freeway, Arterial, and Local	Freeway, Arterial, and Local	Freeway, Arterial, and Local	Freeway, Arterial, and Local
<b>vmt/yr</b>	13,460,032	16,277,248	20,174,397	13,460,032	33,488,541
<b>Criteria Pollutant Emissions (tpy)</b>					
NO <sub>x</sub>	16.6	20.0	24.8	15.4	41.2
VOC	10.9	13.2	16.3	10.8	27.1
SO <sub>2</sub>	0.1	0.1	0.2	0.1	0.3
CO	202.3	244.7	303.2	138.7	503.4
PM <sub>2.5</sub>	0.3	0.4	0.5	0.3	0.8
PM <sub>10</sub>	0.6	0.7	0.8	0.6	1.4
<b>Greenhouse Gas</b>					
CO <sub>2</sub>	8256.5	9984.6	12375.1	8256.5	20542.1

Criteria pollutant emissions were calculated using half summer/half winter emission factors.

Source: Mobile 6.2, 2003; AES, 2011.

**Table 2b**  
**2032 Mobile Operations Criteria Pollutant and GHG Emissions**

Alternatives	1	2	3
Speed (mph)	Freeway, Arterial, and Local	Freeway, Arterial, and Local	Freeway, Arterial, and Local
<b>vmt/yr</b>	20,174,397	13,460,032	33,488,541
<b>Criteria Pollutant Emissions (tpy)</b>			
NO <sub>x</sub>	7.8	5.2	13.0
VOC	9.3	6.2	15.4
SO <sub>2</sub>	0.2	0.1	0.3
CO	229.5	153.1	380.9
PM <sub>2.5</sub>	0.3	0.2	0.5
PM <sub>10</sub>	0.6	0.4	1.0
<b>Greenhouse Gas</b>			
CO <sub>2</sub>	12,584.1	8,395.9	20,888.9

Criteria pollutant emissions were calculated using half summer/half winter emission factors.

Source: Mobile 6.2, 2003; AES, 2011.

**Table 3a**  
Build Out Operational Emission Factors

<b>Season</b>	<b>Winter</b>	<b>Summer</b>
<b>Default Speeds</b>	<b>Freeway, Arterial, and Local<sup>1</sup></b>	<b>Freeway, Arterial, and Local<sup>1</sup></b>
<b>Criteria Pollutant</b>	<b>grams per mile</b>	
NO <sub>x</sub>	1.198	1.035
VOC	0.741	0.727
SO <sub>2</sub>	0.0078	0.0078
CO	17.925	9.347
PM <sub>2.5</sub>	0.0222	0.0215
PM <sub>10</sub>	0.0378	0.0371
<b>Greenhouse Gas</b>		
CO <sub>2</sub>	555.84	557.12

<sup>1</sup> Freeway, Arterial, and local speeds = 55, 40, and 25 miles per hour, respectively.

Source: Mobile6.2, 2003; AES, 2011

**Table 3b**  
Cumulative Operational Emission Factors

<b>Season</b>	<b>Winter</b>	<b>Summer</b>
<b>Default Speeds</b>	<b>Freeway, Arterial, and Local<sup>1</sup></b>	<b>Freeway, Arterial, and Local<sup>1</sup></b>
<b>Criteria Pollutant</b>	<b>grams per mile</b>	
NO <sub>x</sub>	0.373	0.329
VOC	0.426	0.408
SO <sub>2</sub>	0.0078	0.0078
CO	13.560	7.076
PM <sub>2.5</sub>	0.0126	0.0126
PM <sub>10</sub>	0.0274	0.0274
<b>Greenhouse Gas</b>		
CO <sub>2</sub>	565.61	566.14

<sup>1</sup> Freeway, Arterial, and local speeds = 55, 40, and 25 miles per hour, respectively.

Source: Mobile6.2, 2003; AES, 2011

**Table 4**  
Fugitive Dust Emissions from Construction

<b>Alternatives</b>	<b>1, phase I and 2</b>	<b>1, phase II</b>	<b>1, phase III</b>	<b>3</b>
Area to be Graded (acres)	68.19	31.90	27.19	132
Grading Duration (day)	110	66	132	132
PM <sub>10</sub> Emission Factor (tons PM <sub>10</sub> /acre-day)	0.0191	0.0191	0.0191	0.0191
<b>PM<sub>10</sub> Emissions (tons/year)</b>	<b>0.012</b>	<b>0.009</b>	<b>0.004</b>	<b>0.019</b>
PM <sub>2.5</sub> Emission Factor (tons PM <sub>10</sub> /acre/day)	0.005	0.005	0.005	0.005
<b>PM<sub>2.5</sub> Emissions (tons/year)<sup>1</sup></b>	<b>0.003</b>	<b>0.003</b>	<b>0.001</b>	<b>0.005</b>

Source: OFFROAD air quality model, 2007.

**Table 5a**  
Alternatives 1, Phase I and Alternative 2 - Construction Emissions

Construction Equipment <sup>1</sup>	Horsepower <sup>2</sup>	Load Factor <sup>2</sup>	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>4</sup>						Emission (tons/year)						
				CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>	CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
<b>Year 2012 Site Grading</b>																
2 Bulldozer	352	0.59	8	1.38	0.36	4.76	0.74	0.33	0.32	1.84	0.48	6.36	0.99	0.44	0.43	
2 Motor Grader	174	0.575	8	1.36	0.35	7.43	0.74	0.33	0.32	0.88	0.23	4.78	0.48	0.21	0.21	
2 Water Truck	417	0.49	8	2.07	0.44	5.49	0.74	0.41	0.40	2.72	0.58	7.21	0.97	0.54	0.53	
2 Other Construction Equipment	190	0.62	8	1.55	0.38	5.00	0.74	0.35	0.34	1.17	0.29	3.79	0.56	0.27	0.26	
<b>Total Miles Traveled</b>				<b>Emission Factors (g/miles)</b>						<b>Emissions (tons/year)</b>						
Soil Haul Trucks	98,560			3.748	0.386	0.383	0.005	0.040	0.026	0.04	0.41	0.04	0.0005	0.0043	0.0028	
Employee Trips <sup>3</sup>	17,720			17.946	0.735	1.156	0.0078	0.0371	0.0215	0.35	0.01	0.02	0.0002	0.0007	0.0004	
Fugitive Dust (38.2 Acres)														0.012	0.003	
<b>Total Site Grading Emissions</b>										<b>7.01</b>	<b>1.99</b>	<b>22.21</b>	<b>3.00</b>	<b>1.47</b>	<b>1.42</b>	
<b>Year 2013 Construction</b>																
2 Concrete/Industrial Saw	84	0.73	8	8.50	1.00	5.80	0.13	0.16	0.15	3.35	0.39	2.29	0.05	0.06	0.06	
3 Crane	190	0.43	8	1.30	0.44	5.72	0.73	0.34	0.33	1.02	0.35	4.51	0.58	0.27	0.26	
3 Rough Terrain Forklift	94	0.475	8	7.76	1.98	8.56	0.95	1.39	1.35	3.34	0.85	3.69	0.41	0.60	0.58	
3 Rubber Tire Loader	165	0.465	8	1.55	0.38	5.00	0.74	0.35	0.34	1.15	0.28	3.70	0.55	0.26	0.25	
2 Tractors/Loader/Backhoe	79	0.465	8	8.21	1.85	7.22	0.95	1.37	1.33	1.94	0.44	1.71	0.22	0.32	0.31	
2 Other Construction Equipment	190	0.62	8	1.55	0.38	5.00	0.74	0.35	0.34	1.17	0.29	3.79	0.56	0.27	0.26	
Employee Trips <sup>3</sup>				17.946	0.735	1.156	0.0078	0.0371	0.0215	0.35	0.01	0.02	0.00	0.00	0.00	
<b>Paving<sup>4</sup></b>																
Paver	132	0.59	8	8.5	1.0	5.8	0.17	0.16	0.15	2.13	0.25	1.45	0.04	0.04	0.04	
Paving Equipment	111	0.53	8	8.5	1.0	5.8	0.14	0.16	0.15	1.61	0.19	1.10	0.03	0.03	0.03	
2 Rollers	114	0.43	8	8.5	1.0	5.8	0.14	0.16	0.15	2.68	0.32	1.83	0.04	0.05	0.05	
<b>Architectural Coating</b>																
Coating											34.46					
<b>Total Construction Emissions</b>										<b>18.75</b>	<b>37.83</b>	<b>24.08</b>	<b>2.48</b>	<b>1.90</b>	<b>1.84</b>	

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2007 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Based on 20 mile trip length, 886 trips per day, and EMFAC, 2007 emission factors (grams/mile).

<sup>4</sup> Emission factors provided by EPA approved OFFROAD 2007, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour

**Table 5b**  
Alternatives 1, Phase II - Construction Emissions

Construction Equipment <sup>1</sup>	Horsepower <sup>2</sup>	Load Factor <sup>2</sup>	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>4</sup>						Emission (tons/year)					
				CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>	CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>
<b>Year 2015 Site Grading</b>															
2 Bulldozer	352	0.59	8	1.38	0.36	4.76	0.74	0.33	0.32	1.84	0.48	6.36	0.99	0.44	0.43
2 Motor Grader	174	0.575	8	1.36	0.35	7.43	0.74	0.33	0.32	0.88	0.23	4.78	0.48	0.21	0.21
2 Water Truck	417	0.49	8	2.07	0.44	5.49	0.74	0.41	0.40	2.72	0.58	7.21	0.97	0.54	0.53
2 Other Construction Equipment	190	0.62	8	1.55	0.38	5.00	0.74	0.35	0.34	1.17	0.29	3.79	0.56	0.27	0.26
Employee Trips <sup>3</sup>		12,000		17.946	0.735	1.156	0.0078	0.0371	0.0215	0.24	0.01	0.02	0.00	0.00	0.00
Fugitive Dust														0.009	0.003
<b>Total Site Grading Emissions</b>										<b>6.85</b>	<b>1.58</b>	<b>22.16</b>	<b>3.00</b>	<b>1.47</b>	<b>1.42</b>
<b>Year 2016 Construction</b>															
2 Concrete/Industrial Saw	84	0.73	8	8.50	1.00	5.80	0.13	0.16	0.15	3.35	0.39	2.29	0.05	0.06	0.06
2 Crane	190	0.43	8	1.30	0.44	5.72	0.73	0.34	0.33	0.68	0.23	3.01	0.38	0.18	0.17
1Rough Terrain Forklift	94	0.475	8	7.76	1.98	8.56	0.95	1.39	1.35	1.11	0.28	1.23	0.14	0.20	0.19
1Rubber Tire Loader	165	0.465	8	1.55	0.38	5.00	0.74	0.35	0.34	0.38	0.09	1.23	0.18	0.09	0.08
1Tractors/Loader/Backhoe	79	0.465	8	8.21	1.85	7.22	0.95	1.37	1.33	0.97	0.22	0.85	0.11	0.16	0.16
Employee Trips <sup>3</sup>				17.946	0.735	1.156	0.0078	0.0371	0.0215	0.24	0.02	0.03	0.00	0.00	0.00
<b>Paving<sup>4</sup></b>															
Paver	132	0.59	8	8.5	1.0	5.8	0.17	0.16	0.15	2.13	0.25	1.45	0.04	0.04	0.04
Paving Equipment	111	0.53	8	8.5	1.0	5.8	0.14	0.16	0.15	1.61	0.19	1.10	0.03	0.03	0.03
2 Rollers	114	0.43	8	8.5	1.0	5.8	0.14	0.16	0.15	2.68	0.32	1.83	0.04	0.05	0.05
<b>Architectural Coating</b>															
Coating												16.12			
<b>Total Construction Emissions</b>										<b>13.16</b>	<b>18.12</b>	<b>13.01</b>	<b>0.98</b>	<b>0.81</b>	<b>0.78</b>

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2007 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Based on 20 mile trip length, 600 trips per day, and EMFAC, 2007 emission factors (grams/mile).

<sup>4</sup> Emission factors provided by EPA approved OFFROAD 2007, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour



**Table 5c**  
Alternatives 1, Phase III - Construction Emissions

Construction Equipment <sup>1</sup>	Horsepower <sup>2</sup>	Load Factor <sup>2</sup>	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>4</sup>						Emission (tons/year)					
				CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>	CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>
<b>Year 2019 Site Grading</b>															
2 Bulldozer	352	0.59	8	1.38	0.36	4.76	0.74	0.33	0.32	1.84	0.48	6.36	0.99	0.44	0.43
2 Motor Grader	174	0.575	8	1.36	0.35	7.43	0.74	0.33	0.32	0.88	0.23	4.78	0.48	0.21	0.21
2 Water Truck	417	0.49	8	2.07	0.44	5.49	0.74	0.41	0.40	2.72	0.58	7.21	0.97	0.54	0.53
2 Other Construction Equipment	190	0.62	8	1.55	0.38	5.00	0.74	0.35	0.34	1.17	0.29	3.79	0.56	0.27	0.26
Employee Trips <sup>3</sup>				17.946	0.735	1.156	0.0078	0.0371	0.0215	0.42	0.01	0.02	0.00	0.00	0.00
Fugitive Dust														0.004	0.001
<b>Total Site Grading Emissions</b>										<b>7.04</b>	<b>1.59</b>	<b>22.17</b>	<b>3.00</b>	<b>1.46</b>	<b>1.42</b>
<b>Year 2020 Construction</b>															
3 Concrete/Industrial Saw	84	0.73	8	8.50	1.00	5.80	0.13	0.16	0.15	5.03	0.59	3.43	0.08	0.09	0.09
4 Crane	190	0.43	8	1.30	0.44	5.72	0.73	0.34	0.33	1.37	0.46	6.01	0.77	0.36	0.35
5 Rough Terrain Forklift	94	0.475	8	7.76	1.98	8.56	0.95	1.39	1.35	5.57	1.42	6.15	0.68	1.00	0.97
4 Rubber Tire Loader	165	0.465	8	1.55	0.38	5.00	0.74	0.35	0.34	1.53	0.38	4.93	0.73	0.35	0.34
3 Tractors/Loader/Backhoe	79	0.465	8	8.21	1.85	7.22	0.95	1.37	1.33	2.91	0.66	2.56	0.34	0.49	0.47
Employee Trips <sup>3</sup>				17.946	0.735	1.156	0.0078	0.0371	0.0215	0.42	0.01	0.02	0.00	0.00	0.00
<b>Paving<sup>4</sup></b>															
Paver	132	0.59	8	8.5	1.0	5.8	0.17	0.16	0.15	2.13	0.25	1.45	0.04	0.04	0.04
Paving Equipment	111	0.53	8	8.5	1.0	5.8	0.14	0.16	0.15	1.61	0.19	1.10	0.03	0.03	0.03
2 Rollers	114	0.43	8	8.5	1.0	5.8	0.14	0.16	0.15	2.68	0.32	1.83	0.04	0.05	0.05
<b>Architectural Coating</b>															
Coating												13.74			
<b>Total Construction Emissions</b>										<b>23.25</b>	<b>18.02</b>	<b>27.48</b>	<b>2.71</b>	<b>2.40</b>	<b>2.33</b>

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2007 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Based on 20 mile trip length, 1,072 trips per day, and EMFAC, 2007 emission factors (grams/mile).

<sup>4</sup> Emission factors provided by EPA approved OFFROAD 2007, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour

Table 6 - Alternative 3, Construction Emissions

Table 6 Alternatives 3 - Construction Emissions																
Construction Equipment <sup>1</sup>	Horsepower <sup>2</sup>	Load Factor <sup>2</sup>	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>4</sup>						Emission (tons/year)						
				CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>	CO	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>3</sup>	
<b>Year 2012 Site Grading</b>																
2 Bulldozer	352	0.59	8	1.38	0.36	4.76	0.74	0.33	0.32	1.84	0.48	6.36	0.99	0.44	0.43	
3 Motor Grader	174	0.575	8	1.36	0.35	7.43	0.74	0.33	0.32	1.31	0.34	7.17	0.71	0.32	0.31	
2 Water Truck	417	0.49	8	2.07	0.44	5.49	0.74	0.41	0.40	2.72	0.58	7.21	0.97	0.54	0.53	
2 Other Construction Equipment	190	0.62	8	1.55	0.38	5.00	0.74	0.35	0.34	1.17	0.29	3.79	0.56	0.27	0.26	
<b>Total Miles Traveled</b>				<b>Emission Factors (g/miles)</b>						<b>Emissions (tons/year)</b>						
Soil Haul Trucks	98,560			3.748	0.386	0.383	0.005	0.040	0.026	0.04	0.41	0.04	0.0005	0.0043	0.0028	
Employee Trips <sup>3</sup>	21,440			17.946	0.735	1.156	0.0078	0.0371	0.0215	0.42	0.02	0.03	0.00	0.00	0.00	
Fugitive Dust										0.019 0.005						
<b>Total Site Grading Emissions</b>										<b>7.52</b>	<b>2.11</b>	<b>24.60</b>	<b>3.24</b>	<b>1.59</b>	<b>1.53</b>	
<b>2013 and 2014 Year Construction</b>																
3 Concrete/Industrial Saw	84	0.73	8	8.50	1.00	5.80	0.13	0.16	0.15	5.03	0.59	3.43	0.08	0.09	0.09	
3 Crane	190	0.43	8	1.30	0.44	5.72	0.73	0.34	0.33	1.02	0.35	4.51	0.58	0.27	0.26	
4 Rough Terrain Forklift	94	0.475	8	7.76	1.98	8.56	0.95	1.39	1.35	4.46	1.14	4.92	0.55	0.80	0.78	
4 Rubber Tire Loader	165	0.465	8	1.55	0.38	5.00	0.74	0.35	0.34	1.53	0.38	4.93	0.73	0.35	0.34	
3 Tractors/Loader/Backhoe	79	0.465	8	8.21	1.85	7.22	0.95	1.37	1.33	2.91	0.66	2.56	0.34	0.49	0.47	
Employee Trips <sup>3</sup>				17.946	0.735	1.156	0.0078	0.0371	0.0215	0.35	0.01	0.02	0.00	0.00	0.00	
<b>Paving<sup>4</sup></b>																
Paver	132	0.59	8	8.5	1.0	5.8	0.17	0.16	0.15	2.13	0.25	1.45	0.04	0.04	0.04	
Paving Equipment	111	0.53	8	8.5	1.0	5.8	0.14	0.16	0.15	1.61	0.19	1.10	0.03	0.03	0.03	
2 Rollers	114	0.43	8	8.5	1.0	5.8	0.14	0.16	0.15	2.68	0.32	1.83	0.04	0.05	0.05	
<b>Architectural Coating</b>																
Coating											7.53					
<b>Total 2013 Construction Emission<sup>5</sup></b>										<b>13.03</b>	<b>6.85</b>	<b>14.85</b>	<b>1.43</b>	<b>1.27</b>	<b>1.23</b>	
<b>Total 2014 Construction Emission<sup>5</sup></b>										<b>8.69</b>	<b>4.56</b>	<b>9.90</b>	<b>0.95</b>	<b>0.85</b>	<b>0.82</b>	

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2007 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Based on 20 mile trip length, 1,072 trips per day, and EMFAC, 2007 emission factors (grams/mile).

<sup>4</sup> Emission factors provided by EPA approved OFFROAD 2007, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour

<sup>5</sup> Assume 60 percent of emissions would occur in 2013 and 40 percent in 2014.

**Table 7a**  
Alternatives 1 - Construction GHG Emissions

Construction Equipment <sup>1</sup>	Horsepower	Load Factor	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>3</sup>	Emission (tons/year)
				CO2	CO2
<b>Site Grading</b>					
6 Bulldozer	352.00	0.59	8.00	536.20	1,948.84
6 Motor Grader	174.00	0.58	8.00	536.30	939.03
6 Water Truck	417.00	0.49	8.00	536.00	1,916.69
6 Other Construction Equipment	190.00	0.62	8.00	536.20	1,105.42
		<b>Miles Traveled</b>		<b>Emission Factors (g/miles)</b>	<b>Emission (tons/year)</b>
Soil Haul Trucks		98,560		500.02	49.28
Employee Trips		21,440		552.80	11.85
<b>Construction</b>					
7 Concrete/Industrial Saw	84.00	0.73	8.00	529.70	731.18
9 Crane	190.00	0.43	8.00	530.20	1,253.72
9 Rough Terrain Forklift	94.00	0.48	8.00	690.80	892.72
8 Rubber Tire Loader	165.00	0.47	8.00	536.20	1,058.40
6 Tractors/Loader/Backhoe	79.00	0.47	8.00	691.10	489.86
2 Other Construction Equipment	190	0.62	8	530.20	401.71
Employee Trips		21,440.00		552.80	11.85
<b>Paving</b>					
Paver	132.00	0.59	8.00	520.30	130.31
Paving Equipment	111.00	0.53	8.00	520.30	98.44
2 Rollers	114.00	0.43	8.00	520.30	164.04
<b>Total GHG Construction Emissions</b>					<b>11,203.35</b>

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2002 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Emission factors provided by EPA approved NONROAD 2005.

Tables 7 b- Alternative 1, 2, and 3 Construction Emissions

<b>Table 7b</b>					
Alternatives 2 - Construction GHG Emissions					
Construction Equipment <sup>1</sup>	Horsepower	Load Factor	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>3</sup>	Emission (tons/year)
				CO2	CO2
<b>Site Grading</b>					
2 Bulldozer	352.00	0.59	8.00	536.20	716.22
2 Motor Grader	174.00	0.58	8.00	536.30	345.11
2 Water Truck	417.00	0.49	8.00	536.00	704.41
2 Other Construction Equipment	190.00	0.62	8.00	536.20	406.26
	Miles Traveled			Emission Factors (g/miles)	Emission (tons/year)
Soil Haul Trucks	98,560			500.02	49.28
Employee Trips <sup>3</sup>	17,720			552.80	9.80
<b>Construction</b>					
2 Concrete/Industrial Saw	84.00	0.73	8.00	529.70	208.91
3 Crane	190.00	0.43	8.00	530.20	417.91
3 Rough Terrain Forklift	94.00	0.48	8.00	690.80	297.57
3 Rubber Tire Loader	165.00	0.47	8.00	536.20	396.90
2 Tractors/Loader/Backhoe	79.00	0.47	8.00	691.10	163.29
2 Other Construction Equipment	190	0.62	8	530.20	401.71
Employee Trips <sup>3</sup>	17,720			552.80	9.80
<b>Paving</b>					
Paver	132.00	0.59	8.00	520.30	130.31
Paving Equipment	111.00	0.53	8.00	520.30	98.44
2 Rollers	114.00	0.43	8.00	520.30	164.04
<b>Total GHG Construction Emissions</b>					<b>4,519.94</b>

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2002 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Emission factors provided by EPA approved NONROAD 2005.

**Table 7c**  
 Alternatives 3 - Construction GHG Emissions

Construction Equipment <sup>1</sup>	Horsepower	Load Factor	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>3</sup>	Emission (tons/year)
				CO2	CO2
<b>Site Grading</b>					
5 Bulldozer	352.00	0.59	8.00	536.20	1,790.56
6 Motor Grader	174.00	0.58	8.00	536.30	1,035.32
3 Water Truck	417.00	0.49	8.00	536.00	1,056.61
5 Other Construction Equipment	190.00	0.62	8.00	536.20	1,015.64
		<b>Miles Traveled</b>		<b>Emission Factors (g/miles)</b>	<b>Emission (tons/year)</b>
Soil Haul Trucks		98,560		500.02	49.28
Employee Trips <sup>3</sup>		21,440		552.80	11.85
<b>Construction</b>					
3 Concrete/Industrial Saw	84.00	0.73	8.00	529.70	313.36
3 Crane	190.00	0.43	8.00	530.20	417.91
6 Rough Terrain Forklift	94.00	0.48	8.00	690.80	595.14
5 Rubber Tire Loader	165.00	0.47	8.00	536.20	661.50
5 Tractors/Loader/Backhoe	79.00	0.47	8.00	691.10	408.21
Employee Trips <sup>3</sup>		21,440		552.80	11.85
<b>Paving</b>					
2 Paver	132.00	0.59	8.00	520.30	260.62
3 Paving Equipment	111.00	0.53	8.00	520.30	295.31
3 Rollers	114.00	0.43	8.00	520.30	246.06
<b>Total GHG Construction Emissions</b>					<b>8,169.23</b>

Source: EPA, 2007; AES, 2011

<sup>1</sup> Construction equipment list from USEPA approved URBEMIS 2002 air model.

<sup>2</sup> Hours per normal work day.

<sup>3</sup> Emission factors provided by EPA approved NONROAD 2005.

Tables 8 a and b - Alts 1, Phases I and II and 2 Stationary Source Emissions

**Table 8 a**  
Alternative 1, Phase I and Alternative 2

<b>Pollutant/GHG</b>	<b>MMscf/year</b>	<b>Emission Factors (lb/MMscf)</b>	<b>Conversion factor (lb/tons)</b>	<b>Emissions (tons)</b>
VOC	130	5.5	0.0005	0.36
NOx	130	0.64	0.0005	0.04
CO	130	11	0.0005	0.72
SO2	130	0.6	0.0005	0.04
PM10	130	5.7	0.0005	0.37
PM2.5	130	1.9	0.0005	0.12
<b>Greenhouse Gas</b>			<b>lb/MT</b>	<b>MT</b>
CO2	130	120,000	0.00045	7,020

Stationary Sources include boilers, stoves, heating units, and other equipment.  
Source: EPA, AP 42, 1997..

**Table 8 b**  
Alternative 1, Phase II

<b>Pollutant/GHG</b>	<b>MMscf/year</b>	<b>Emission Factors (lb/MMscf)</b>	<b>Conversion factor (lb/tons)</b>	<b>Emissions (tons)</b>
VOC	160	5.5	0.0005	0.44
NOx	160	0.64	0.0005	0.05
CO	160	11	0.0005	0.88
SO2	160	0.6	0.0005	0.05
PM10	160	5.7	0.0005	0.46
PM2.5	160	1.9	0.0005	0.15
<b>Greenhouse Gas</b>			<b>lb/MT</b>	<b>MT</b>
CO2	160	120,000	0.00045	8,640

Stationary Sources include boilers, stoves, heating units, and other equipment.  
Source: EPA, AP 42, 1997..

Tables 8 c and d - Alts 1, Phase III and 3 Stationary Source Emissions

**Table 8 c**  
Alternative 1, Phase III

<b>Pollutant/GHG</b>	<b>MMscf/year</b>	<b>Emission Factors (lb/MMscf)</b>	<b>Conversion factor (lb/tons)</b>	<b>Emissions (tons)</b>
VOC	240	5.5	0.0005	0.66
NOx	240	0.64	0.0005	0.08
CO	240	11	0.0005	1.32
SO2	240	0.6	0.0005	0.07
PM10	240	5.7	0.0005	0.68
PM2.5	240	1.9	0.0005	0.23
<b>Greenhouse Gas</b>			<b>lb/MT</b>	<b>MT</b>
CO2	240	120,000	0.00045	12,960

Stationary Sources include boilers, stoves, heating units, and other equipment.  
Source: EPA, AP 42, 1997..

**Tabel 8 d**  
Alternative 3

<b>Pollutant/GHG</b>	<b>MMscf/year</b>	<b>Emission Factors (lb/MMscf)</b>	<b>Conversion factor (lb/tons)</b>	<b>Emissions (tons)</b>
VOC	240	5.5	0.0005	0.66
NOx	240	0.64	0.0005	0.08
CO	240	11	0.0005	1.32
SO2	240	0.6	0.0005	0.07
PM10	240	5.7	0.0005	0.68
PM2.5	240	1.9	0.0005	0.23
<b>Greenhouse Gas</b>			<b>lb/MT</b>	<b>MT</b>
CO2	240	120,000	0.00045	12,960

Stationary Sources include boilers, stoves, heating units, and other equipment.  
Source: EPA, AP 42, 1997..





Composite CO2 :			Winter criteria.PM						
1415.5	177.4	555.84	368.1	478.4	621.6	514.8	912.6	314.1	599.5

---

---

\*\*\*\*\*  
\* MOBILE6.2.03 (24-Sep-2003) \*  
\* Input file: N:\PROJECTS\MOBILE6.2\SPOKPM.IN (file 1, run 1). \*  
\*\*\*\*\*

\* #####  
\* Spokane Casino

\* File 1, Run 1, Scenario 1.  
\* #####

Calendar Year: 2012  
Month: Jan.  
Gasoline Fuel Sulfur Content: 30. ppm  
Diesel Fuel Sulfur Content: 15. ppm  
Particle Size Cutoff: 10.00 Microns  
Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT
-----	-----	-----	-----	-----	-----	-----	-----	-----
0.0857	VMT Distribution: 0.0053 1.0000	0.3321	0.4018	0.1370		0.0358	0.0003	0.0020

-----

Composite Emission Factors (g/mi):

-----	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	-----	-----
-----	0.0000	0.0000						
-----	GASPM:	0.0040	0.0039	0.0040	0.0039	0.0290	-----	-----
-----	0.0205	0.0046						
0.0818	ECARBON:	-----	-----	-----	-----	-----	0.0294	0.0181
-----	-----	0.0071						
0.0414	OCARBON:	-----	-----	-----	-----	-----	0.0083	0.0260
-----	-----	0.0036						
0.0009	SO4:	0.0003	0.0005	0.0005	0.0005	0.0016	0.0002	0.0003
-----	0.0001	0.0005						
0.1242	Total Exhaust PM:	0.0043	0.0043	0.0045	0.0044	0.0307	0.0378	0.0444
-----	0.0206	0.0157						
0.0125	Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
-----	0.0125	0.0125						
0.0259	Tire:	0.0080	0.0080	0.0080	0.0080	0.0086	0.0080	0.0080
-----	0.0040	0.0095						
0.1626	Total PM:	0.0248	0.0249	0.0250	0.0249	0.0519	0.0584	0.0650
-----	0.0371	0.0378						

-----

\*\*\*\*\*  
\* MOBILE6.2.03 (24-Sep-2003) \*  
\* Input file: N:\PROJECTS\MOBILE6.2\SPOK251.IN (file 1, run 1). \*  
\*\*\*\*\*

\* #####  
\* Spokane Casino

\* File 1, Run 1, Scenario 1.  
\* #####

Calendar Year: 2012  
Month: Jan.  
Gasoline Fuel Sulfur Content: 30. ppm  
Diesel Fuel Sulfur Content: 15. ppm  
Particle Size Cutoff: 2.50 Microns  
Reformulated Gas: No

HDDV	Vehicle Type: MC	All Veh GWR:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT
			<6000	>6000		(All)			
0.0857	VMT Distribution: 0.0053	1.0000	0.3321	0.4018	0.1370		0.0358	0.0003	0.0020

-----

Composite Emission Factors (g/mi):

0.0000	Lead: 0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0142	GASPM: 0.0037	0.0041	0.0037	0.0036	0.0037	0.0036	0.0258		
0.0753	ECARBON: 0.0065							0.0270	0.0167
0.0381	OCARBON: 0.0033							0.0076	0.0240
0.0009	SO4: 0.0003	0.0005	0.0003	0.0005	0.0005	0.0005	0.0016	0.0002	0.0003
0.1143	Total Exhaust PM: 0.0143	0.0145	0.0040	0.0040	0.0041	0.0041	0.0274	0.0348	0.0409
0.0053	Brake: 0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
0.0065	Tire: 0.0020	0.0024	0.0020	0.0020	0.0020	0.0020	0.0022	0.0020	0.0020
0.1261	Total PM: 0.0206	0.0222	0.0113	0.0114	0.0115	0.0114	0.0349	0.0421	0.0482

-----

Summer Criteria.PM

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: N:\PROJECTS\MOBILE6.2\SPOKPM7.IN (file 1, run 1). \*  
 \*\*\*\*\*

\* #####  
 \* Spokane Casino

\* File 1, Run 1, Scenario 1.  
 \* #####

\* Reading PM Gas Carbon ZML Levels  
 \* from the external data file PMGZML.CSV

\* Reading PM Gas Carbon DR1 Levels  
 \* from the external data file PMGDR1.CSV

\* Reading PM Gas Carbon DR2 Levels  
 \* from the external data file PMGDR2.CSV

\* Reading PM Diesel Zero Mile Levels  
 \* from the external data file PMDZML.CSV

\* Reading the First PM Deterioration Rates  
 \* from the external data file PMDDR1.CSV

\* Reading the Second PM Deterioration Rates  
 \* from the external data file PMDDR2.CSV

M 48 warning:  
     there are no sales for vehicle class HDGV8b  
 M 48 warning:  
     there are no sales for vehicle class LDDT12

\* Reading Ammonia (NH3) Basic Emission Rates  
 \* from the external data file PMNH3BER.D

\* Reading Ammonia (NH3) Sulfur Deterioration Rates  
 \* from the external data file PMNH3SDR.D

Calendar Year: 2012  
 Month: July  
 Altitude: High  
 Minimum Temperature: 55.0 (F)  
 Maximum Temperature: 85.0 (F)  
 Absolute Humidity: 75. grains/lb  
 Nominal Fuel RVP: 7.0 psi  
 Weathered RVP: 7.0 psi  
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No  
 Evap I/M Program: No  
 ATP Program: No  
 Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh GVWR:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT
-----	-----	-----	-----	-----	-----	-----	-----	-----
	VMT Distribution:	0.3271	0.4043	0.1389		0.0360	0.0003	0.0020
0.0861	0.0054 1.0000							
	Fuel Economy (mpg):	24.1	18.5	14.3	17.2	9.7	32.4	17.0
7.2	50.0 16.4							

---

Composite Emission Factors (g/mi):								
0.678	Composite VOC :	0.577	0.659	1.166	0.788	1.012	0.130	0.364
3.276	Composite CO :	8.01	9.05	12.19	9.86	26.15	0.803	0.694
5.191	Composite NOX :	0.463	0.599	0.982	0.697	1.443	0.269	0.556
		0.727						
		27.86						
		0.89						

Composite CO2 :		Summer Criteria.PM						
1415.0	177.4	368.1	478.5	621.8	515.1	912.1	314.1	599.4
	557.12							

---

---

Summer.PM

```
*****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: N:\PROJECTS\MOBILE6.2\SPOKPM7.IN (file 1, run 1). *
*****
```

```
* #####
* Spokane Casino
```

```
* File 1, Run 1, Scenario 1.
* #####
```

```
Calendar Year: 2012
Month: July
Gasoline Fuel Sulfur Content: 30. ppm
Diesel Fuel Sulfur Content: 15. ppm
Particle Size Cutoff: 10.00 Microns
Reformulated Gas: No
```

HDDV	Vehicle Type: MC All Veh GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT
0.0861	VMT Distribution: 0.0054 1.0000	0.3271	0.4043	0.1389		0.0360	0.0003	0.0020

-----

Composite Emission Factors (g/mi):

0.0000	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	-----	-----	
0.0205	GASPM:	0.0040	0.0039	0.0040	0.0039	0.0275	-----	-----	
0.0762	ECARBON:	0.0045	-----	-----	-----	-----	0.0282	0.0170	
0.0386	OCARBON:	0.0066	-----	-----	-----	-----	0.0080	0.0245	
0.0009	SO4:	0.0034	0.0003	0.0005	0.0005	0.0017	0.0002	0.0003	
0.1157	Total Exhaust PM:	0.0001 0.0005	0.0043	0.0043	0.0045	0.0044	0.0291	0.0364	0.0418
0.0125	Brake:	0.0206 0.0150	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
0.0259	Tire:	0.0125 0.0125	0.0080	0.0080	0.0080	0.0080	0.0086	0.0080	0.0080
0.1541	Total PM:	0.0040 0.0095	0.0248	0.0249	0.0250	0.0249	0.0503	0.0569	0.0624

-----



SPOKjan 2032 Criteria.PM

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: N:\PROJECTS\MOBILE6.2\2032\SPOK2513.IN (file 1, run 1). \*  
 \*\*\*\*\*

\* #####  
 \* Spokane Casino

\* File 1, Run 1, Scenario 1.  
 \* #####

\* Reading PM Gas Carbon ZML Levels  
 \* from the external data file PMGZML.CSV

\* Reading PM Gas Carbon DR1 Levels  
 \* from the external data file PMGDR1.CSV

\* Reading PM Gas Carbon DR2 Levels  
 \* from the external data file PMGDR2.CSV

\* Reading PM Diesel Zero Mile Levels  
 \* from the external data file PMDZML.CSV

\* Reading the First PM Deterioration Rates  
 \* from the external data file PMDDR1.CSV

\* Reading the Second PM Deterioration Rates  
 \* from the external data file PMDDR2.CSV  
 M 48 Warning:  
     there are no sales for vehicle class HDGV8b  
 M 48 Warning:  
     there are no sales for vehicle class LDDT12

\* Reading Ammonia (NH3) Basic Emission Rates  
 \* from the external data file PMNH3BER.D

\* Reading Ammonia (NH3) Sulfur Deterioration Rates  
 \* from the external data file PMNH3SDR.D

Calendar Year: 2032  
 Month: Jan.  
 Altitude: High  
 Minimum Temperature: 25.0 (F)  
 Maximum Temperature: 35.0 (F)  
 Absolute Humidity: 75. grains/lb  
 Nominal Fuel RVP: 7.0 psi  
 Weathered RVP: 7.0 psi  
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No  
 Evap I/M Program: No  
 ATP Program: No  
 Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh GVWR:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT
-----	-----	-----	-----	-----	-----	-----	-----	-----
	VMT Distribution:	0.2790	0.4400	0.1500		0.0363	0.0003	0.0022
0.0872	0.0050 1.0000							
	Fuel Economy (mpg):	24.1	18.5	14.2	17.2	9.8	32.4	17.0
7.2	50.0 16.1							

-----

Composite Emission Factors (g/mi):								
	Composite VOC :	0.327	0.403	0.594	0.452	0.357	0.047	0.109
0.486	2.49 0.426							
	Composite CO :	14.32	13.42	16.09	14.10	28.87	0.592	0.349
0.529	30.43 13.560							
	Composite NOX :	0.250	0.358	0.569	0.411	0.158	0.028	0.123
0.559	1.16 0.373							



Composite CO2 : 368.0 SPOKjan 2032 Criteria.PM  
1411.1 177.4 565.61 479.4 624.6 516.4 907.4 314.1 598.7

---

---



\*\*\*\*\*  
\* MOBILE6.2.03 (24-Sep-2003) \*  
\* Input file: N:\PROJECTS\MOBILE6.2\2032\SPOK2513.IN (file 1, run 1). \*  
\*\*\*\*\*

\* #####  
\* Spokane Casino

\* File 1, Run 1, Scenario 1.  
\* #####

Calendar Year: 2032  
Month: Jan.  
Gasoline Fuel Sulfur Content: 30. ppm  
Diesel Fuel Sulfur Content: 15. ppm  
Particle Size Cutoff: 2.50 Microns  
Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT
0.0872	0.0050	1.0000	0.2790	0.4400	0.1500	0.0363	0.0003	0.0022

-----  
Composite Emission Factors (g/mi):

-----	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	-----	-----
-----	0.0000	0.0000						
-----	GASPM:	0.0036	0.0034	0.0034	0.0034	0.0075	-----	-----
-----	0.0142	0.0034						
0.0075	ECARBON:	-----	-----	-----	-----	-----	0.0065	0.0034
-----	-----	0.0007						
0.0038	OCARBON:	-----	-----	-----	-----	-----	0.0018	0.0049
-----	-----	0.0003						
0.0009	SO4:	0.0003	0.0005	0.0005	0.0005	0.0019	0.0002	0.0003
-----	0.0001	0.0005						
0.0123	Total Exhaust PM:	0.0039	0.0039	0.0039	0.0039	0.0094	0.0085	0.0086
-----	0.0143	0.0049						
0.0053	Brake:	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
-----	0.0053	0.0053						
0.0065	Tire:	0.0020	0.0020	0.0020	0.0020	0.0022	0.0020	0.0020
-----	0.0010	0.0024						
0.0241	Total PM:	0.0112	0.0112	0.0112	0.0112	0.0169	0.0159	0.0159
-----	0.0206	0.0126						

Spokju12032 criteria.PM

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: N:\PROJECTS\MOBILE6.2\SPOKPM73.IN (file 1, run 1). \*  
 \*\*\*\*\*

\* #####  
 \* Spokane Casino

\* File 1, Run 1, Scenario 1.  
 \* #####

\* Reading PM Gas Carbon ZML Levels  
 \* from the external data file PMGZML.CSV

\* Reading PM Gas Carbon DR1 Levels  
 \* from the external data file PMGDR1.CSV

\* Reading PM Gas Carbon DR2 Levels  
 \* from the external data file PMGDR2.CSV

\* Reading PM Diesel Zero Mile Levels  
 \* from the external data file PMDZML.CSV

\* Reading the First PM Deterioration Rates  
 \* from the external data file PMDDR1.CSV

\* Reading the Second PM Deterioration Rates  
 \* from the external data file PMDDR2.CSV  
 M 48 Warning:  
     there are no sales for vehicle class HDGV8b  
 M 48 Warning:  
     there are no sales for vehicle class LDDT12

\* Reading Ammonia (NH3) Basic Emission Rates  
 \* from the external data file PMNH3BER.D

\* Reading Ammonia (NH3) Sulfur Deterioration Rates  
 \* from the external data file PMNH3SDR.D

Calendar Year: 2032  
 Month: July  
 Altitude: High  
 Minimum Temperature: 55.0 (F)  
 Maximum Temperature: 85.0 (F)  
 Absolute Humidity: 75. grains/lb  
 Nominal Fuel RVP: 7.0 psi  
 Weathered RVP: 7.0 psi  
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No  
 Evap I/M Program: No  
 ATP Program: No  
 Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh GVWR:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT
		<6000	>6000	(All)				
-----	-----	-----	-----	-----	-----	-----	-----	-----
VMT Distribution:		0.2788	0.4388	0.1507		0.0365	0.0003	0.0022
0.0876	0.0051 1.0000							
Fuel Economy (mpg):		24.1	18.5	14.2	17.2	9.8	32.4	17.0
7.2	50.0 16.1							

-----

Composite Emission Factors (g/mi):								
Composite VOC :		0.311	0.385	0.538	0.424	0.399	0.047	0.109
0.486	2.74 0.408							
Composite CO :		6.31	6.94	8.25	7.27	22.97	0.597	0.350
0.528	27.86 7.076							
Composite NOX :		0.220	0.316	0.466	0.354	0.149	0.028	0.123
0.554	0.89 0.329							

Composite CO2 : 368.0      Spokju12032 criteria.PM  
1410.9      177.4      566.14      479.4      624.6      516.6      907.3      314.1      598.7

---

---

\*\*\*\*\*  
\* MOBILE6.2.03 (24-Sep-2003) \*  
\* Input file: N:\PROJECTS\MOBILE6.2\SPOKPM73.IN (file 1, run 1). \*  
\*\*\*\*\*

\* #####  
\* Spokane Casino  
  
\* File 1, Run 1, Scenario 1.  
\* #####

Calendar Year: 2032  
Month: July  
Gasoline Fuel Sulfur Content: 30. ppm  
Diesel Fuel Sulfur Content: 15. ppm  
Particle Size Cutoff: 10.00 Microns  
Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT
	GVWR:		<6000	>6000	(All)			
-----	-----	-----	-----	-----	-----	-----	-----	-----
0.0876	VMT Distribution: 0.0876 0.0051 1.0000	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022

Composite Emission Factors (g/mi):								
-----	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	-----	-----
-----	0.0000	0.0000						
-----	GASPM:	0.0039	0.0037	0.0037	0.0037	0.0082	-----	-----
-----	0.0205	0.0037						
0.0082	ECARBON:	-----	-----	-----	-----	-----	0.0071	0.0037
-----	-----	0.0007						
0.0042	OCARBON:	-----	-----	-----	-----	-----	0.0020	0.0053
-----	-----	0.0004						
0.0009	so4:	0.0003	0.0005	0.0005	0.0005	0.0019	0.0002	0.0003
-----	0.0001	0.0005						
0.0133	Total Exhaust PM:	0.0042	0.0042	0.0042	0.0042	0.0101	0.0093	0.0093
-----	0.0206	0.0053						
0.0125	Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
-----	0.0125	0.0125						
0.0258	Tire:	0.0080	0.0080	0.0080	0.0080	0.0086	0.0080	0.0080
-----	0.0040	0.0096						
0.0516	Total PM:	0.0247	0.0247	0.0247	0.0247	0.0313	0.0298	0.0299
-----	0.0371	0.0274						

\*\*\*\*\*  
\* MOBILE6.2.03 (24-Sep-2003) \*  
\* Input file: N:\PROJECTS\MOBILE6.2\SPOK2573.IN (file 1, run 1). \*  
\*\*\*\*\*

\* #####  
\* Spokane Casino

\* File 1, Run 1, Scenario 1.  
\* #####

Calendar Year: 2032  
Month: July  
Gasoline Fuel Sulfur Content: 30. ppm  
Diesel Fuel Sulfur Content: 15. ppm  
Particle Size Cutoff: 2.50 Microns  
Reformulated Gas: No

HDDV	Vehicle Type: MC All Veh GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT
-----	-----	-----	-----	-----	-----	-----	-----	-----
VMT Distribution: 0.0876	0.0051 1.0000	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022

-----

Composite Emission Factors (g/mi):

-----	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	-----	-----
-----	0.0000	0.0000						
-----	GASPM:	0.0036	0.0034	0.0034	0.0034	0.0075	-----	-----
-----	0.0142	0.0034						
0.0075	ECARBON:	-----	-----	-----	-----	-----	0.0065	0.0034
-----	-----	0.0007						
0.0038	OCARBON:	-----	-----	-----	-----	-----	0.0018	0.0049
-----	-----	0.0003						
0.0009	SO4:	0.0003	0.0005	0.0005	0.0005	0.0019	0.0002	0.0003
-----	0.0001	0.0005						
Total Exhaust PM:	0.0039	0.0039	0.0039	0.0039	0.0039	0.0094	0.0085	0.0086
0.0123	0.0143	0.0049						
0.0053	Brake:	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
-----	0.0053	0.0053						
0.0065	Tire:	0.0020	0.0020	0.0020	0.0020	0.0022	0.0020	0.0020
-----	0.0010	0.0024						
Total PM:	0.0112	0.0112	0.0112	0.0112	0.0112	0.0169	0.0159	0.0159
0.0241	0.0206	0.0126						

-----