

**APPENDIX E**  
**DATA SET-UP TABLES**























**Table E-10: Modeled Concentrations of NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>2</sub> for BASE YEAR**

Notes:

(1) Bold type indicate a modeled impact that is above the NAAQS/SAQS

(2) Includes 75% NOx to NO2 conversion

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )																		NAAQS/AAQS ( $\mu\text{g}/\text{m}^3$ )
				ALL SOURCES	ALL EDF	ALL MT	ALL OTHER	ALL WY	MT CBM Construction	MT CBM Operation	MT COAL	MT EDF	MT Oil & Gas	MT OTHER	MT Power Plants	WY CBM	WY COAL	WY EDF	WY Oil & Gas	WY OTHER	WY Power Plants	
CLASS I AREAS																						
Badlands NP Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	1.27E-01	8.78E-04	4.67E-03	7.34E-02	6.18E-02	2.25E-05	3.47E-05	3.88E-04	4.03E-04	6.44E-04	7.76E-04	2.81E-03	1.53E-02	4.11E-03	5.02E-04	4.90E-03	3.78E-03	3.38E-02	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	3.87E+00	2.76E-01	5.48E-01	1.52E+00	2.68E+00	2.54E-03	3.60E-03	5.49E-02	1.91E-02	1.38E-02	1.75E-01	3.37E-01	7.98E-01	5.59E-01	2.71E-01	2.95E-01	4.06E-01	1.39E+00	150
		ANNUAL	1ST HIGH	5.64E-01	2.07E-02	6.03E-02	1.69E-01	3.96E-01	2.04E-04	2.66E-04	6.63E-03	1.84E-03	1.24E-03	1.62E-02	3.58E-02	9.61E-02	7.07E-02	1.89E-02	3.25E-02	4.14E-02	1.56E-01	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	3.30E+00	1.57E-01	4.80E-01	1.37E+00	2.01E+00	1.53E-03	2.63E-03	1.61E-02	1.86E-02	1.36E-02	1.43E-01	3.32E-01	5.20E-01	1.07E-01	1.52E-01	2.78E-01	2.97E-01	1.39E+00	35
ANNUAL		1ST HIGH	4.01E-01	1.13E-02	5.04E-02	1.20E-01	2.69E-01	1.08E-04	1.74E-04	1.67E-03	1.76E-03	1.21E-03	1.25E-02	3.48E-02	4.98E-02	9.62E-03	9.60E-03	2.98E-02	2.44E-02	1.56E-01	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	8.32E+00	2.78E-01	8.94E-01	7.49E+00	3.50E+00	3.47E-04	1.63E-04	7.78E-03	9.62E-02	1.20E-03	4.49E-01	4.89E-01	1.10E-01	1.52E-02	2.78E-01	2.03E-01	5.24E-01	3.19E+00	1,300	
	24- Hr	2ND HIGH	2.44E+00	1.02E-01	2.64E-01	1.83E+00	1.69E+00	1.02E-04	4.78E-05	2.13E-03	3.18E-02	2.64E-04	1.13E-01	1.46E-01	4.34E-02	5.98E-03	9.90E-02	8.36E-02	2.80E-01	1.45E+00	260	
	ANNUAL	1ST HIGH	3.93E-01	1.28E-02	4.12E-02	1.57E-01	2.49E-01	1.04E-05	4.94E-06	2.91E-04	2.75E-03	2.60E-05	1.44E-02	2.65E-02	8.43E-03	8.24E-04	1.01E-02	1.43E-02	3.57E-02	1.90E-01	60	
Bob Marshall W Class I Area	NO <sub>2</sub>	1-Hr	1ST HIGH	8.40E-01	5.39E-03	8.40E-01	1.75E-01	1.42E-02	3.81E-05	9.25E-05	6.09E-03	4.36E-04	3.79E-03	1.75E-01	8.00E-01	9.20E-03	6.05E-05	5.39E-03	6.58E-03	7.39E-03	9.92E-03	565
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	9.69E-01	2.38E-02	7.01E-01	7.09E-01	2.97E-01	3.33E-04	4.39E-04	2.11E-02	1.06E-02	3.27E-03	2.66E-01	4.75E-01	5.61E-02	3.17E-02	2.00E-02	4.84E-02	3.43E-02	1.59E-01	150
		ANNUAL	1ST HIGH	4.50E-02	6.81E-04	2.83E-02	2.17E-02	7.93E-03	7.85E-06	1.00E-05	6.46E-04	1.91E-04	9.84E-05	1.20E-02	1.55E-02	1.71E-03	6.90E-04	4.90E-04	1.24E-03	9.52E-04	3.35E-03	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	8.79E-01	1.99E-02	5.90E-01	6.59E-01	2.46E-01	2.22E-04	3.33E-04	6.45E-03	1.03E-02	3.11E-03	1.77E-01	4.62E-01	3.82E-02	3.77E-03	1.15E-02	4.22E-02	2.40E-02	1.59E-01	35
ANNUAL		1ST HIGH	3.64E-02	5.04E-04	2.20E-02	1.54E-02	6.20E-03	4.33E-06	6.64E-06	1.73E-04	1.86E-04	9.35E-05	6.56E-03	1.52E-02	9.26E-04	9.47E-05	3.18E-04	1.16E-03	6.69E-04	3.35E-03	15	
SO <sub>2</sub>	1-Hr	1ST HIGH	2.48E+00	8.98E-02	2.48E+00	1.54E+00	6.27E-01	1.11E-04	5.28E-05	3.25E-03	3.86E-02	2.07E-04	1.00E+00	2.44E+00	3.52E-02	1.79E-03	8.98E-02	1.34E-01	1.45E-01	4.48E-01	1,300	
	3- Hr	2ND HIGH	1.77E+00	6.94E-02	1.28E+00	1.36E+00	3.69E-01	5.42E-05	2.57E-05	2.65E-03	1.97E-02	1.79E-04	3.91E-01	1.12E+00	2.18E-02	1.21E-03	6.94E-02	7.58E-02	1.06E-01	2.10E-01	1,300	
	24- Hr	2ND HIGH	5.33E-01	1.47E-02	3.01E-01	4.08E-01	1.66E-01	1.24E-05	5.88E-06	7.03E-04	7.51E-03	3.22E-05	1.79E-01	2.82E-01	5.83E-03	3.58E-04	1.46E-02	2.27E-02	3.22E-02	1.19E-01	260	
ANNUAL	1ST HIGH	2.54E-02	4.13E-04	1.66E-02	1.43E-02	3.36E-03	3.85E-07	1.83E-07	2.33E-05	1.41E-04	6.94E-07	8.31E-03	8.25E-03	1.26E-04	6.34E-06	2.72E-04	6.28E-04	5.32E-04	2.07E-03	60		
Bridger W Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	1.03E-01	6.94E-03	3.03E-03	1.47E-02	9.81E-02	3.96E-06	7.83E-06	5.36E-05	2.01E-05	2.29E-05	2.94E-04	2.72E-03	2.76E-03	2.79E-04	6.93E-03	4.33E-02	1.13E-02	4.89E-02	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	6.47E+00	8.96E-01	8.41E-01	2.16E+00	5.21E+00	5.13E-03	6.70E-03	7.97E-02	4.45E-02	1.30E-02	4.33E-01	4.58E-01	1.46E+00	5.41E-01	8.73E-01	1.73E+00	1.47E+00	2.85E+00	150
		ANNUAL	1ST HIGH	4.90E-01	4.65E-02	4.21E-02	1.34E-01	3.87E-01	1.00E-04	1.32E-04	2.63E-03	9.60E-04	3.43E-04	1.30E-02	2.63E-02	5.27E-02	2.58E-02	4.56E-02	1.04E-01	5.87E-02	1.54E-01	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	5.83E+00	6.15E-01	7.56E-01	2.03E+00	4.47E+00	2.92E-03	4.58E-03	2.61E-02	4.36E-02	1.27E-02	3.90E-01	4.48E-01	1.00E+00	1.12E-01	5.82E-01	1.28E+00	1.08E+00	2.85E+00	35
ANNUAL		1ST HIGH	3.99E-01	2.53E-02	3.78E-02	1.00E-01	3.12E-01	5.83E-05	9.17E-05	8.10E-04	9.39E-04	3.34E-04	1.11E-02	2.57E-02	3.11E-02	3.13E-03	2.44E-02	9.03E-02	3.94E-02	1.54E-01	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	9.29E+00	2.29E+00	1.84E+00	4.75E+00	9.29E+00	6.00E-04	2.85E-04	8.64E-03	8.28E-02	6.27E-04	1.13E+00	7.78E-01	2.15E-01	1.48E-02	2.29E+00	1.15E+00	4.09E+00	8.59E+00	1,300	
	24- Hr	2ND HIGH	3.67E+00	6.51E-01	6.57E-01	1.29E+00	3.23E+00	1.72E-04	8.18E-05	3.30E-03	2.57E-02	1.23E-04	3.80E-01	2.95E-01	7.75E-02	4.80E-03	6.35E-01	4.94E-01	8.77E-01	2.13E+00	260	
	ANNUAL	1ST HIGH	3.87E-01	5.18E-02	2.41E-02	1.39E-01	3.02E-01	4.36E-06	2.07E-06	1.02E-04	6.06E-04	2.72E-06	9.45E-03	1.46E-02	3.45E-03	1.76E-04	5.13E-02	4.81E-02	7.10E-02	1.84E-01	60	
Fitzpatrick W Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	1.62E-01	1.63E-03	3.24E-03	5.59E-03	1.57E-01	3.28E-06	6.24E-06	3.67E-05	2.43E-05	2.16E-05	5.37E-04	2.84E-03	1.39E-03	7.27E-05	1.61E-03	1.45E-01	2.72E-03	1.18E-02	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	6.72E+00	5.73E-01	1.23E+00	2.47E+00	5.08E+00	4.03E-03	5.32E-03	9.29E-02	5.31E-02	1.67E-02	5.52E-01	5.66E-01	9.49E-01	4.56E-01	5.20E-01	9.73E-01	9.28E-01	2.20E+00	150
		ANNUAL	1ST HIGH	3.65E-01	2.69E-02	5.22E-02	1.14E-01	2.61E-01	8.69E-05	1.15E-04	2.89E-03	1.12E-03	3.93E-04	1.77E-02	3.10E-02	3.43E-02	1.46E-02	2.59E-02	6.33E-02	3.89E-02	1.10E-01	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	6.06E+00	3.97E-01	1.10E+00	2.25E+00	4.73E+00	2.50E-03	3.85E-03	2.97E-02	5.21E-02	1.63E-02	5.05E-01	5.52E-01	6.27E-01	9.49E-02	3.43E-01	9.11E-01	7.44E-01	2.20E+00	35
ANNUAL		1ST HIGH	3.06E-01	1.71E-02	4.68E-02	9.12E-02	2.17E-01	5.21E-05	8.20E-05	9.20E-04	1.09E-03	3.83E-04	1.50E-02	3.03E-02	2.03E-02	2.09E-03	1.61E-02	5.82E-02	2.80E-02	1.10E-01	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	1.11E+01	1.80E+00	3.13E+00	4.83E+00	1.01E+01	5.60E-04	2.66E-04	9.94E-03	1.13E-01	4.41E-04	1.82E+00	1.30E+00	1.14E-01	8.03E-03	1.80E+00	9.23E+00	3.35E+00	3.12E+00	1,300	
	24- Hr	2ND HIGH	3.86E+00	5.55E-01	1.04E+00	1.64E+00	2.85E+00	1.08E-04	5.15E-05	2.96E-03	2.94E-02	1.25E-04	5.88E-01	4.48E-01	4.27E-02	3.77E-03	5.26E-01	1.77E+00	5.31E-01	1.33E+00	260	
	ANNUAL	1ST HIGH	2.42E-01	2.16E-02	3.27E-02	9.53E-02	1.63E-01	3.49E-06	1.66E-06	1.05E-04	7.21E-04	2.73E-06	1.43E-02	1.83E-02	2.15E-03	1.04E-04	2.09E-02	6.17E-02	3.14E-02	9.18E-02	60	



**Table E-10: Modeled Concentrations for NO2, PM10, PM2.5 and SO2 for BASE YEAR**

Notes:

(1) Bold type indicate a modeled impact that is above the NAAQS/SAAQS

(2) Includes 75% NOx to NO2 conversion

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )																	NAAQS/SAAQS ( $\mu\text{g}/\text{m}^3$ )	
				ALL SOURCES	ALL EDF	ALL MT	ALL OTHER	ALL WY	MT CBM Construction	MT CBM Operation	MT COAL	MT EDF	MT Oil & Gas	MT OTHER	MT Power Plants	WY CBM	WY COAL	WY EDF	WY Oil & Gas	WY OTHER		WY Power Plants
CLASS I AREAS																						
North Cheyenne IR Class I Area	NO <sub>2</sub>	1-Hr ANNUAL	1ST HIGH	1.31E+01	6.38E-01	1.10E+01	3.10E+00	9.68E+00	3.95E+00	6.47E+00	3.60E+00	6.38E-01	1.46E+00	1.17E+00	7.98E+00	9.33E+00	7.25E-01	1.07E-02	6.97E-01	2.38E-01	2.09E+00	565
			1ST HIGH	2.95E-01	7.60E-03	1.23E-01	3.04E-02	2.08E-01	9.18E-03	1.54E-02	4.49E-02	7.56E-03	1.18E-02	2.04E-02	7.55E-02	1.75E-01	4.24E-03	4.84E-05	1.61E-02	3.47E-03	1.45E-02	100
	PM <sub>10</sub> Total	24- Hr ANNUAL	2ND HIGH	7.33E+00	2.99E-01	1.52E+00	4.30E+00	5.79E+00	1.98E-01	2.29E-01	9.56E-01	4.60E-02	5.74E-02	5.68E-01	6.80E-01	2.41E+00	1.05E+00	2.92E-01	3.91E-01	3.64E-01	2.43E+00	150
			1ST HIGH	8.39E-01	1.29E-02	3.00E-01	1.82E-01	5.56E-01	1.12E-02	1.27E-02	1.44E-01	4.32E-03	4.30E-03	5.84E-02	9.28E-02	3.33E-01	6.49E-02	9.33E-03	3.54E-02	3.00E-02	1.00E-01	50
Red Rock Lakes Class I Area	PM <sub>2.5</sub> Total	24- Hr ANNUAL	2ND HIGH	5.69E+00	1.53E-01	1.01E+00	3.95E+00	3.74E+00	5.88E-02	9.53E-02	1.44E-01	4.23E-02	5.61E-02	4.56E-01	6.58E-01	1.18E+00	1.63E-01	1.44E-01	3.68E-01	2.82E-01	2.43E+00	35
			1ST HIGH	4.84E-01	8.97E-03	1.45E-01	1.44E-01	2.78E-01	3.19E-03	4.95E-03	1.46E-02	3.73E-03	3.69E-03	4.00E-02	8.76E-02	1.26E-01	6.71E-03	5.69E-03	3.25E-02	1.49E-02	1.00E-01	15
	SO <sub>2</sub>	1-Hr	1ST HIGH	1.60E+01	2.15E+00	1.59E+01	1.36E+01	5.71E+00	4.10E-01	1.94E-01	8.25E-01	2.14E+00	5.30E-03	6.91E+00	1.58E+01	1.43E+00	5.84E-02	3.81E-01	6.19E-01	7.54E-01	5.28E+00	1,300
		3- Hr	2ND HIGH	1.00E+01	8.23E-01	6.68E+00	9.51E+00	4.65E+00	1.19E-01	5.64E-02	2.34E-01	8.09E-01	3.20E-03	4.36E+00	5.83E+00	9.18E-01	3.66E-02	2.00E-01	2.94E-01	4.97E-01	4.27E+00	1,300
24- Hr ANNUAL		2ND HIGH	4.46E+00	2.79E-01	2.18E+00	3.34E+00	2.19E+00	1.74E-02	8.22E-03	6.51E-02	2.72E-01	1.37E-03	1.24E+00	1.32E+00	2.68E-01	1.28E-02	8.33E-02	1.19E-01	2.29E-01	1.71E+00	260	
		1ST HIGH	5.52E-01	2.65E-02	3.23E-01	2.29E-01	1.66E-01	9.76E-04	4.62E-04	9.02E-03	2.26E-02	5.80E-05	1.39E-01	2.18E-01	3.69E-02	7.06E-04	4.41E-03	2.07E-02	1.15E-02	1.04E-01	60	
Scapegoat W Class I Area	NO <sub>2</sub>	1-Hr ANNUAL	1ST HIGH	6.14E+00	1.04E-01	6.14E+00	3.97E-01	8.02E-01	2.77E-05	4.50E-05	1.43E-03	3.67E-03	9.43E-04	3.97E-01	6.13E+00	1.32E-02	7.28E-04	1.04E-01	2.49E-01	1.93E-01	6.95E-01	565
			1ST HIGH	2.99E-02	9.54E-05	2.44E-02	6.76E-03	1.58E-03	5.21E-08	1.12E-07	3.32E-06	3.96E-06	2.61E-06	1.47E-03	2.29E-02	2.35E-05	8.16E-07	9.22E-05	3.60E-04	1.38E-04	1.06E-03	100
	PM <sub>10</sub> Total	24- Hr ANNUAL	2ND HIGH	1.70E+00	2.25E-01	6.32E-01	7.68E-01	1.16E+00	5.70E-04	7.63E-04	2.23E-02	9.12E-03	5.66E-03	2.01E-01	5.69E-01	1.75E-01	6.20E-02	2.25E-01	2.23E-01	2.89E-01	6.36E-01	150
			1ST HIGH	1.28E-01	4.96E-03	4.85E-02	5.97E-02	4.05E-02	1.40E-05	1.86E-05	7.67E-04	2.47E-04	1.19E-04	1.20E-02	3.56E-02	4.12E-03	1.90E-03	4.75E-03	7.42E-03	7.03E-03	2.02E-02	50
Teton W Class I Area	PM <sub>2.5</sub> Total	24- Hr ANNUAL	2ND HIGH	1.47E+00	1.22E-01	5.67E-01	6.74E-01	1.03E+00	3.60E-04	5.61E-04	8.46E-03	8.95E-03	5.57E-03	1.73E-01	5.53E-01	1.20E-01	1.45E-02	1.22E-01	2.12E-01	2.13E-01	6.36E-01	35
			1ST HIGH	1.06E-01	3.31E-03	4.22E-02	4.15E-02	3.51E-02	8.75E-06	1.36E-05	2.60E-04	2.42E-04	1.17E-04	7.48E-03	3.43E-02	2.58E-03	2.81E-04	3.10E-03	6.94E-03	5.28E-03	2.02E-02	15
	SO <sub>2</sub>	1-Hr	1ST HIGH	4.98E+00	4.15E-01	4.98E+00	3.08E+00	3.20E+00	1.07E-04	5.11E-05	2.06E-03	2.86E-02	1.49E-04	5.19E-01	4.98E+00	2.64E-02	1.05E-03	4.15E-01	3.19E-01	7.01E-01	2.42E+00	1,300
		3- Hr	2ND HIGH	3.06E+00	2.93E-01	2.56E+00	1.74E+00	2.09E+00	8.01E-05	3.81E-05	1.77E-03	1.83E-02	1.12E-04	4.68E-01	2.56E+00	1.76E-02	1.02E-03	2.92E-01	1.97E-01	5.17E-01	1.44E+00	1,300
24- Hr ANNUAL		2ND HIGH	1.01E+00	1.35E-01	7.30E-01	5.42E-01	6.90E-01	2.26E-05	1.06E-05	7.27E-04	5.36E-03	5.16E-05	1.69E-01	7.28E-01	7.69E-03	4.20E-04	1.35E-01	8.15E-02	2.49E-01	3.75E-01	260	
		1ST HIGH	9.16E-02	2.49E-03	3.79E-02	4.26E-02	2.18E-02	4.58E-07	2.19E-07	2.55E-05	1.43E-04	7.92E-07	4.52E-03	3.33E-02	2.14E-04	1.18E-05	2.34E-03	3.30E-03	3.83E-03	1.45E-02	60	
Scapegoat W Class I Area	NO <sub>2</sub>	1-Hr ANNUAL	1ST HIGH	2.41E+00	1.49E-02	2.41E+00	9.11E-01	4.42E-02	4.89E-05	1.16E-04	9.48E-03	1.20E-03	4.20E-02	9.10E-01	2.36E+00	1.17E-02	7.28E-05	1.49E-02	2.45E-02	1.97E-02	2.72E-02	565
			1ST HIGH	6.24E-03	6.49E-06	6.07E-03	3.24E-03	3.59E-05	4.73E-08	1.02E-07	7.08E-06	1.47E-06	1.37E-04	3.07E-03	3.80E-03	5.27E-06	9.72E-08	5.32E-06	1.21E-05	8.35E-06	1.19E-05	100
	PM <sub>10</sub> Total	24- Hr ANNUAL	2ND HIGH	1.62E+00	4.48E-02	1.19E+00	1.24E+00	5.20E-01	5.51E-04	7.34E-04	3.97E-02	1.59E-02	5.62E-03	4.19E-01	7.90E-01	9.34E-02	4.89E-02	4.48E-02	8.28E-02	7.28E-02	2.45E-01	150
			1ST HIGH	8.91E-02	1.25E-03	6.03E-02	4.53E-02	1.30E-02	1.24E-05	1.61E-05	1.15E-03	3.02E-04	2.22E-04	2.78E-02	3.11E-02	2.61E-03	1.05E-03	9.45E-04	2.23E-03	1.67E-03	5.43E-03	50
Teton W Class I Area	PM <sub>2.5</sub> Total	24- Hr ANNUAL	2ND HIGH	1.43E+00	3.00E-02	9.49E-01	1.10E+00	4.05E-01	3.49E-04	5.47E-04	1.06E-02	1.55E-02	5.48E-03	2.29E-01	7.72E-01	6.16E-02	5.26E-03	2.72E-02	7.23E-02	5.05E-02	2.45E-01	35
			1ST HIGH	6.98E-02	8.92E-04	4.46E-02	2.99E-02	1.03E-02	7.11E-06	1.10E-05	3.24E-04	2.95E-04	2.00E-04	1.39E-02	3.02E-02	1.47E-03	1.42E-04	5.97E-04	2.10E-03	1.19E-03	5.43E-03	15
	SO <sub>2</sub>	1-Hr	1ST HIGH	3.20E+00	1.34E-01	3.20E+00	2.56E+00	1.19E+00	1.66E-04	7.89E-05	5.40E-03	5.53E-02	2.17E-04	6.65E-01	3.08E+00	5.80E-02	2.78E-03	1.34E-01	2.80E-01	2.35E-01	8.84E-01	1,300
		3- Hr	2ND HIGH	2.15E+00	1.10E-01	2.14E+00	1.53E+00	8.42E-01	9.19E-05	4.37E-05	3.06E-03	2.15E-02	1.80E-04	4.97E-01	2.04E+00	2.24E-02	1.59E-03	1.10E-01	1.66E-01	1.95E-01	6.11E-01	1,300
24- Hr ANNUAL		2ND HIGH	1.02E+00	3.41E-02	5.98E-01	8.80E-01	3.37E-01	1.79E-05	8.47E-06	1.36E-03	1.03E-02	6.41E-05	2.74E-01	5.06E-01	9.16E-03	5.50E-04	3.41E-02	5.90E-02	6.73E-02	2.09E-01	260	
		1ST HIGH	4.98E-02	7.55E-04	3.35E-02	2.60E-02	6.03E-03	5.65E-07	2.68E-07	4.17E-05	2.12E-04	1.20E-06	1.48E-02	1.87E-02	1.85E-04	9.35E-06	5.43E-04	1.19E-03	1.01E-03	3.64E-03	60	
Teton W Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	2.27E-02	3.62E-04	7.58E-03	8.58E-03	1.05E-02	9.52E-07	1.85E-06	6.56E-05	2.65E-05	3.16E-05	9.86E-04	7.15E-03	3.94E-04	1.66E-05	3.57E-04	4.32E-03	5.70E-04	5.47E-03	100
	PM <sub>10</sub> Total	24- Hr ANNUAL	2ND HIGH	4.54E+00	3.66E-01	1.03E+00	2.04E+00	3.45E+00	3.05E-03	4.07E-03	9.96E-02	3.74E-02	1.53E-02	3.96E-01	5.94E-01	8.20E-01	2.71E-01	2.74E-01	5.01E-01	4.39E-01	1.59E+00	150
			1ST HIGH	2.57E-01	1.30E-02	6.15E-02	1.12E-01	1.42E-01	6.31E-05	8.38E-05	3.54E-03	1.12E-03	3.96E-04	1.95E-02	3.79E-02	1.89E-02	8.03E-03	1.21E-02	3.01E-02	1.83E-02	6.81E-02	50
	PM <sub>2.5</sub> Total	24- Hr ANNUAL	2ND HIGH	3.85E+00	2.78E-01	8.84E-01	1.91E+00	2.86E+00	1.96E-03	3.02E-03	3.39E-02	3.67E-02	1.49E-02	3.37E-01	5.82E-01	5.28E-01	5.11E-02	1.77E-01	4.81E-01	3.58E-01	1.59E+00	35
		1ST HIGH	2.18E-01	8.57E-03	5.44E-02	8.15E-02	1.21E-01	3.83E-05	5.99E-05	1.10E-03	1.10E-03	3.87E-04	1.59E-02	3.69E-02	1.15E-02	1.23E-03	7.73E-03	2.77E-02	1.37E-02	6.81E-02	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	5.62E+00	4.01E-01	2.74E+00	3.84E+00	3.20E+00	3.30E-04	1.57E-04	7.90E-03	1.26E-01	2.62E-04	1.70E+00	1.09E+00	7.51E-02	3.03E-03	3.85E-01	6.74E-01	6.90E-01	2.79E+00	1,300	
	24- Hr ANNUAL	2ND HIGH	2.39E+00	1.40E-01	9.53E-01	1.57E+00	1.13E+00	9.49E-05	4.50E-05	3.59E-03	2.01E-02	8.16E-05	5.37E-01	4.12E-01	3.31E-02	1.68E-03	1.37E-01	2.57E-01	2.49E-01	7.71E-01	260	
		1ST HIGH	1.89E-01	7.53E-03	4.06E-02	1.21E-01	7.52E-02	2.23E-06	1.07E-06	1.24E-04	7.70E-04	2.43E-06	1.69E-02	2.36E-02	1.05E-03	5.25E-05	7.03E-03	1.37E-02	1.10E-02	4.95E-02	60	

AIR QUALITY TECHNICAL SUPPORT DOCUMENT  
Appendix E – Data Set-up Tables

**Table E-10: Modeled Concentrations of NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>2</sub> for BASE YEAR**

Notes:

- (1) Bold type indicate a modeled impact that is above the NAAQS/AAQS
- (2) Includes 75% NO<sub>x</sub> to NO<sub>2</sub> conversion

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )																	NAAQS/AAQS ( $\mu\text{g}/\text{m}^3$ )	
				ALL SOURCES	ALL EDF	ALL MT	ALL OTHER	ALL WY	MT CBM Construction	MT CBM Operation	MT COAL	MT EDF	MT Oil & Gas	MT OTHER	MT Power Plants	WY CBM	WY COAL	WY EDF	WY Oil & Gas	WY OTHER		WY Power Plants
CLASS I AREAS																						
Theodore Roosevelt NP Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	5.98E-01	2.61E-04	2.77E-02	5.74E-01	1.17E-02	2.15E-05	3.68E-05	1.60E-03	2.46E-04	9.87E-03	9.75E-03	1.21E-02	5.77E-03	8.49E-04	1.50E-05	1.15E-03	4.28E-04	3.59E-03	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	5.25E+00	1.11E-01	1.02E+00	4.51E+00	2.03E+00	4.42E-03	5.73E-03	1.84E-01	1.81E-02	4.95E-02	3.47E-01	4.93E-01	6.08E-01	4.40E-01	1.09E-01	2.31E-01	1.86E-01	9.43E-01	150
		ANNUAL	1ST HIGH	3.99E-01	5.90E-03	8.78E-02	2.45E-01	1.44E-01	1.82E-04	2.33E-04	1.34E-02	1.48E-03	4.31E-03	2.77E-02	4.20E-02	4.55E-02	2.42E-02	4.42E-03	1.23E-02	1.17E-02	4.99E-02	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	4.45E+00	8.11E-02	8.49E-01	3.93E+00	1.53E+00	2.38E-03	3.77E-03	5.00E-02	1.71E-02	4.61E-02	2.79E-01	4.81E-01	3.62E-01	6.36E-02	7.77E-02	2.29E-01	1.63E-01	9.43E-01	35
ANNUAL		1ST HIGH	3.05E-01	4.08E-03	6.60E-02	1.98E-01	9.46E-02	9.45E-05	1.49E-04	2.74E-03	1.41E-03	3.95E-03	1.95E-02	3.97E-02	2.28E-02	3.06E-03	2.66E-03	1.16E-02	7.35E-03	4.99E-02	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	3.65E+01	1.14E-01	1.86E+00	3.64E+01	1.65E+00	4.87E-04	2.31E-04	1.36E-02	1.08E-01	7.06E-03	9.11E-01	1.12E+00	1.85E-01	2.19E-02	1.11E-01	1.49E-01	1.96E-01	1.38E+00	1,300	
	24- Hr	2ND HIGH	1.09E+01	4.94E-02	8.62E-01	1.08E+01	7.02E-01	1.92E-04	9.09E-05	6.15E-03	2.82E-02	2.24E-03	4.56E-01	4.37E-01	5.20E-02	5.31E-03	4.45E-02	8.08E-02	1.10E-01	5.32E-01	260	
	ANNUAL	1ST HIGH	7.99E-01	4.09E-03	8.23E-02	7.23E-01	5.87E-02	9.10E-06	4.32E-06	6.11E-04	2.12E-03	1.98E-04	3.30E-02	4.98E-02	3.86E-03	2.50E-04	1.97E-03	5.82E-03	5.71E-03	4.30E-02	60	
		1ST HIGH	2.19E-02	1.70E-04	1.57E-02	7.50E-03	2.53E-03	2.00E-06	4.41E-06	2.54E-03	1.68E-04	4.69E-04	3.82E-03	8.90E-03	1.26E-03	2.20E-04	1.83E-06	3.49E-04	6.66E-05	6.33E-04	100	
UL Bend W Class I Area	NO <sub>2</sub>	1-Hr	1ST HIGH	1.69E+00	1.23E-01	1.18E+00	1.67E+00	8.32E-01	1.98E-03	3.73E-03	3.30E-01	1.23E-01	4.64E-02	3.97E-01	1.09E+00	5.37E-01	1.22E-01	1.37E-03	1.66E-01	2.10E-02	2.86E-01	565
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	2.46E+00	8.16E-02	9.70E-01	1.97E+00	1.27E+00	2.74E-03	3.65E-03	2.72E-01	2.22E-02	1.13E-02	3.37E-01	5.93E-01	7.37E-01	2.93E-01	6.78E-02	1.35E-01	1.36E-01	4.01E-01	150
		ANNUAL	1ST HIGH	1.92E-01	3.71E-03	9.01E-02	7.82E-02	5.90E-02	6.91E-05	8.50E-05	1.44E-02	1.25E-03	8.29E-04	3.01E-02	4.46E-02	1.79E-02	7.99E-03	2.47E-03	6.51E-03	5.73E-03	2.09E-02	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	2.28E+00	6.07E-02	8.80E-01	1.84E+00	8.84E-01	1.73E-03	2.67E-03	6.15E-02	2.13E-02	1.10E-02	2.88E-01	5.83E-01	4.42E-01	5.80E-02	4.76E-02	1.32E-01	9.81E-02	4.01E-01	35
ANNUAL		1ST HIGH	1.46E-01	2.83E-03	6.71E-02	6.34E-02	4.07E-02	3.20E-05	4.93E-05	2.09E-03	1.19E-03	7.91E-04	2.10E-02	4.32E-02	8.80E-03	1.01E-03	1.64E-03	6.15E-03	3.81E-03	2.09E-02	15	
SO <sub>2</sub>	1-Hr	1ST HIGH	1.01E+01	3.17E-01	3.59E+00	9.80E+00	1.34E+00	5.61E-04	2.66E-04	6.98E-02	2.83E-01	1.93E-03	2.28E+00	1.52E+00	1.58E-01	1.03E-02	1.42E-01	2.67E-01	2.93E-01	1.06E+00	1,300	
	3- Hr	2ND HIGH	5.51E+00	2.10E-01	2.39E+00	5.29E+00	1.22E+00	3.77E-04	1.79E-04	4.07E-02	1.99E-01	1.17E-03	1.65E+00	8.59E-01	1.42E-01	8.42E-03	1.03E-01	1.62E-01	2.04E-01	9.19E-01	1,300	
	24- Hr	2ND HIGH	2.02E+00	5.08E-02	7.97E-01	1.96E+00	6.40E-01	1.02E-04	4.86E-05	1.23E-02	4.94E-02	4.23E-04	3.84E-01	3.06E-01	5.95E-02	3.92E-03	3.29E-02	5.86E-02	7.22E-02	4.33E-01	260	
	ANNUAL	1ST HIGH	1.39E-01	3.09E-03	7.07E-02	7.78E-02	2.49E-02	3.62E-06	1.72E-06	7.34E-04	1.85E-03	1.39E-05	3.14E-02	3.86E-02	1.61E-03	8.93E-05	1.24E-03	3.55E-03	3.01E-03	1.66E-02	60	
Washakie W Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	2.41E-02	3.06E-04	1.34E-02	6.09E-03	1.30E-02	1.84E-06	3.67E-06	1.93E-04	1.01E-04	1.49E-04	3.62E-03	9.43E-03	6.78E-04	4.12E-05	2.91E-04	1.11E-02	4.65E-04	4.61E-03	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	6.38E+00	5.59E-01	1.74E+00	2.82E+00	4.57E+00	3.89E-03	5.17E-03	1.62E-01	7.65E-02	2.07E-02	8.39E-01	8.18E-01	9.76E-01	3.72E-01	4.39E-01	9.58E-01	7.69E-01	1.83E+00	150
		ANNUAL	1ST HIGH	3.83E-01	1.91E-02	9.98E-02	1.37E-01	2.16E-01	9.56E-05	1.26E-04	6.57E-03	1.82E-03	7.00E-04	3.57E-02	5.68E-02	3.01E-02	1.31E-02	1.73E-02	5.62E-02	2.87E-02	8.94E-02	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	5.41E+00	3.93E-01	1.53E+00	2.51E+00	3.87E+00	2.47E-03	3.82E-03	5.21E-02	7.50E-02	2.03E-02	7.46E-01	7.98E-01	6.22E-01	6.74E-02	2.97E-01	9.32E-01	6.20E-01	1.83E+00	35
ANNUAL		1ST HIGH	3.25E-01	1.29E-02	8.60E-02	1.11E-01	1.81E-01	5.70E-05	8.93E-05	1.95E-03	1.77E-03	6.83E-04	2.88E-02	5.52E-02	1.74E-02	1.82E-03	1.12E-02	5.27E-02	2.08E-02	8.94E-02	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	8.81E+00	7.40E-01	6.42E+00	5.41E+00	3.34E+00	5.70E-04	2.72E-04	1.86E-02	1.82E-01	3.19E-04	3.83E+00	2.57E+00	8.87E-02	5.23E-03	7.00E-01	2.01E+00	1.18E+00	1.83E+00	1,300	
	24- Hr	2ND HIGH	3.65E+00	1.93E-01	2.06E+00	2.30E+00	1.61E+00	1.15E-04	5.46E-05	7.63E-03	6.22E-02	1.86E-04	1.23E+00	8.26E-01	4.74E-02	3.05E-03	1.42E-01	6.63E-01	2.34E-01	8.54E-01	260	
	ANNUAL	1ST HIGH	2.56E-01	1.12E-02	8.66E-02	1.12E-01	1.26E-01	3.60E-06	1.72E-06	2.49E-04	1.53E-03	4.32E-06	4.24E-02	4.46E-02	1.88E-03	9.71E-05	9.92E-03	4.82E-02	1.64E-02	6.34E-02	60	
		1ST HIGH	1.74E-01	1.34E-03	4.18E-03	7.63E-02	1.34E-01	3.05E-05	6.02E-05	3.23E-04	3.56E-04	3.31E-04	7.98E-04	2.68E-03	3.24E-02	1.07E-02	9.88E-04	1.07E-02	7.97E-03	7.29E-02	100	
Wind Cave NP Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	1.74E-01	1.34E-03	4.18E-03	7.63E-02	1.34E-01	3.05E-05	6.02E-05	3.23E-04	3.56E-04	3.31E-04	7.98E-04	2.68E-03	3.24E-02	1.07E-02	9.88E-04	1.07E-02	7.97E-03	7.29E-02	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	6.46E+00	3.20E-01	5.24E-01	3.16E+00	4.86E+00	3.39E-03	5.02E-03	7.89E-02	1.83E-02	4.19E-02	1.71E-01	3.01E-01	1.27E+00	6.75E-01	3.06E-01	4.17E-01	5.36E-01	2.08E+00	150
		ANNUAL	1ST HIGH	8.01E-01	3.10E-02	6.95E-02	2.18E-01	6.11E-01	2.89E-04	3.76E-04	6.58E-03	2.26E-03	1.47E-03	1.88E-02	4.21E-02	1.51E-01	1.19E-01	2.88E-02	5.16E-02	6.21E-02	2.28E-01	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	5.32E+00	1.77E-01	4.49E-01	2.84E+00	3.72E+00	2.30E-03	3.93E-03	2.61E-02	1.76E-02	4.12E-02	1.41E-01	2.95E-01	8.16E-01	1.25E-01	1.64E-01	3.86E-01	4.01E-01	2.08E+00	35
ANNUAL		1ST HIGH	5.63E-01	1.68E-02	5.95E-02	1.56E-01	4.06E-01	1.60E-04	2.52E-04	1.80E-03	2.17E-03	1.43E-03	1.50E-02	4.10E-02	7.83E-02	1.58E-02	1.47E-02	4.73E-02	3.69E-02	2.28E-01	15	
SO <sub>2</sub>	3- Hr	2ND HIGH	8.14E+00	3.88E-01	7.60E-01	6.25E+00	4.49E+00	1.65E-03	7.81E-04	7.74E-03	7.92E-02	2.56E-03	2.86E-01	5.23E-01	2.67E-01	3.34E-02	3.88E-01	3.28E-01	1.71E+00	3.97E+00	1,300	
	24- Hr	2ND HIGH	3.31E+00	1.25E-01	2.81E-01	2.79E+00	2.09E+00	2.26E-04	1.07E-04	2.45E-03	2.50E-02	7.17E-04	1.30E-01	1.60E-01	7.47E-02	9.60E-03	1.23E-01	1.45E-01	4.84E-01	1.46E+00	260	
	ANNUAL	1ST HIGH	5.82E-01	1.89E-02	4.46E-02	1.98E-01	4.48E-01	1.49E-05	7.10E-06	2.90E-04	2.95E-03	2.02E-05	1.59E-02	2.84E-02	1.35E-02	1.53E-03	1.60E-02	2.30E-02	8.71E-02	3.24E-01	60	
		1ST HIGH	3.32E-02	2.67E-04	3.08E-02	9.84E-03	6.05E-03	5.49E-07	1.05E-06	6.02E-05	3.91E-05	2.77E-05	3.76E-03	2.75E-02	2.29E-04	1.04E-05	2.66E-04	2.39E-03	4.39E-04	3.69E-03	100	
Yellowstone NP Class I Area	NO <sub>2</sub>	ANNUAL	1ST HIGH	3.32E-02	2.67E-04	3.08E-02	9.84E-03	6.05E-03	5.49E-07	1.05E-06	6.02E-05	3.91E-05	2.77E-05	3.76E-03	2.75E-02	2.29E-04	1.04E-05	2.66E-04	2.39E-03	4.39E-04	3.69E-03	100
	PM <sub>10</sub> Total	24- Hr	2ND HIGH	4.27E+00	3.08E-01	9.48E-01	2.10E+00	2.99E+00	5.23E-03	7.06E-03	9.15E-02	3.36E-02	1.40E-02	4.08E-01	7.01E-01	6.28E-01	2.29E-01	3.08E-01	5.11E-01	4.40E-01	1.48E+00	150
		ANNUAL	1ST HIGH	2.36E-01	1.02E-02	8.36E-02	1.11E-01	1.13E-01	6.80E-05	9.09E-05	3.43E-03	9.88E-04	4.35E-04	2.27E-02	5.73E-02	1.68E-02	6.32E-03	9.39E-03	2.12E-02	1.47E-02	5.55E-02	50
	PM <sub>2.5</sub> Total	24- Hr	2ND HIGH	3.67E+00	1.98E-01	8.36E-01	1.93E+00	2.40E+00	3.25E-03	5.11E-03	2.79E-02	3.28E-02	1.37E-02	3.01E-01	6.83E-01	3.91						













