4.14.6.3: White City Industrial Area Analysis

The highest potential PM_{10} impacts for both the attainment and maintenance analysis are predicted to occur within the White City industrial complex. This is an area of concern, especially given it's proximity to commercial and residential areas of White City. The Medford industrial area is also of interest, however model predicted PM_{10} impacts in and near the Medford industrial area are well below PM_{10} standards.

Predicted high PM_{10} levels in the White City industrial area are partly the result of the worst-case analysis approach which assumes that all major industrial facilities are simultaneously emitting PM_{10} at their maximum allowable emission level. The attainment and maintenance analysis show the potential for PM_{10} impacts in the White City area under worst-case conditions. However, there is a relatively low likelihood that all White City industrial sources will simultaneously operate at their maximum allowable (permitted) emission level.

Table 14 shows predicted peak Annual Avg. and 4th-high Daily PM_{10} concentrations for the White City industrial area for the attainment analysis. Table 15 shows predicted peak Annual Avg. and 4th-high Daily PM_{10} concentrations for the White City area for the maintenance analysis. Peak PM_{10} impacts for the White City industrial are similar for the attainment and maintenance analysis because maximum allowable (permitted) industrial emission levels were used in both cases.

Table 14: Highest Predicted PM_{10}, White City Industrial Area (1998 Worst-Case)

Model Coordinate X	Model Coordinate Y	**Annual Avg.** Predicted PM_{10} (ug/m^3)	Model Coordinate X	Model Coordinate Y	**4th High Daily** Predicted PM_{10} (ug/m^3)
512.00	4697.00	49.2	512.00	4697.25	149.4
512.00	4698.00	47.5	512.00	4697.75	148.7
512.00	4698.25	47.1	512.00	4697.50	143.8
512.00	4697.50	46.2	512.00	4697.00	143.2

Table 15: Highest Predicted PM_{10}, White City Industrial Area (2015 Worst-Case)

Model Coordinate X	Model Coordinate Y	**Annual Avg.** Predicted PM_{10} (ug/m^3)	Model Coordinate X	Model Coordinate Y	**4th High Daily** Predicted PM_{10} (ug/m^3)
512.00	4697.00	49.3	512.00	4697.75	147.8
512.00	4698.00	46.9	512.00	4697.50	144.0
512.00	4697.50	46.8	512.00	4697.00	143.2
512.00	4698.00	46.7	512.00	4698.00	138.8

PM_{10} levels in the White City Area: Air Quality Maps

The air quality maps in Figures 62 through 65 show predicted annual average and daily (24-hr avg.) PM_{10} levels for the attainment and maintenance compliance analysis in the

White City industrial area. Major industrial facilities are identified, and predicted PM_{10} levels reflect worst-case conditions (i.e. all industrial facilities emitting at their maximum allowable permitted levels).

Figure 62: Annual Avg. PM_{10} (1998 Worst-Case) White City

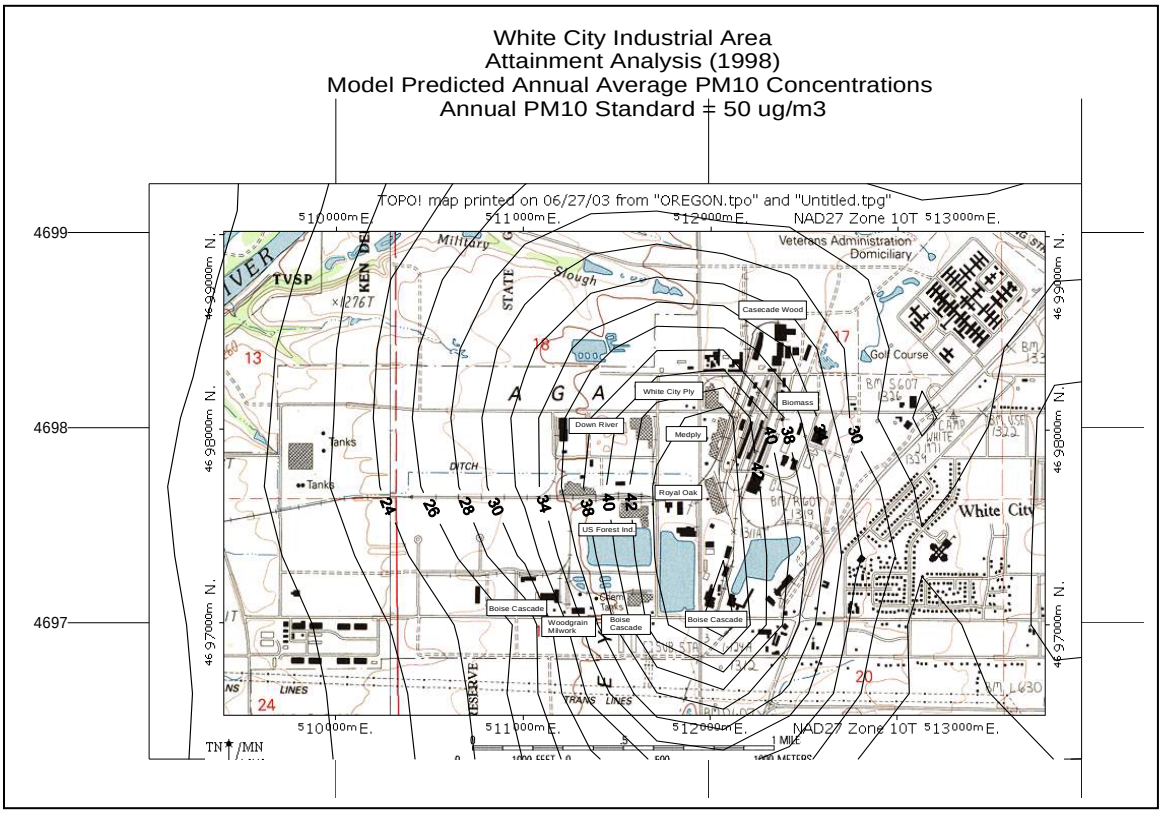


Figure 63: Daily PM_{10} (1998 Worst-Case) White City

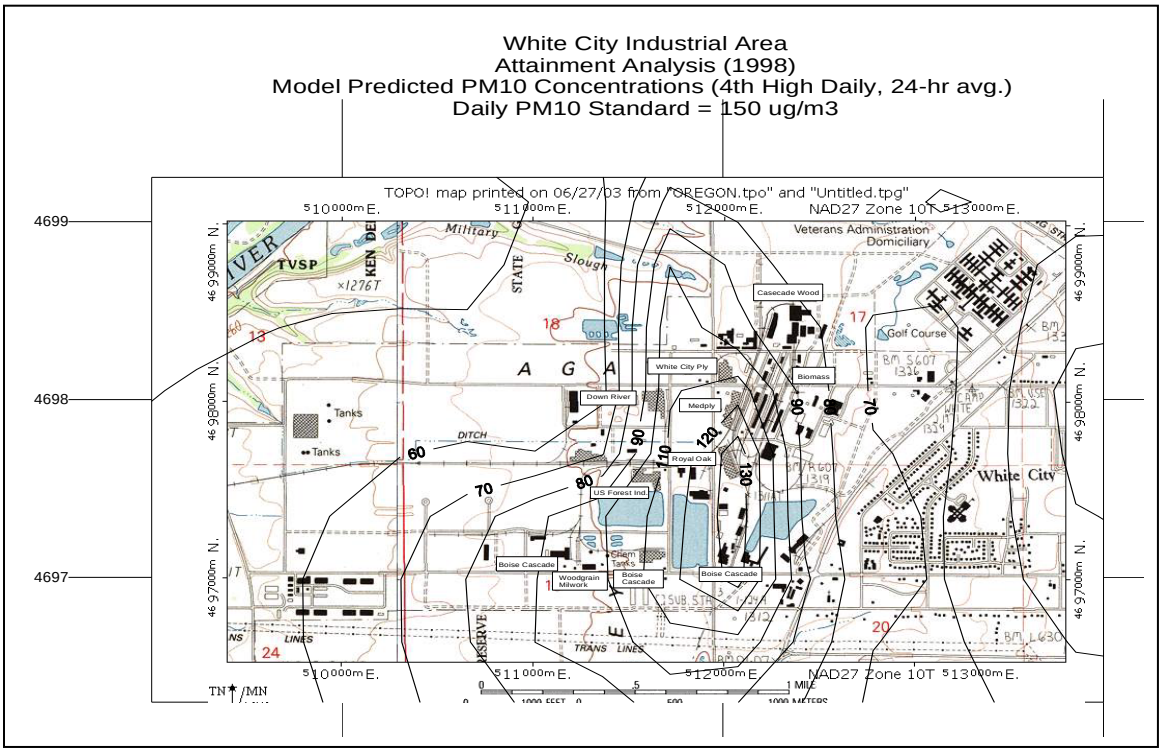


Figure 64: Annual Average PM_{10} (2015 Worst-Case) White City

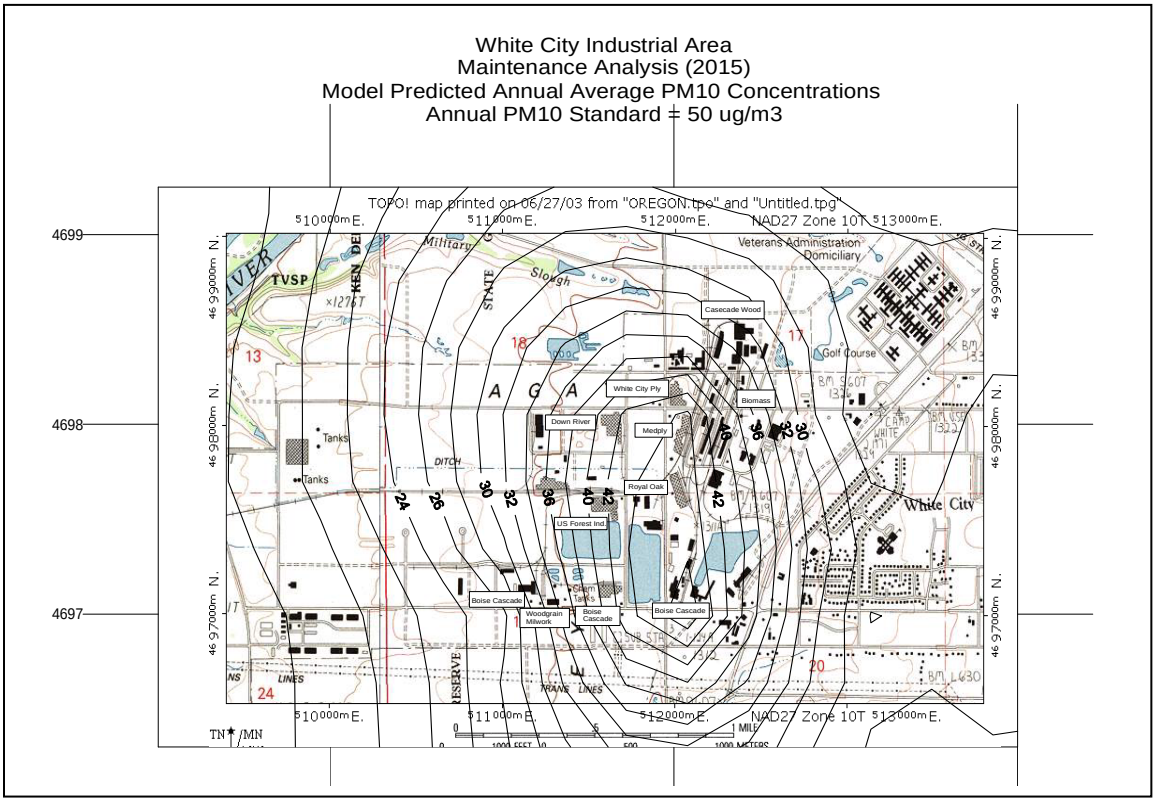
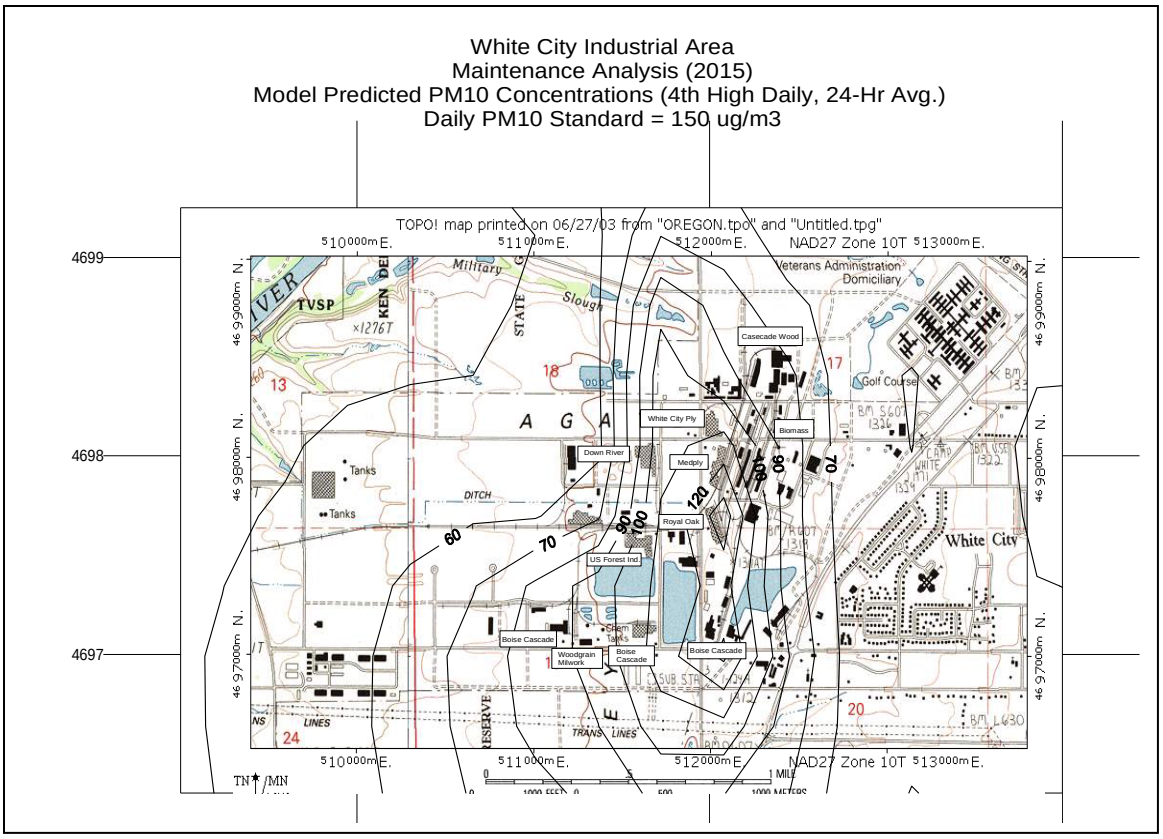


Figure 65: Daily PM_{10} (2015 Worst-Case) White City



Compliance Summary: Attainment and Maintenance Demonstration

- There are no predicted violations of the daily or annual average PM_{10} standards in either the 1998 or 2015 compliance analysis. The Attainment and Maintenance analysis show that the AQMA is currently in compliance with PM_{10} standards and will continue to be in compliance through at least the year 2015.

- Attainment Analysis: The attainment analysis predicts potential exceedances of the daily standard (but no violation) on two winter days in the east Medford area. With woodstove curtailment, these exceedances would be eliminated. One exceedance is also predicted to occur under worst-case conditions in the White City industrial area.

- Maintenance Analysis: One potential exceedance of the daily standard (154 ug/m^3) is predicted in the 2015 maintenance analysis in the White City industrial area.

- The predicted exceedances of the daily standard, together with the number of predicted PM_{10} levels within 20% or so of the standard, supports the need to continue the PM_{10} strategies (i.e. woodstove curtailment, opening burning program, road sweeping, industrial rules), that have successfully brought the

AQMA into compliance. These strategies also help prevent violations of the fine particulate standards (PM2.5).

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