**ATTACHMENT B**

**MOTOR VEHICLE REGIONAL ANALYSIS METHODOLOGY**

The following methodology was used to determine whether increased emissions from on-road mobile sources could, in the next 10 years, increase concentrations in the Grants Pass UGB and threaten the assumption of maintenance that underlies the LMP Guidance.

DV+ (VMTpi x DVmv) <MOS

Where:

DV = the area’s design value based on the most recent 5 years of data, μg/m3

VMTpi = The projected percent increase in vehicle miles traveled (VMT) over the next 10

years

DVmv = Motor vehicle design value based on on-road mobile portion of the attainment year

inventory, μg/m3

MOS = Margin of safety for 24-hour PM-10 standard is 98 μg/m3

**Step 1:** Determine DV

The maximum from five complete years of data (2004-2008) is 49 μg/m3

**Step 2:** Determine the projected percent increase in VMT over the next 10 years

The VMT data for the Grants Pass for 2011 and 2021 was supplied by Oregon Department of Transportation, Transportation Planning Analysis Unit. Based on the Grants Pass OSUM Model (Years 2002 and 2025), the percentage increase in the 10‐year daily VMT between 2011 and 2021 is estimated to be 15%, and 2011 base year daily VMT is forecast to be 700,675.

**Step 3:** Calculate motor vehicle design value based on on-road mobile portion of the attainment year inventory

The 1996 Grants Pass maintenance plan identified that re-entrained road dust represented 42% and on-road mobile portion represented 1.4% of the attainment year inventory.

DVmv = DV x % Onroad Emissions

DVmv = 49 µg/m3 x 0.43 = 21.07 µg/m3

**Step 4:** Calculate the margin of safety

DV +VMT pi x DVmv = MOS

49 µg/m3 + 0.15 x 21.07 µg/m3 = **52 µg/m3**

**Since 52 µg/m3 is much less than 98 µg/m3 the area passes the motor vehicle regional analysis and qualifies for the LMP approach.**