Air Quality Technical Support Document – Errata

July 2006

Errata

The potential air quality impacts included in the Northern San Juan Basin Coal Bed Methane Project Draft Environmental Impact Statement were based upon a detailed quantitative analysis as reported in:

> RTP Environmental. 2004. Air Quality Impact Assessment Technical Support Document – Northern San Juan Basin Coalbed Methane Project Environmental Impact Statement. RTP Environmental. Boulder, Colorado.

Since that assessment was prepared, typographical errors were discovered and have been corrected. These typographical corrections did not affect the analysis results.

In addition, potential visibility impacts within the Mesa Verde and Weminuche mandatory federal PSD Class I areas were revised based on new data obtained after the DEIS was published.

First, hourly background relative humidity data became available from the Albino Canyon, New Mexico, monitoring site to replace the daily average relative humidity values used for the DEIS. Since the calculation of visibility conditions and impacts are derived from IMPROVE observed speciated aerosol concentrations, and this calculation uses a "f(RH)" function based on observed relative humidity data, the use of hourly data rather than daily average values results in higher predicted visibility impacts.

Secondly, the IMPROVE Program provided two additional years of speciated aerosol concentration data since the DEIS was prepared, and the concentrations of sulfate ion, nitrate ion, and organic carbon had been revised for the entire period of record.

Finally, potential lake chemistry impacts within the Weminuche mandatory federal PSD Class I area were revised based on new data obtained after the DEIS was published.

The following pages are provided to replace and update applicable sections of the Air Quality Impact Assessment Technical Support Document:

4.2 PSD Class I Background Data

Criteria Pollutants

Representative background ambient air pollutant concentrations provided by the State of Colorado (CHPDE-APCD 2001), based on typical rural air quality estimates, were used to describe existing air quality within Mesa Verde National Park and the Weminuche Wilderness PSD Class I areas. These levels are summarized in Table 4-2.

Table 4-2. Background Air Pollutant Concentrations (Mesa Verde and Weminuche)

Pollutant	Averaging Time	Mesa Verde National Park (µg/m^3)	Weminuche Wilderness Area (µg/m^3)
carbon monoxide	1-hr	2,286	2,286
	8-hr	2,286	2,286
nitrogen dioxide	Annual	9	9
PM_{IO}	24-hr	30	9
	Annual	6	4
sulfur dioxide	3-hr	21	21
	24-hr	13	13
	Annual	5	5

Source: CDPHE-APCD (2001)

Visibility

Background visibility conditions were determined based on speciated aerosol samples collected using IMPROVE (2005) monitoring protocols at Mesa Verde National Park and Weminuche Wilderness Area, as well as hourly relative humidity data measured at the Albino Canyon, New Mexico, Remote Automatic Weather Station (RAWS; WRCC 2005). Measured concentrations of sulfate ion, nitrate ion, organic carbon, elemental carbon, soil and coarse mass were incorporated into a Microsoft Excel© Daily FLAG Refined Analysis Spreadsheets (Archer 2005), which calculated daily background visibility (extinction) conditions based on the FLAG (2000) reconstructed extinction methodology. Missing speciated aerosol concentration and relative humidity data were substituted by linearly interpolation between valid data.

Figure 4-2 presents the visibility frequency distribution expressed in deciviews for Mesa Verde National Park from 1989 through 1999. This is done for the 90th (clearest), 80th, 50th 20th, and 10th (haziest) percentile days in each year. The horizontal lines present the temporal trend (least square

Lake Chemistry

Four lakes of concern were identified within the Weminuche Wilderness Area, while the USDI-National Park Service has not identified any sensitive lakes within Mesa Verde National Park. The Weminuche sensitive lakes and their 10th Percentile (lowest) background acid neutralizing capacity (ANC; reported in microequivalents per liter, or μeq/l) values are presented in Table 4-3.

Table 4-3. Weminuche Wilderness Area Sensitive Lakes

Sensitive Lake	Background Acid Neutralizing Capacity (μeq/l)
Big Eldorado Lake	18.2
Lower Sunlight Lake	86.9
Upper Grizzly Lake	36.9
Upper Sunlight Lake	32.8

Source: Mast (2005)

Table 6-4. CALPUFF Background Ammonia Concentrations

Monthly Average	Mesa Verde (ppb)	Weminuche (ppb)	Average (ppb)
January	0.31	0.20	0.26
February	0.31	0.22	0.26
March	0.36	0.31	0.34
April	0.40	0.36	0.38
May	0.46	0.42	0.44
June	0.50	0.44	0.47
July	0.54	0.44	0.49
August	0.55	0.45	0.50
September	0.55	0.45	0.50
October	0.42	0.36	0.39
November	0.32	0.20	0.26
December	0.33	0.18	0.26
Seasonal Average			
Winter	0.32	0.20	0.26
Spring:	0.40	0.36	0.38
Summer	0.53	0.44	0.49
Fall	0.43	0.34	0.38
Annual Average	0.42	0.34	**0.38**

6.2.2.5 Visibility Calculations

Potential visibility impacts were performed using the FLAG (2000) published procedure to calculate a change in extinction (reported in dv) at mandatory federal PSD Class I Areas. Background extinction conditions were determined based on speciated aerosol samples collected using IMPROVE (2005) monitoring protocols at Mesa Verde National Park and Weminuche Wilderness Area, as well as daily average relative humidity values measured at the Albino Canyon, New Mexico, RAWS location (WRCC 2005) as described in Section 4.2 above. Since potential carbon, primary particulate matter, and sulfur emissions would not be significant from the proposed action (or alternatives), permitted but not yet constructed sources, or other RFS, the visibility impact analysis was based on the maximum daily nitrate ion (NO_3^-) and annual average nitrogen dioxide gas (NO_2) concentrations predicted to occur anywhere within each Class I area.

Microsoft Excel© Daily FLAG Refined Analysis Spreadsheets (Archer 2005) for the Mesa Verde National Park and Weminuche Wilderness areas were used to determine the change in extinction as if the maximum daily predicted impacts had occurred during the aerosol sampling period (1988 through 2004). The number of days in excess of a 1.0 dv "Just Noticeable Change," reported as a range of values for the entire aerosol sampling period, was used as the significance threshold. This threshold is based on the original development of the deciview scale (Pitchford and Malm 1994), and is supported by EPA's Final Regional Haze Regulation (64 FR 126, July 1, 1999) decision to use of 1.0 dv as the significance level when preparing periodic reasonable progress reports. However, at the request of the USDA-Forest Service, this analysis also reports the predicted range of days in excess of 0.5 dv (1/2 of a "Just Noticeable Change.")

6.2.2.6 Atmospheric Deposition Calculations

Total predicted dry nitrogen deposition impacts were calculated using the CALPUFF default dry deposition model, dry deposition parameters, and scavenging coefficients. Total predicted wet nitrogen deposition fluxes were computed from the modeled nitrogen species, with a molecular weight adjustment to convert the fluxes to the same units. For total wet nitrogen deposition, the adjustment factors were:

$$\text{Total N} = 0.291667\ [SO_4^{=}] + 0.451613\ [NO_3^{-}] + 0.222222\ [HNO_3] + 0.823529\ [NH_3]$$

Since no large SO_2 emission sources were identified in the proposed action (or alternatives), the permitted but not yet constructed, and other RFS emission source inventories, it was assumed that the change in sulfur deposition would be insignificant. Nitrate ion is assumed to be present as ammonium nitrate secondary particulate matter.

Wet and dry deposition were combined to estimate total nitrogen deposition using the POSTUTIL post processing program. The annual total deposition from each CALPUFF emission source group was calculated separately so that total deposition could be combined for the scenarios of interest. The USDA-Forest Service (Fox, et al 1989) has established a 3 kilogram per hectare per year (kg/ha-yr) total nitrogen deposition acceptable threshold for PSD Class I areas, below which no reductions in emissions would be necessary.

A USDA-Forest Service (2000) has also established a screening methodology to calculate the potential change in ANC at sensitive lakes located within PSD Class I areas. Four sensitive lakes were identified within the Weminuche Wilderness Area, although no sensitive lakes were identified within Mesa Verde National Park. For Big Eldorado Lake, the 10th Percentile (lowest) background ANC was 18.2 μeq/l; the USDA-Forest Service has indicated a threshold of 1 μeq/l change for lakes with background ANC levels less than 25 μeq/l. Since background ANC levels at the remaining three lakes were all above 25 μeq/l, the applicable threshold is a 10 percent change in ANC.

6.3 Construction Impacts

This subsection was originally developed as part of the SUIT Air Quality Analysis (BLM 2000). It is included here for completeness, and is applicable to the proposed action (and alternative) construction impacts.

Construction emissions would primarily occur due to the installation of new wells, which involves three separate, sequential phases:

- well pad and resource road construction;
- rig-up, drill, and rig-down; and
- well completion and testing.

7.2.3 AQRV Impacts

7.2.3.1 Visibility

Tables 7-7 and 7-8 present a summary of the potential cumulative changes in visibility within the Mesa Verde and Weminuche Class I Areas. These tables present the minimum, maximum, and average number of days per year where the reduction in visibility was predicted to exceed a 1.0 dv "just noticeable change" (equivalent to a 10 percent change in extinction). At the request of the USDA-Forest Service, the same information is presented for a 0.5 dv 1/2 of a "just noticeable change" threshold. The maximum predicted single day change in visibility is also presented.

As indicated in Table 7-7, the maximum predicted direct visibility impacts for all alternatives at Mesa Verde are less than 1.0 dv. At Weminuche, up to three days were predicted to exceed 1.0 dv annually under Alternatives 1 and 2 (Table 7-8).

At Mesa Verde (Table 7-7), the maximum cumulative impacts from all sources combined was between 36 and 62 days per year greater than a 1.0 dv "just noticeable change" under Alternative 2 (assuming Farmington RMP small wellhead engines would operate at 9.6 g/hp-hr NOx emissions). If the Farmington RMP small wellhead engines were limited to 2.0 g/hp-hr NOx emissions, the maximum cumulative impacts are reduced to between 10 and 35 days greater than a 1.0 dv annually.

At the Weminuche Class I Area (Table 7-8), the maximum cumulative impacts from all sources combined was between 24 and 47 days per year greater than a 1.0 dv "just noticeable change" under Alternative 2 (assuming Farmington RMP small wellhead engines would operate at 9.6 g/hp-hr NOx emissions). If the Farmington RMP small wellhead engines were limited to 2.0 g/hp-hr NOx emissions, the maximum cumulative impacts are reduced to between 11 and 31 days greater than a 1.0 dv annually.

7.2.3.2 Atmospheric Deposition

A modeling analysis of total cumulative atmospheric deposition was performed to demonstrate the combined effects of the proposed action (and alternatives) in conjunction with existing and other RFS would not exceed the USDA-Forest Service total nitrogen deposition threshold (Fox, et al 1989) of 3 kg/ha-yr in each Class I area. Since no SO_2 emission sources would be associated with the proposed action (or alternatives), it was assumed that additional sulfur deposition would be negligible. Table 7-9 presents a summary of maximum predicted total annual nitrogen deposition within the Mesa Verde and Weminuche Class I areas. In addition, Figures 7-6 and 7-7 present these modeling results graphically.

The maximum predicted total annual nitrogen deposition within Mesa Verde National Park was 0.22 kg/ha-yr, under the cumulative Maximum Development (Alternative 2) scenario. As indicated in Figure 7-6, the maximum impacts would occur in the southeast comer of Mesa Verde and would decrease towards the northwest.

Table 7-7. Visibility Impact Summary (Mesa Verde)

Emission Source Group	Maximum Single Day Impact (dv)	Number of Days > 0.5 dv change			Number of Days > 1.0 dv change		
		Minimum	Maximum	Average	Minimum	Maximum	Average
Alt 1 (Proposed Action)	0.45	0	0	0	0	0	0
Alt 2 (Maximum Development)	0.67	0	2	0.2	0	0	0
Alt 5 (No Action)	0.12	0	0	0	0	0	0
Alt 1 + Existing + RFS	3.38	14	40	25.3	2	10	5.8
Alt 2 + Existing + RFS	3.45	14	40	26.8	3	10	6.6
Alt 5 + Existing + RFS	3.29	11	35	22.5	0	9	3.6
Alt 1 + Existing + RFS + FRMP (9.6 g/hp-hr)	7.67	67	104	88.0	36	61	47.6
Alt 2 + Existing + RFS + FRMP (9.6 g/hp-hr)	7.77	69	106	89.4	36	62	48.5
Alt 5 + Existing + RFS + FRMP (9.6 g/hp-hr)	7.54	65	101	86.6	34	59	46.4
Alt 1 + Existing + RFS + FRMP (2.0 g/hp-hr)	4.89	41	74	56.2	10	31	20.6
Alt 2 + Existing + RFS + FRMP (2.0 g/hp-hr)	4.99	41	76	58.9	10	35	22.2
Alt 5 + Existing + RFS + FRMP (2.0 g/hp-hr)	4.81	40	73	54.5	9	28	18.9

Table 7-8. Visibility Impact Summary (Weminuche)

Emission Source Group	Maximum Single Day Impact (dv)	Number of Days > 0.5 dv change			Number of Days > 1.0 dv change		
		Minimum	Maximum	Average	Minimum	Maximum	Average
Alt 1 (Proposed Action)	1.70	3	12	6.7	0	3	1.0
Alt 2 (Maximum Development)	1.52	4	20	10.6	0	2	0.7
Alt 5 (No Action)	0.45	0	0	0	0	0	0
Alt 1 + Existing + RFS	2.15	17	38	27.7	1	13	6.4
Alt 2 + Existing + RFS	2.87	26	49	36.8	5	18	10.8
Alt 5 + Existing + RFS	2.00	10	26	17.3	1	9	3.6
Alt 1 + Existing + RFS + FRMP (9.6 g/hp-hr)	5.90	54	80	68.4	22	43	31.1
Alt 2 + Existing + RFS + FRMP (9.6 g/hp-hr)	6.55	61	93	76.4	24	47	34.6
Alt 5 + Existing + RFS + FRMP (9.6 g/hp-hr)	5.55	46	74	61.0	15	38	26.6
Alt 1 + Existing + RFS + FRMP (2.0 g/hp-hr)	3.23	33	60	45.4	7	24	15.7
Alt 2 + Existing + RFS + FRMP (2.0 g/hp-hr)	3.69	41	70	54.4	11	31	20.2
Alt 5 + Existing + RFS + FRMP (2.0 g/hp-hr)	2.90	27	50	37.3	7	20	12.2

The maximum predicted total annual nitrogen deposition within the Weminuche Wilderness Area was 0.18 kg/ha-yr, also under the cumulative Maximum Development (Alternative 2) scenario. Figure 7-7 shows the maximum impacts would occur along the southwestern boundary of the Weminuche Class I Area, and would decrease towards the north.

The USDA-Forest Service (2000) screening methodology was used to calculate the potential ANC change at four sensitive lakes, all located within the Weminuche Wilderness Area. No sensitive lakes were identified within Mesa Verde National Park.

Potential changes in ANC at all four lakes (Table 7-10) were below the USDA-Forest Service ten percent change threshold. However, since the background ANC for Big Eldorado Lake is under 25 μeq/l (at 18.2 μeq/l), its applicable threshold is a 1.0 μeq/l change. For Big Eldorado Lake, this corresponds to a 5.5 percent ANC change. Therefore, no "significant, adverse" impact to Lake chemistry was predicted to occur under any analysis scenario.

Table 7-10. Maximum Predicted Cumulative ANC Changes

Emission Source Group	Potential Change in ANC (percent)			
	Big Eldorado Lake	Lower Sunlight Lake	Upper Grizzly Lake	Upper Sunlight Lake
Alt 1 (Proposed Action)	0.23	0.06	0.16	0.18
Alt 2 (Maximum Development)	0.37	0.10	0.26	0.29
Alt 5 (No Action)	0.08	0.02	0.06	0.06
Alt 1 + Existing + RFS	1.13	0.30	0.74	0.91
Alt 2 + Existing + RFS	1.27	0.34	0.84	1.02
Alt 5 + Existing + RFS	0.98	0.26	0.63	0.77
Alt 1 + Existing + RFS + FRMP	2.75	0.72	1.76	2.16
Alt 2 + Existing + RFS + FRMP	2.89	0.76	1.86	2.27
Alt 5 + Existing + RFS + FRMP	2.60	0.67	1.65	2.02
Alt 1 + Existing + RFS + FRMP (2.0 g/hp-hr)	1.86	0.47	1.10	1.40
Alt 2 + Existing + RFS + FRMP (2.0 g/hp-hr)	2.00	0.51	1.20	1.52
Alt 5 + Existing + RFS + FRMP (2.0 g/hp-hr)	1.71	0.42	0.99	1.27

7.3 Construction Impacts

This subsection was originally developed as part of the SUIT Air Quality Analysis (BLM 2000). It is included here for completeness, and is applicable to the proposed action (and alternative) construction impacts.

The SUIT Air Quality analysis performed a detailed impact analysis for the construction phase of development (BLM 2000). No new information was available to revise estimates of these impacts. Therefore, Table 7-11 presents modeling results from the previous study which are directly

9.0 References

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Table A-34. Near Field Modeling Input Values (Alternative 1)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
1	Elmridge 1	ELM1A	288,301	4,112,688	0.52	0.69	0.08	6.6	0.46	17.3	644	3.9	3.9	6,399
2	Elmridge 1	ELM1B	288,301	4,112,698	0.52	0.69	0.08	6.6	0.46	17.3	644	3.9	3.9	6,399
3	Elmridge 1	ELM1C	288,301	4,112,708	0.52	0.69	0.08	6.6	0.46	17.3	644	3.9	3.9	6,399
4	Elmridge 1	ELM1D	288,301	4,112,718	0.52	0.69	0.08	6.6	0.46	17.3	644	3.9	3.9	6,399
5	Elmridge 1	ELM1DEHY	288,301	4,112,728	0.13	0.11	0.00	3.5	0.15	6.4	533	2.3	2.3	6,399
6	Elmridge 1	ELM1SEP	288,301	4,112,738	0.09	0.15	0.00	3.5	0.15	6.4	533	2.3	2.3	6,399
7	Elmridge 2	ELM2A	274,470	4,114,300	0.63	0.83	0.\0	9.5	0.38	29.2	644	5.9	5.9	6,996
8	Elmridge 2	ELM2B	274,470	4,114,310	0.63	0.83	0.\0	9.5	0.38	29.2	644	5.9	5.9	6,996
9	Elmridge 2	ELM2C	274,470	4,] 14,320	0.63	0.83	0.10	9.5	0.38	29.2	644	5.9	5.9	6,996
10	Elmridge 2	ELM2D	274,470	4,114,330	0.63	0.83	0.10	9.5	0.38	29.2	644	5.9	5.9	6,996
11	Elmridge 2	ELM2E	274,470	4,114,340	0.63	0.83	0.10	9.5	0.38	29.2	644	5.9	5.9	6,996
12	Elmridge 2	ELM2F	274,470	4,114,350	0.63	0.83	0.\0	9.5	0.38	29.2	644	5.9	5.9	6,996
13	Elmridge 2	ELM2G	274,470	4,114,360	0.63	0.83	0.\0	9.5	0.38	29.2	644	5.9	5.9	6,996
14	Elmridge 2	ELM2H	274,470	4,114,370	0.63	0.83	0.\0	9.5	0.38	29.2	644	5.9	5.9	6,996
15	Elmridge 2	ELM21	274,470	4,114,380	0.63	0.83	0.\0	9.5	0.38	29.2	644	5.9	5.9	6,996
16	Elmridge 2	ELM2DEHY	274,470	4,114,270	0.13	0.11	0.00	3.5	0.15	6.4	533	2.0	2.0	6,996
17	Elmridge 2	ELM2SEP	274,470	4,114,280	0.11	0.36	0.00	3.5	0.2	6.4	533	2.0	2.0	6,996
18	Elmridge 2	ELM2SEPa	274,470	4,114,290	0.11	0.36	0.00	3.5	0.2	6.4	533	2.0	2.0	6,996
19	PETROX 1	PET 1	292,405	4,113,912	0.26	0.34	0.04	3.1	0.3	24.1	644	2.0	2.0	6,396
20	PETROX 1	PET1DEH	292,405	4,113,922	0.13	0.11	0.00	3.0	0.2	6.4	533	2.0	2.0	6,396
21	PETROX 1	PET1SEP	292,405	4,113,932	0.02	0.02	0.00	3.0	0.2	6.4	533	2.0	2.0	6,396
22	PETROX 2	PET2	286,151	4,120,460	0.79	1.06	0.12	9.1	0.46	26.3	644	4.9	4.9	7,613
23	PETROX 2	PET2DEH	286,151	4,120,470	0.13	0.11	0.00	3.1	0.2	6.4	533	2.0	2.0	7,613
24	PETROX 2	PET2SEP	286,151	4,120,480	0.03	0.06	0.00	3.1	0.2	6.4	533	2.0	2.0	7,613
25	PETROX 2	PET2SEPa	286,151	4,120,450	0.03	0.06	0.00	3.1	0.2	6.4	533	2.0	2.0	7,613
26	BP AMOCO 1	BP1A	273,670	4,]24,111	0.56	0.74	0.09	4.6	0.46	18.4	644	3.0	3.0	7,141
27	BP AMOCO 1	BP1B	273,670	4,124,121	0.56	0.74	0.09	4.6	0.46	18.4	644	3.0	3.0	7,141
28	BP AMOCO 1	BP1C	273,670	4,124,131	0.56	0.74	0.09	4.6	0.46	18.4	644	3.0	3.0	7,141
29	BP AMOCO 1	BP1SEP	273,670	4,124,141	0.13	0.11	0.00	3.0	0.15	6.4	533	2.0	2.0	7,141
30	BP AMOCO 1	BP1DEH	273,670	4,124,151	0.14	0.12	0.00	3.0	0.15	6.4	533	2.0	2.0	7,141
31	BP AMOCO 2	BP2A	275,030	4,114,050	0.63	0.83	0.10	4.6	0.38	29.9	644	3.0	3.0	6,799
32	BP AMOCO 2	BP2B	275,030	4,114,060	0.63	0.83	0.10	4.6	0.38	29.9	644	3.0	3.0	6,799
33	BP AMOCO 2	BP2SEP	275,030	4,114,070	0.13	0.11	0.00	3.0	0.2	6.4	533	2.0	2.0	6,799
34	BP AMOCO 2	BP2DEH	275,030	4,114,080	0.11	0.09	0.00	3.0	0.2	6.4	533	2.0	2.0	6,799
35	PETROX 3	PED	283,100	4,123,180	0.26	0.34	0.04	3.05	0.3	24.1	644	2.0	2.0	7,616

Table A-34. Near Field Modeling Input Values (Alternative 1) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
36	PETROX 3	PET3SEP	283,100	4,123,190	0.13	0.11	0.04	3	0.2	6.4	533	2.0	2.0	7,616
37	PETROX 3	PET3DEH	283,100	4,123,200	0.02	0.02	0.04	3	0.2	6.4	533	2.0	2.0	7,616
38	PETROX 4	PET4	281,500	4,123,161	0.26	0.34	0.04	3.05	0.3	24.1	644	2.0	2.0	8,197
39	PETROX 4	PET4SEP	281,500	4,123,171	0.13	0.11	0.00	3	0.2	6.4	533	2.0	2.0	8,197
40	PETROX 4	PET4DEH	281,500	4,123,181	0.02	0.02	0.00	3	0.2	6.4	533	2.0	2.0	8,197
41	PURE 1	PUR1	251,600	4,125,830	0.63	0.83	0.10	4.6	0.38	29.9	644	3.0	3.0	7,036
42	PURE 1	PUR1SEP	251,600	4,125,840	0.13	0.11	0.10	3	0.2	6.4	533	2.0	2.0	7,036
43	PURE 1	PUR1DEH	251,600	4,125,850	0.05	0.05	0.10	3	0.2	6.4	533	2.0	2.0	7,036
44	PURE 2	PUR2	249,350	4,]25,160	0.10	0.13	0.02	3	0.18	21.5	583	2.0	2.0	6,803
45	PURE 2	PUR2SEP	249,350	4,125,170	0.13	0.11	0.00	3	0.18	6.44	533	2.0	2.0	6,803
46	PURE 2	PUR2DEH	249,350	4,125,]80	0.01	0.01	0.00	3	0.15	6.44	533	2.0	2.0	6,803
47	BP3	BP3A	272,164	4,126,575	0.63	0.83	0.10	4.6	0.38	29.9	644	3.0	3.0	6,996
48	BP3	BP3B	272,164	4,126,585	0.63	0.83	0.10	4.6	0.38	29.9	644	3.0	3.0	6,996
49	BP3	BP3SEP	272,164	4,126,595	0.13	0.11	0.00	3	0.2	6.4	533	2.0	2.0	6,996
50	BP3	BP3DEH	272,]64	4,126,605	0.11	0.09	0.00	3	0.2	6.4	533	2.0	2.0	6,996
51	BP4	BP4A	259,000	4,124,000	0.56	0.74	0.09	4.6	0.46	18.4	644	3.0	3.0	7,082
52	BP4	BP4B	259,000	4,124,000	0.56	0.74	0.09	4.6	0.46	18.4	644	3.0	3.0	7,082
53	BP4	BP4C	259,000	4,124,020	0.56	0.74	0.09	4.6	0.46	18.4	644	3.0	3.0	7,082
54	BP4	BP4SEP	259,000	4,124,030	0.13	0.11	0.00	3	0.2	6.4	533	2.0	2.0	7,082
55	BP4	BP4DEH	259,000	4,124,040	0.14	0.12	0.00	3	0.2	6.4	533	2.0	2.0	7,082
56	Cross Timbers	HUB 1	257,000	4,125,000	0.52	0.69	0.08	4.6	0.5	17.3	644.0	3.0	3.0	6,934
57	Cross Timbers	HUB2	257,000	4,125,010	0.52	0.69	0.08	4.6	0.5	17.3	644.0	3.0	3.0	6,934
58	Cross Timbers	HUBSEP	257,000	4,125,020	0.13	0.11	0.00	3.0	0.2	6.4	533.0	2.0	2.0	6,934
59	Cross Timbers	HUBDEH	257,000	4,125,030	0.09	0.08	0.00	3.0	0.2	6.4	533.0	2.0	2.0	6,934
60	Bayfield	BAY1	271,500	4,125,000	0.83	1.11	0.13	7.5	0.5	28.6	644.0	4.9	4.9	6,996
61	Bayfield	BAYDEH	271,500	4,125,000	0.13	0.11	0.00	3.0	0.2	6.4	533.0	2.0	2.0	6,996
62	Bayfield	BAYSEP	271,500	4,125,020	0.07	0.06	0.00	3.0	0.2	6.4	533.0	2.0	2.0	6,996
63	Huber engine	5	264,640	4,126,938	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,478
64	Huber engine	13	258,942	4,123,212	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
65	Huber engine	207	263,842	4,126,960	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,744
66	Huber engine	230	262,712	4,124,660	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
67	Huber engine	237	261,268	4,123,811	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,022
68	Huber engine	249	262,668	4,123,106	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
69	Huber engine	1	263,008	4,131,981	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,970
70	Huber engine	2	259,133	4,129,870	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,498

Table A-34. Near Field Modeling Input Values (Alternative 1) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
71	Huber engine	176	260,793	4,132,044	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,875
72	Huber engine	177	261,302	4,131,252	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,738
73	Huber engine	179	258,263	4,130,450	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,574
74	Huber engine	185	257,531	4,129,694	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,383
75	Huber engine	187	260,723	4,129,603	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,564
76	Huber engine	192	253,338	4,128,927	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,272
77	Huber engine	193	254,934	4,128,881	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,311
78	Huber engine	196	254,120	4,128,349	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
79	Huber engine	204	254,268	4,127,345	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,052
80	wellhead engine	3	282,897	4,126,002	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,957
81	wellhead engine	6	283,641	4,120,431	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
82	wellhead engine	8	285,894	4,121,706	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,410
83	wellhead engine	10	277,316	4,126,370	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,446
84	wellhead engine	12	292,360	4,113,882	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,396
85	wellhead engine	15	261,315	4,125,476	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,206
86	wellhead engine	17	282,848	4,120,673	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
87	wellhead engine	19	280,281	4,120,962	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,102
88	wellhead engine	21	280,546	4,117,513	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
89	wellhead engine	23	280,340	4,119,850	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
90	wellhead engine	25	283,587	4,118,322	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,085
91	wellhead engine	27	280,658	4,118,398	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
92	wellhead engine	29	282,768	4,117,566	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
93	wellhead engine	31	282,573	4,113,463	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,803
94	wellhead engine	33	282,831	4,116,566	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,344
95	wellhead engine	35	283,702	4,115,877	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,738
96	wellhead engine	37	285,237	4,116,837	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,197
97	wellhead engine	39	282,722	4,115,791	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,029
98	wellhead engine	41	285,108	4,115,285	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,596
99	wellhead engine	43	285,941	4,116,597	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,816
100	wellhead engine	45	276,507	4,115,953	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,895
101	wellhead engine	47	274,816	4,115,887	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
102	wellhead engine	49	258,263	4,130,450	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,596
103	wellhead engine	51	288,535	4,117,309	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
104	wellhead engine	53	286,852	4,117,462	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,275
105	wellhead engine	55	288,428	4,120,088	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,252

Table A-34. Near Field Modeling Input Values (Alternative 1) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
106	wellhead engine	57	287,640	4,120,551	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,328
107	wellhead engine	59	287,431	4,115,782	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
108	wellhead engine	61	285,349	4,114,280	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,537
109	wellhead engine	63	286,047	4,117,260	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,816
110	wellhead engine	65	282,805	4,119,009	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
111	wellhead engine	67	274,000	4,115,243	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
112	wellhead engine	69	280,586	4,119,067	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
113	wellhead engine	71	267,191	4,129,310	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,403
114	wellhead engine	73	273,532	4,127,582	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,206
115	wellhead engine	75	269,499	4,129,358	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,177
116	wellhead engine	77	254,934	4,128,881	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,403
117	wellhead engine	79	269,384	4,125,140	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,045
118	wellhead engine	81	276,639	4,124,278	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,347
119	wellhead engine	83	275,043	4,127,652	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
120	wellhead engine	85	268,570	4,124,608	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,045
121	wellhead engine	87	271,849	4,124,407	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
122	wellhead engine	89	274,977	4,121,880	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,131
123	wellhead engine	91	270,121	4,122,899	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
124	wellhead engine	93	275,731	4,116,862	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,482
125	wellhead engine	95	277,106	4,121,823	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,350
126	wellhead engine	97	274,947	4,120,770	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
127	wellhead engine	99	268,435	4,122,945	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
128	wellhead engine	101	248,207	4,123,526	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,819
129	wellhead engine	103	266,885	4,124,654	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
130	wellhead engine	105	263,647	4,123,190	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,147
131	wellhead engine	107	270,186	4,122,009	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,954
132	wellhead engine	109	289,013	4,115,076	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,799
133	wellhead engine	111	274,215	4,126,564	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
134	wellhead engine	113	259,681	4,130,410	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,629
135	wellhead engine	115	281,938	4,119,808	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
136	wellhead engine	117	276,397	4,115,179	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,154
137	wellhead engine	119	280,969	4,116,725	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
138	wellhead engine	121	255,890	4,128,187	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,219
139	wellhead engine	123	263,707	4,125,297	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,596
140	wellhead engine	125	262,712	4,124,660	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,544

Table A-34. Near Field Modeling Input Values (Alternative 1) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
141	wellhead engine	127	252,554	4,123,397	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,960
142	wellhead engine	129	273,489	4,122,696	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,147
143	wellhead engine	131	274,843	4,120,217	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
144	wellhead engine	133	264,329	4,122,171	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
145	wellhead engine	135	249,334	4,122,604	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,796
146	wellhead engine	137	27],870	4,125,184	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,072
147	wellhead engine	139	257,985	4,123,905	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,180
148	wellhead engine	141	271,806	4,126,074	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
149	wellhead engine	143	267,833	4,126,849	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
150	wellhead engine	145	262,158	4,123,898	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,337
151	wellhead engine	147	286,812	4,115,908	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
152	wellhead engine	149	284,366	4,114,083	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,016
153	wellhead engine	151	281,992	4,115,032	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
154	wellhead engine	153	286,782	4,118,241	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,413
155	wellhead engine	155	284,120	4,118,309	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,085
156	wellhead engine	157	282,132	4,120,470	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
157	wellhead engine	159	288,280	4,114,206	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,737
158	wellhead engine	161	285,790	4,114,158	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
159	wellhead engine	163	282,619	4,115,238	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,252
160	wellhead engine	165	264,731	4,130,156	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,692
161	wellhead engine	167	273,402	4,] 26,031	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
162	wellhead engine	169	273,955	4,113,578	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,796
163	wellhead engine	171	281,694	4,117,261	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,597
164	wellhead engine	173	260,723	4,129,603	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,797
165	wellhead engine	175	271,851	4,127,738	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,469
166	wellhead engine	180	289,976	4,118,050	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
167	wellhead engine	182	272,626	4,123,608	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,052
168	wellhead engine	184	281,321	4,123,378	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,226
169	wellhead engine	188	279,846	4,128,080	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,800
170	wellhead engine	190	281,249	4,124,046	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,397
171	wellhead engine	194	285,007	4,121,729	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,596
172	wellhead engine	197	296,270	4,113,898	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
173	wellhead engine	199	283,718	4,123,427	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,596
174	wellhead engine	201	285,948	4,120,372	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,649
175	wellhead engine	203	288,433	4,120,309	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,311

Table A-34. Near Field Modeling Input Values (Alternative 1) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
176	wellhead engine	206	281,439	4,127,927	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,800
177	wellhead engine	209	282,966	4,121,781	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,997
178	wellhead engine	211	289,873	4,113,944	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,596
179	wellhead engine	212	283,386	4,124,324	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,764
180	wellhead engine	214	285,422	4,120,608	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,059
181	wellhead engine	216	288,435	4,116,867	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
182	wellhead engine	218	295,549	4,113,471	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
183	wellhead engine	220	273,443	4,124,253	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,104
184	wellhead engine	222	283,412	4,121,880	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,997
185	wellhead engine	224	290,652	4,116,701	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,796
186	wellhead engine	226	264,640	4,126,938	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,596
187	wellhead engine	228	282,056	4,124,358	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,2]0
188	wellhead engine	231	277,363	4,128,146	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
189	wellhead engine	233	287,211	4,114,122	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,000
190	wellhead engine	235	260,454	4,123,279	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
]9]	wellhead engine	238	296,251	4,113,122	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
192	wellhead engine	240	263,008	4,131,981	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,997
193	wellhead engine	241	281,705	4,114,262	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,397
194	wellhead engine	243	260,634	4,126,495	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
195	wellhead engine	245	259,497	4,123,973	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,186
196	wellhead engine	247	281,627	4,124,924	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,157
197	wellhead engine	250	282,909	4,123,004	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,718
198	wellhead engine	252	284,534	4,120,630	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,059
199	wellhead engine	254	263,091	4,128,647	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,997
200	wellhead engine	256	289,512	4,117,284	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,996
201	wellhead engine	258	286,690	4,121,575	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
202	wellhead engine	260	282,009	4,119,140	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
203	wellhead engine	262	285,362	4,118,277	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,397
204	wellhead engine	264	286,075	4,118,370	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,997
205	wellhead engine	266	287,451	4,116,559	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,275
206	wellhead engine	268	283,997	4,113,537	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,016
207	wellhead engine	269	284,423	4,119,744	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	8,797
208	wellhead engine	271	283,606	4,122,542	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,728
209	wellhead engine	273	274,998	4,125,988	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,196
210	wellhead engine	275	268,658	4,127,826	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,127

Table A-34. Near Field Modeling Input Values (Alternative 1) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
211	wellhead engine	277	284,323	4,115,860	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,738
212	wellhead engine	279	276,353	4,116,846	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,482
213	wellhead engine	281	276,086	4,113,522	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	6,993
214	wellhead engine	283	277,161	4,113,826	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,544
215	wellhead engine	285	285,418	4,113,501	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,537
216	wellhead engine	287	253,338	4,128,927	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,396
217	wellhead engine	289	262,961	4,130,317	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,800
218	wellhead engine	291	262,870	4,127,098	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,659
219	wellhead engine	293	254,268	4,127,345	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,127
220	wellhead engine	295	267,216	4,130,197	0.13	0.11	0.002	1.524	0.2	3.8	477	1.0668	1.0668	7,521

Table A-35. Near Field Modeling Input Values (Alternative 2)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
1	Elmridge 1	ELM1A	288,301	4,112,688	0.521	0.694	0.08	6.60	0.46	17.3	644	3.9	3.9	6,399
2	Elmridge 1	ELM1B	288,301	4,112,698	0.521	0.694	0.08	6.60	0.46	17.3	644	3.9	3.9	6,399
3	Elmridge 1	ELM1C	288,301	4,112,708	0.521	0.694	0.08	6.60	0.46	17.3	644	3.9	3.9	6,399
4	Elmridge 1	ELM1D	288,301	4,112,718	0.521	0.694	0.08	6.60	0.46	17.3	644	3.9	3.9	6,399
5	Elmridge 1	ELM1DEHY	288,301	4,112,728	0.126	0.106	0.00	3.50	0.15	6.4	533	2.3	2.3	6,399
6	Elmridge 1	ELM1SEP	288,301	4,112,738	0.089	0.150	0.00	3.50	0.15	6.4	533	2.3	2.3	6,399
7	Elmridge 2	ELM2A	274,470	4,114,300	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
8	Elmridge 2	ELM2B	274,470	4,114,310	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
9	Elmridge 2	ELM2C	274,470	4,114,320	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
10	Elmridge 2	ELM2D	274,470	4,114,330	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
11	Elmridge 2	ELM2E	274,470	4,114,340	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
12	Elmridge 2	ELM2F	274,470	4,114,350	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
13	Elmridge 2	ELM2G	274,470	4,114,360	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
14	Elmridge 2	ELM2H	274,470	4,114,370	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
15	Elmridge 2	ELM2I	274,470	4,114,380	0.625	0.833	0.10	9.50	0.38	29.2	644	5.9	5.9	6,996
16	Elmridge 2	ELM2DEHY	274,470	4,114,270	0.126	0.106	0.00	3.50	0.2	6.4	533	2.0	2.0	6,996
17	Elmridge 2	ELM2SEP	274,470	4,114,280	0.110	0.360	0.00	3.50	0.2	6.4	533	2.0	2.0	6,996
18	Elmridge 2	ELM2SEPa	274,470	4,114,290	0.110	0.360	0.00	3.50	0.2	6.4	533	2.0	2.0	6,996
19	PETROX 1	PET1	292,405	4,113,912	0.258	0.344	0.04	3.05	0.3	24.1	644	2.0	2.0	6,396
20	PETROX 1	PET1DEH	292,405	4,113,922	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	6,396
21	PETROX 1	PET1SEP	292,405	4,113,932	0.022	0.019	0.00	3.00	0.2	6.4	533	2.0	2.0	6,396
22	PETROX 2	PET2	286,151	4,120,460	0.792	1.056	0.12	9.10	0.46	26.3	644	4.9	4.9	7,613
23	PETROX 2	PET2DEH	286,151	4,120,470	0.126	0.106	0.00	3.10	0.2	6.4	533	2.0	2.0	7,613
24	PETROX 2	PET2SEP	286,151	4,120,480	0.034	0.057	0.00	3.10	0.2	6.4	533	2.0	2.0	7,613
25	PETROX 2	PET2SEPa	286,151	4,120,450	0.034	0.057	0.00	3.10	0.2	6.4	533	2.0	2.0	7,613
25	BP AMOCO 1	BP1A	273,670	4,124,111	0.556	0.741	0.09	4.60	0.46	18.4	644	3.0	3.0	7,141
26	BP AMOCO 1	BP1B	273,670	4,124,121	0.556	0.741	0.09	4.60	0.46	18.4	644	3.0	3.0	7,141
27	BP AMOCO 1	BP1C	273,670	4,124,131	0.556	0.741	0.09	4.60	0.46	18.4	644	3.0	3.0	7,141
28	BP AMOCO 1	BP1DEH	273,670	4,124,141	0.126	0.106	0.00	3.00	0.15	6.4	533	2.0	2.0	7,141
29	BP AMOCO 1	BP1SEP	273,670	4,124,151	0.143	0.120	0.00	3.00	0.15	6.4	533	2.0	2.0	7,141
30	BP AMOCO 2	BP2A	275,030	4,114,050	0.625	0.833	0.10	4.60	0.38	29.9	644	3.0	3.0	6,799
31	BP AMOCO 2	BP2B	275,030	4,114,060	0.625	0.833	0.10	4.60	0.38	29.9	644	3.0	3.0	6,799
32	BP AMOCO 2	BP2DEH	275,030	4,114,070	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	6,799
33	BP AMOCO 2	BP2SEP	275,030	4,114.080	0.107	0.090	0.00	3.00	0.2	6.4	533	2.0	2.0	6,799
34	PETROX 3	PET3	283,100	4,123,180	0.258	0.344	0.04	3.05	0.3	24.1	644	2.0	2.0	7,616
35	PETROX 3	PET3DEH	283,100	4,123,190	0.126	0.106	0.00	3.00	0.1524	6.4	533	2.0	2.0	7,616

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source De-scription	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
36	PETROX 3	PET3SEP	283,100	4,123,200	0.022	0.019	0.00	3.00	0.1524	6.4	533	2.0	2.0	7,616
37	PETROX 4	PET4	281,500	4,123,161	0.258	0.344	0.04	3.05	0.3	24.1	644	2.0	2.0	8,197
38	PETROX 4	PET4DEH	281,500	4,123,171	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	8,197
39	PETROX 4	PET4SEP	281,500	4,123,181	0.022	0.019	0.00	3.00	0.2	6.4	533	2.0	2.0	8,197
40	PURE 1	PUR1	251,600	4,125,830	0.625	0.833	0.10	4.60	0.38	29.9	644	3.0	3.0	7,036
41	PURE I	PUR1DEH	251,600	4,125,840	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	7,036
42	PURE I	PUR1SEP	251,600	4,125,850	0.054	0.045	0.00	3.00	0.2	6.4	533	2.0	2.0	7,036
43	PURE 2	PUR2	249,350	4,125,160	0.100	0.133	0.02	3.00	0.18	21.5	583	2.0	2.0	6,803
44	PURE 2	PUR2DEH	249,350	4,125,170	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	6,803
45	PURE 2	PUR2SEP	249,350	4,125,180	0.009	0.007	0.00	3.00	0.2	6.4	533	2.0	2.0	6,803
46	BP 3	BP3A	272,164	4,126,575	0.625	0.833	0.10	4.60	0.38	29.9	644	3.0	3.0	6,996
47	BP 3	BP3B	272,164	4,126,585	0.625	0.833	0.10	4.60	0.38	29.9	644	3.0	3.0	6,996
48	BP3	BP3DEH	272,164	4,126,595	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	6,996
49	BP 3	BP3SEP	272,164	4,126,605	0.107	0.090	0.00	3.00	0.2	6.4	533	2.0	2.0	6,996
50	BP4	BP4A	259,000	4,124,000	0.556	0.741	0.09	4.60	0.46	18.4	644	3.0	3.0	7082.0
51	BP4	BP4B	259,000	4,124,0 I 0	0.556	0.741	0.09	4.60	0.46	18.4	644	3.0	3.0	7082.0
52	BP4	BP4C	259,000	4,124,020	0.556	0.741	0.09	4.60	0.46	18.4	644	3.0	3.0	7082.0
53	BP4	BP4DEH	259,000	4,124,030	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	7082.0
54	BP4	BP4SEP	259,000	4,124,040	0.143	0.120	0.00	3.00	0.2	6.4	533	2.0	2.0	7082.0
55	Cross Timbers	HUB1	257,000	4,125,000	0.521	0.694	0.08	4.60	0.5	17.3	644.0	3.0	3.0	6,934
56	Cross Timbers	HUB2	257,000	4,125,010	0.521	0.694	0.08	4.60	0.5	17.3	644.0	3.0	3.0	6,934
57	Cross Timbers	HUBDEH	257,000	4,125,020	0.126	0.106	0.00	3.00	0.2	6.4	533.0	2.0	2.0	6,934
58	Cross Timbers	HUBSEP	257,000	4,125,030	0.089	0.075	0.00	3.00	0.2	6.4	533.0	2.0	2.0	6,934
59	Independent 1	IP1	277,120	4,115,417	0.417	0.556	0.06	3.05	0.3	24.8	644	2.0	2.0	7,514
60	Independent 1	IP1DEH	277,120	4,115,427	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	7,514
61	Independent 1	IP1SEP	277,120	4,115,437	0.036	0.030	0.00	3.00	0.2	6.4	533	2.0	2.0	7,514
62	Independent 2	IP2A	275,600	4,120,800	0.833	1.111	0.13	7.50	0.46	25.3	644	4.9	4.9	7,196
63	Independent 2	1P2DEH	275,600	4,120,810	0.126	0.106	0.00	3.00	0.15	6.4	533	2.0	2.0	7,196
64	Independent 2	IP2SEP	275,600	4,120,820	0.071	0.060	0.00	3.00	0.15	6.4	533	2.0	2.0	7,196
65	Independent 3	IP3A	276,435	4,116,788	0.833	1.111	0.13	7.50	0.46	25.3	644	4.9	4.9	7,426
66	Independent 3	IP3DEH	276,435	4,116,778	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	7,426
67	Independent 3	IP3SEP	276,435	4,116,778	0.071	0.060	0.00	3.00	0.2	6.4	533	2.0	2.0	7,426
68	Bayfield	BAY 1	271,500	4,125,000	0.833	1.111	0.13	7.50	0.5	28.6	644	4.9	4.9	6,996
69	Bayfield	BAYDEH	271,500	4,125.010	0.126	0.106	0.00	3.00	0.2	6.4	533	2.0	2.0	6,996
70	Bayfield	BA YSEP	271,500	4,125,020	0.071	0.060	0.00	3.00	0.2	6.4	533	2.0	2.0	6,996

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
71	Huber engine	5	263,008	4,131,981	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,970
72	Huber engine	13	259,133	4,129,870	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,498
73	Huber engine	296	263,091	4,128,647	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,797
74	Huber engine	347	264,640	4,126,938	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,478
75	Huber engine	359	271,025	4,126,761	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
76	Huber engine	380	270,212	4,126,228	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,291
77	Huber engine	1	266,019	4,125,455	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,377
78	Huber engine	2	260,454	4,123,279	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,157
79	Huber engine	174	258,942	4,123,212	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
80	Huber engine	175	284,474	4,121,742	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,544
81	Huber engine	176	289,873	4,113,944	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,586
82	Huber engine	213	289,820	4,115,389	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,796
83	Huber engine	214	290,652	4,116,701	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,609
84	Huber engine	217	289,953	4,117,162	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,796
85	Huber engine	228	289,190	4,118,625	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
86	Huber engine	230	289,976	4,118,050	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,396
87	Huber engine	241	292,360	4,113,882	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,396
88	Huber engine	249	293,869	4,113,846	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
89	Huber engine	266	293,409	4,113,191	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,862
90	Huber engine	267	294,938	4,113,931	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,790
91	Huber engine	275	295,549	4,113,471	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,790
92	Huber engine	292	296,251	4,113,122	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,528
93	wellhead engine	3	279,846	4,128,080	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,800
94	wellhead engine	6	280,629	4,127,505	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,800
95	wellhead engine	8	281,439	4,127,927	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,800
96	wellhead engine	10	281,384	4,125,819	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,397
97	wellhead engine	12	282,276	4,126,018	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,256
98	wellhead engine	15	274,918	4,122,991	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
99	wellhead engine	17	274,862	4,124,214	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
100	wellhead engine	19	273,443	4,124,253	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,104
101	wellhead engine	2]	272,626	4,123,608	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,052
102	wellhead engine	23	277,363	4,128,146	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
103	wellhead engine	25	276,595	4,125,945	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,446
104	wellhead engine	27	280,560	4,124,841	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,728
105	wellhead engine	29	282,056	4,124,358	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,210

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
106	wellhead engine	31	281,321	4,123,378	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,226
107	wellhead engine	33	282,013	4,122,694	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,125
108	wellhead engine	35	282,946	4,124,446	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,764
109	wellhead engine	37	283,718	4,123,427	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,596
110	wellhead engine	39	282,909	4,123,004	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,718
111	wellhead engine	41	282,966	4,121,781	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
112	wellhead engine	43	285,118	4,122,614	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,596
113	wellhead engine	45	285,894	4,121,706	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,410
114	wellhead engine	47	283,641	4,120,431	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
115	wellhead engine	49	285,422	4,120,608	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,059
116	wellhead engine	51	285,845	4,119,819	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,354
117	wellhead engine	53	287,640	4,120,551	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,328
118	wellhead engine	55	286,911	4,119,793	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,580
1]9	wellhead engine	57	288,433	4,] 20,309	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,311
120	wellhead engine	59	288,383	4,118,312	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,209
121	wellhead engine	61	287,676	4,118,441	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,209
122	wellhead engine	63	286,802	4,119,018	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,436
123	wellhead engine	65	286,075	4,118,370	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
124	wellhead engine	67	285,382	4,119,054	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,640
125	wellhead engine	69	286,749	4,116,909	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,275
126	wellhead engine	71	287,554	4,117,111	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
127	wellhead engine	73	288,435	4,116,867	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
128	wellhead engine	75	284,120	4,118,309	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,085
129	wellhead engine	77	282,565	4,120,014	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,597
130	wellhead engine	79	282,001	4,118,808	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
131	wellhead engine	81	281,210	4,115,719	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,584
132	wellhead engine	83	281,705	4,114,262	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,397
133	wellhead engine	85	283,467	4,113,662	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,075
134	wellhead engine	87	284,366	4,114,083	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,016
135	wellhead engine	89	285,349	4,114,280	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,537
136	wellhead engine	91	286,576	4,113,583	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,000
137	wellhead engine	93	287,211	4,114,122	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,000
]38	wellhead engine	95	288,299	4,114,983	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,911
139	wellhead engine	97	287,500	4,115,003	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,911
140	wellhead engine	99	287,431	4,115,782	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
141	wellhead engine	101	285,039	4,116,065	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,797
142	wellhead engine	103	285,907	4,115,265	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
143	wellhead engine	105	284,323	4,115,860	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,738
144	wellhead engine	107	284,011	4,117,534	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,085
145	wellhead engine	109	285,941	4,116,597	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,816
146	wellhead engine	111	277,161	4,113,826	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,544
147	wellhead engine	113	276,086	4,113,522	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,993
148	wellhead engine	115	275,488	4,114,425	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,875
149	wellhead engine	117	273,982	4,114,577	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
150	wellhead engine	119	274,798	4,115,221	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
151	wellhead engine	121	274,816	4,115,887	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
152	wellhead engine	123	276,507	4,115,953	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,895
153	wellhead engine	125	276,353	4,116,846	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,482
154	wellhead engine	127	260,818	4,132,932	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,164
155	wellhead engine	129	261,438	4,132,914	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,164
156	wellhead engine	131	263,119	4,132,755	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,941
157	wellhead engine	133	264,714	4,132,711	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
158	wellhead engine	135	256,623	4,132,053	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,079
159	wellhead engine	137	258,219	4,132,006	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,062
160	wellhead engine	139	259,194	4.131,979	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,770
161	wellhead engine	141	259,814	4,131,961	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,797
162	wellhead engine	143	260,793	4,132,044	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,875
163	wellhead engine	145	264,689	4,131,823	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,777
164	wellhead engine	147	266,192	4,131,670	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
165	wellhead engine	149	254,920	4,131,436	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
166	wellhead engine	151	256,604	4,131,387	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,600
167	wellhead engine	153	258,200	4,131,341	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,596
168	wellhead engine	155	254,388	4,131,451	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
169	wellhead engine	157	264,670	4.131,157	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,626
170	wellhead engine	159	265,645	4,131,130	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,596
171	wellhead engine	161	261,302	4,131,252	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,964
172	wellhead engine	163	267,149	4,130,977	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,583
173	wellhead engine	165	272,024	4,130,843	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
174	wellhead engine	167	273,619	4.130,800	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
175	wellhead engine	169	272,644	4,130,826	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
176	wellhead engine	171	275,835	4,130,741	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,029
177	wellhead engine	173	276,811	4,130,714	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,902
178	wellhead engine	178	277,431	4,130,698	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,902
179	wellhead engine	180	278,406	4,130,672	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,783
180	wellhead engine	182	252,675	4,130,502	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,544
181	wellhead engine	184	254,270	4,130,455	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
182	wellhead engine	186	254,980	4,130,435	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,826
183	wellhead engine	188	255,958	4,130,517	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
184	wellhead engine	190	258,263	4,130,450	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,574
185	wellhead engine	192	259,681	4,130,410	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,629
186	wellhead engine	194	264,731	4,130,156	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,692
187	wellhead engine	196	267,216	4,130,197	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,521
188	wellhead engine	198	251,680	4,129,865	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,314
189	wellhead engine	200	252,658	4,129,947	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,715
190	wellhead engine	202	254,254	4,129,901	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,439
191	wellhead engine	204	270,404	4,129,999	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,593
192	wellhead engine	205	254,963	4,129,880	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,492
193	wellhead engine	207	271,908	4,129,847	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,797
194	wellhead engine	209	273,504	4,129,804	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,505
195	wellhead engine	211	275,191	4,129,869	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,387
196	wellhead engine	215	275,723	4,129,855	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,400
197	wellhead engine	218	251,148	4,129,881	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
198	wellhead engine	220	257,531	4,129,694	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,383
]99	wellhead engine	222	279,003	4,129,768	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,649
200	wellhead engine	224	278,379	4,129,673	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,482
201	wellhead engine	226	255,935	4,129,740	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,636
202	wellhead engine	229	265,513	4,129,579	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,797
203	wellhead engine	232	260,723	4,129,603	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,564
204	wellhead engine	234	269,499	4,129,358	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,177
205	wellhead engine	236	276,769	4,129,161	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
206	wellhead engine	237	278,986	4,129,103	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,449
207	wellhead engine	239	279,960	4,129,077	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,593
208	wellhead engine	242	281,468	4,129,038	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,780
209	wellhead engine	244	250,143	4,128,911	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,187
210	wellhead engine	246	251,742	4,128,975	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,229

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
211	wellhead engine	248	252,626	4,128,838	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
212	wellhead engine	251	253,338	4,128,927	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,272
213	wellhead engine	253	254,934	4,128,881	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,311
214	wellhead engine	255	255,913	4,128,964	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,400
215	wellhead engine	257	250,038	4,128,359	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,416
216	wellhead engine	259	269,472	4,128,359	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,127
217	wellhead engine	261	251,722	4,128,309	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,170
218	wellhead engine	263	254,120	4,128,349	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
219	wellhead engine	265	278,959	4,128,104	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,600
220	wellhead engine	268	255,890	4,128,187	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,219
221	wellhead engine	270	268,658	4,127,826	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,127
222	wellhead engine	272	271,851	4,127,738	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,469
223	wellhead engine	274	278,321	4,127,454	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,701
224	wellhead engine	277	283,023	4,127,443	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,128
225	wellhead engine	279	249,388	4,127,378	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
226	wellhead engine	281	283,466	4,127,431	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,128
227	wellhead engine	283	254,268	4,127,345	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,052
228	wellhead engine	285	259,589	4,127,192	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,446
229	wellhead engine	287	263,842	4,126,960	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,744
230	wellhead engine	289	249,371	4,126,823	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
231	wellhead engine	291	269,426	4,126,693	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,154
232	wellhead engine	294	274,215	4,126,564	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
233	wellhead engine	297	283,089	4,126,552	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,128
234	wellhead engine	299	283,709	4,126,536	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,197
235	wellhead engine	301	279,890	4,126,413	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,230
236	wellhead engine	303	257,438	4,126,476	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,091
237	wellhead engine	305	262,227	4,126,339	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
238	wellhead engine	307	273,402	4,126,031	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
239	wellhead engine	309	283,695	4,125,982	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,026
240	wellhead engine	311	278,901	4,125,884	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,197
241	wellhead engine	313	280,497	4,125,842	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,230
242	wellhead engine	315	247,833	4,125,870	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,275
243	wellhead engine	317	251,561	4,125,870	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,045
244	wellhead engine	319	261,315	4,125,476	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,206
245	wellhead engine	321	264,505	4,125,275	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,239

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source De-scription	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
246	wellhead engine	323	269,384	4,125,140	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,045
247	wellhead engine	325	282,073	4,125,024	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,157
248	wellhead engine	327	258,904	4,124,990	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
249	wellhead engine	329	260,50 1	4,124,944	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,206
250	wellhead engine	331	248,253	4,125,080	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
251	wellhead engine	333	246,738	4,124,903	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
252	wellhead engine	335	278,875	4,124,885	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,256
253	wellhead engine	337	279,850	4,124,860	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,459
254	wellhead engine	339	266,885	4,124,654	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
255	wellhead engine	341	262,712	4,124,660	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
256	wellhead engine	343	265,462	4,124,583	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,239
257	wellhead engine	345	246,186	4,124,253	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,796
258	wellhead engine	348	279,832	4,124,194	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,426
259	wellhead engine	350	280,454	4,124,178	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,426
260	wellhead engine	352	250,980	4,124,221	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
261	wellhead engine	354	257,985	4,123,905	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,180
262	wellhead engine	356	261,268	4,123,811	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,022
263	wellhead engine	358	264,462	4,123,721	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,311
264	wellhead engine	361	248,207	4,123,526	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,819
265	wellhead engine	363	249,892	4,123,476	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,796
266	wellhead engine	365	277 ,236	4,123,3 74	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,380
267	wellhead engine	367	278,209	4,123,237	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,672
268	wellhead engine	369	246,688	4,123,238	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,783
269	wellhead engine	37]	280,427	4,123,179	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,138
270	wellhead engine	373	246,245	4,123,252	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,754
271	wellhead engine	375	244,644	4,123,189	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,082
272	wellhead engine	377	268,435	4,122,945	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
273	wellhead engine	379	262,668	4,123,106	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
274	wellhead engine	382	270,121	4,122,899	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
275	wellhead engine	384	244,631	4,122,745	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,082
276	wellhead engine	386	278,816	4,122,666	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,93]
277	wellhead engine	388	280,413	4,122,625	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,970
278	wellhead engine	390	273,492	4,122,808	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,147
279	wellhead engine	392	276,595	4,122,613	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,380
280	wellhead engine	394	259,452	4,122,420	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
281	wellhead engine	396	269,121	4,122,038	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,944
282	wellhead engine	398	273,380	4,121,922	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,996
283	wellhead engine	400	274,977	4,121,880	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,131
284	wellhead engine	402	281,455	4,121,709	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,502
285	wellhead engine	404	278,703	4,121,781	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,685
286	wellhead engine	406	280,390	4,121,736	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,397
287	wellhead engine	408	274,947	4,120,770	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
288	wellhead engine	410	276,456	4,120,730	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,377
289	wellhead engine	412	277,432	4,120,704	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,669
290	wellhead engine	414	279,650	4,120,646	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,102
291	wellhead engine	416	290,031	4,120,269	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
292	wellhead engine	418	275,817	4,120,080	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,406
293	wellhead engine	420	277,414	4,120,038	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,600
294	wellhead engine	422	279,015	4,120,107	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,469
295	wellhead engine	424	289,132	4,119,848	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
296	wellhead engine	426	290,730	4,119,808	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,396
297	wellhead engine	428	274,814	4,119,108	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
298	wellhead engine	430	276,415	4,119,176	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,442
299	wellhead engine	432	277,391	4,119,150	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,754
300	wellhead engine	434	279,610	4,119,092	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,744
301	wellhead engine	436	290,705	4,118,809	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,341
302	wellhead engine	438	275,687	4,118,529	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,442
303	wellhead engine	440	277,373	4,118,485	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,305
304	wellhead engine	442	278,971	4,118,443	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,597
305	wellhead engine	444	274,772	4,117,554	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,196
306	wellhead engine	446	277,968	4,117,469	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,295
307	wellhead engine	448	277,258	4,117,488	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,082
308	wellhead engine	450	283,653	4,117,432	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
309	wellhead engine	452	290,666	4,117,255	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,796
310	wellhead engine	454	277,240	4,116,822	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,082
311	wellhead engine	456	278,930	4,116,889	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,456
312	wellhead engine	458	275,731	4,116,862	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,482
313	wellhead engine	460	277,217	4,115,934	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,895
314	wellhead engine	462	279,525	4,115,874	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,266
315	wellhead engine	464	291,513	4,115,569	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,599

Table A-35. Near Field Modeling Input Values (Alternative 2) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
316	wellhead engine	466	277,910	4,115,250	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
317	wellhead engine	468	279,508	4,115,208	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,039
318	wellhead engine	470	290,700	4,115,034	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,504
319	wellhead engine	472	292,117	4,114,888	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,596
320	wellhead engine	474	279,393	4,114,212	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,764
321	wellhead engine	476	281,081	4,114,168	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,397
322	wellhead engine	478	291,563	4,114,013	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,396
323	wellhead engine	480	279,201	4,113,661	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,764
324	wellhead engine	482	280,977	4,113,615	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,397
325	wellhead engine	484	291,547	4,113,347	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	6,393
326	wellhead engine	488	281,938	4,119,808	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
327	wellhead engine	490	280,586	4,119,067	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
328	wellhead engine	492	281,880	4,117,589	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
329	wellhead engine	494	280,969	4,116,725	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,597
330	wellhead engine	496	283,240	4,115,222	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,252
331	wellhead engine	498	281,639	4,115,152	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,597
332	wellhead engine	500	284,423	4;119,744	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
333	wellhead engine	501	284,408	4,119,190	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,797
334	wellhead engine	503	283,587	4,118,322	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,085
335	wellhead engine	505	280,281	4,120,962	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,102
336	wellhead engine	507	281,320	4,119,936	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,728
337	wellhead engine	509	280,658	4,118,398	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,597
338	wellhead engine	511	280,546	4,117,513	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,597
339	wellhead engine	513	280,505	4,115,959	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,584
340	wellhead engine	515	282,831	4,116,566	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,344
341	wellhead engine	517	282,573	4,113,463	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,803
342	wellhead engine	519	283,679	4,114,989	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,167
343	wellhead engine	521	283,636	4,116,767	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	7,997
344	wellhead engine	523	282,722	4,115,791	0.133	0.115	0.002	1.52	0.2	3.8	477	1.1	1.1	8,029

Table A-36. Near Field Modeling Input Values (Alternative 5)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
1	Elmridge 1	ELM1A	288,301	4,112,688	0.52	0.69	0.08	6.6	0.5	17.3	644	3.9	3.9	6,399
2	Elmridge 1	ELM1B	288,301	4,112,698	0.52	0.69	0.08	6.6	0.5	17.3	644	3.9	3.9	6,399
3	Elmridge 1	ELM1C	288,301	4,112,708	0.52	0.69	0.08	6.6	0.5	17.3	644	3.9	3.9	6,399
4	Elmridge 1	ELM1D	288,301	4,112,718	0.52	0.69	0.08	6.6	0.5	17.3	644	3.9	3.9	6,399
5	Elmridge 1	ELMlDEHY	288,301	4,112,728	0.13	0.11	0.00	3.5	0.2	6.4	533	2.3	2.3	6,399
6	Elmridge 1	ELM1SEP	288,301	4,112,738	0.09	0.15	0.00	3.5	0.2	6.4	533	2.3	2.3	6,399
7	PURE 1	PUR1	251,600	4,125,830	0.63	0.83	0.10	4.6	0.4	29.9	644	3.0	3.0	7,036
8	PURE 1	PUR1SEP	251,600	4,125,840	0.13	0.11	0.00	3.0	0.2	6.4	533	2.0	2.0	7,036
9	PURE 1	PURlDEH	251,600	4,125,850	0.05	0.05	0.00	3.0	0.2	6.4	533	2.0	2.0	7,036
10	PURE 2	PUR2	249,350	4,125,160	0.10	0.13	0.02	3.0	0.2	21.5	583	2.0	2.0	6,803
11	PURE 2	PUR2SEP	249,350	4,125,170	0.13	0.11	0.00	3.0	0.2	6.4	533	2.0	2.0	6,803
12	PURE 2	PUR2DEH	249,350	4,125,180	0.01	0.01	0.00	3.0	0.2	6.4	533	2.0	2.0	6,803
13	BP3	BP3A	272,164	4,126,575	0.63	0.83	0.10	29.9	0.4	29.9	644	3.0	3.0	6,996
14	BP3	BP3B	272,164	4,126,585	0.6	0.83	0.1	29.9	0.4	29.9	644	3.0	3.0	6,996
15	BP3	BP3SEP	272,164	4,126,595	0.1	0.11	0.0	6.4	0.2	6.4	533	2.0	2.0	6,996
16	BP3	BP3DEH	272,164	4,126,605	0.1	0.09	0.0	6.4	0.2	6.4	533	2.0	2.0	6,996
17	Cross Timbers	HUB1	257,000	4,125,000	0.5	0.69	0.1	4.6	0.5	17.3	644	3.0	3.0	6,934
18	Cross Timbers	HUB2	257,000	4,125,010	0.5	0.69	0.1	4.6	0.5	17.3	644	3.0	3.0	6,934
19	Cross Timbers	HUBDEH	257,000	4,125,020	0.1	0.11	0.0	3.0	0.2	6.4	533	2.0	2.0	6,934
20	Cross Timbers	HUBSEP	257,000	4,125,030	0.1	0.08	0.0	3.0	0.2	6.4	533	2.0	2.0	6,934
21	Bayfield	BAY1	271,500	4,125,000	0.8	1.1	0.1	7.5	0.5	28.6	644	4.9	4.9	6,996
22	Bayfield	BAYDEH	271,500	4,125,010	0.1	0.1	0.0	3.0	0.2	6.4	533	2.0	2.0	6,996
23	Bayfield	BAYSEP	271,500	4,125,020	0.1	0.1	0.0	3.0	0.2	6.4	533	2.0	2.0	6,996
24	Huber engine	207	263,842	4,126.960	0.13	0.11	0.002	1.5	0.20	3.8	477	1.1	1.1	7,744
25	Huber engine	230	262,712	4,124,660	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,396
26	Huber engine	237	261,268	4,123,811	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,022
27	Huber engine	249	262,668	4,123,106	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
28	Huber engine	hub1	264,640	4,126,938	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,478
29	Huber engine	hub2	258,942	4,123,212	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
30	Huber engine	176	260,793	4,132,044	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,875
31	Huber engine	177	261,302	4,131,252	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,738
32	Huber engine	179	258,263	4,130,450	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,574
33	Huber engine	185	257,531	4,129,694	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,383
34	Huber engine	187	260,723	4,129,603	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,564
35	Huber engine	192	253,338	4,128,927	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,272

Table A-36. Near Field Modeling Input Values (Alternative 5) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
36	Huber engine	193	254,934	4,128,881	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,311
37	Huber engine	196	254,120	4,128,349	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
38	Huber engine	204	254,268	4,127,345	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,052
39	wellhead engine	1	290,652	4,116,701	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,796
40	wellhead engine	3	289,953	4,117,162	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
41	wellhead engine	5	289,190	4,118,625	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,045
42	wellhead engine	7	289,976	4,118,050	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
43	wellhead engine	9	287,640	4,120,551	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,328
44	wellhead engine	11	288,428	4,120,088	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,252
45	wellhead engine	13	287,601	4,118,998	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,249
46	wellhead engine	15	288,313	4,115,538	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
47	wellhead engine	17	271,025	4,126,761	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
48	wellhead engine	19	270,212	4,126,228	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,291
49	wellhead engine	21	284,474	4,121,742	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,997
50	wellhead engine	23	260,793	4,132,044	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,997
51	wellhead engine	25	262,451	4,131,109	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,823
52	wellhead engine	27	259,681	4,130,410	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,629
53	wellhead engine	29	264,731	4,130,156	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,692
54	wellhead engine	31	267,216	4,130,197	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,521
55	wellhead engine	33	265,513	4,129,579	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,797
56	wellhead engine	35	262,407	4,129,555	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,797
57	wellhead engine	37	267,191	4,129,310	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,403
58	wellhead engine	39	253,338	4,128,927	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,396
59	wellhead engine	41	255,913	4,128,964	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,400
60	wellhead engine	43	254,120	4,128,349	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,200
61	wellhead engine	45	255,890	4,128,187	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,219
62	wellhead engine	47	263,956	4,127,845	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,797
63	wellhead engine	49	275,043	4,127,652	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,396
64	wellhead engine	51	254,268	4,127,345	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,127
65	wellhead engine	53	262,870	4,127,098	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,659
66	wellhead engine	55	267,833	4,126,849	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
67	wellhead engine	57	274,215	4,126,564	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
68	wellhead engine	59	268,616	4,126,272	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,059
69	wellhead engine	6]	271,806	4,126,074	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
70	wellhead engine	63	274,998	4,125,988	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196

Table A-36. Near Field Modeling Input Values (Alternative 5) (continued)

Source Count	Source Description	Unit ID	UTM		Emission Rate			Stack Parameters				Building		Elevation (ft)
			Easting (m)	Northing (m)	NOx (g/s)	CO (g/s)	HAP (g/s)	Height (m)	Diameter (m)	Velocity (m/s)	Temp (°K)	Height (m)	Width (m)	
71	wellhead engine	65	261,315	4,125,476	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,206
72	wellhead engine	67	264,505	4,125,275	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,239
73	wellhead engine	69	269,384	4,125,140	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,045
74	wellhead engine	7]	258,904	4,] 24,990	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
75	wellhead engine	73	250,024	4,124,916	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,796
76	wellhead engine	75	266,885	4,124,654	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,396
77	wellhead engine	77	262,712	4,124,660	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,544
78	wellhead engine	79	271,849	4,] 24,407	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
79	wellhead engine	8]	250,980	4,] 24,221	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
80	wellhead engine	83	257,985	4,123,905	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,180
81	wellhead engine	85	262,158	4,123,898	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,337
82	wellhead engine	87	248,207	4,123,526	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,819
83	wellhead engine	89	249,892	4,] 23,476	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,796
84	wellhead engine	91	277,236	4,]23,374	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,380
85	wellhead engine	93	263,647	4,123,190	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,147
86	wellhead engine	95	268,435	4,] 22,945	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
87	wellhead engine	97	269,323	4,]22,92]	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,977
88	wellhead engine	99	27],7]8	4,] 22,856	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,039
89	wellhead engine	]0]	249,334	4,] 22,604	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,796
90	wellhead engine	103	252,975	4,122,608	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,960
91	wellhead engine	105	264,329	4,122,171	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,996
92	wellhead engine	107	270,]86	4,122,009	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	6,954
93	wellhead engine	]09	274,977	4,12],880	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,131
94	wellhead engine	]11	274,947	4,120,770	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
95	wellhead engine	]]3	274,843	4,] 20.217	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
96	wellhead engine	]]5	274,772	4,117,554	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,196
97	wellhead engine	117	275,731	4,] 16,862	0.13	0.11	0.002	1.5	0.2	3.8	477	1.1	1.1	7,482