Appendix IV

PM_{2.5} Seasonal Monitoring Data Analysis

New Jersey analyzed the seasonal distribution of maximum 24-hour $PM_{2.5}$ concentrations over 35.0 µg/m³ in its nonattainment areas. For each New Jersey monitor in the nonattainment areas, the values analyzed were concentrations measured higher than 35.0 µg/m³ each year between 2007 and 2010. The number of days greater than 35.0 µg/m³ were counted and totaled on a monthly and seasonal basis. Seasons were defined using the United States Environmental Protection Agency's (USEPA) Air Emissions Reporting Requirements: Dec-Feb (Winter), Mar-May (Spring), Jun-Aug (Summer), and Sep-Nov (Fall).

The percentage of maximum values over $35.0 \ \mu\text{g/m}^3$, by season, is shown in the pie charts below for each year from 2007 to 2010, and the total for the timeframe from 2007 to 2010. The pie chart summarizing the timeframe from 2007 to 2010 shows the highest percentage of maximum values over $35.0 \ \mu\text{g/m}^3$ occurring in the summer (66%), followed by the winter (26%), fall (6%), and spring (2%). The data indicates that exceedances have occurred in all seasons over the time period analyzed.

Percentage of Maximum Values Over 35.0 µg/m³ By Season



2007-2010





2009



