

Bradley Werling

From: Ronn Smith [rsmith@imlinc.com]
Sent: Thursday, July 18, 2013 11:02 AM
To: Bradley Werling
Cc: John Mays
Subject: D-B 1st high PM10/PM2.5 for PSD discussion

Bradley,

Confirming our phone conversation of this morning, following is the highest modeled 1st high 24-hour PM_{2.5} concentration for the Wind Cave boundary receptors. The 2nd high for any year of the modeling period must be less than this value, and is therefore under the allowable Class I PSD increment of 2 µg/m³.

Easting UTM = 633859, Northing UTM = 4828062, Concentration = 0.45 µg/m³

The modeled 1st high 24-hour PM₁₀ concentrations at the Wind Cave boundary were barely above the Class I increment of 8 µg/m³ at three receptors.

Easting UTM = 634196, Northing UTM = 4829651, Concentration = 8.30 µg/m³

Easting UTM = 633859, Northing UTM = 4828062, Concentration = 8.23 µg/m³

Easting UTM = 633849, Northing UTM = 4829656, Concentration = 8.20 µg/m³

The 4th high values at these receptors during the 3-year period were 0.84, 1.66 and 0.79 µg/m³ respectively. It seems reasonable to assume the 2nd high values would be less than 8, especially the 2nd high for any single year. Also of note, these results were obtained without dry depletion, which was only used for the top 50 receptors overall.

I hope this information will be useful for the SEIS. For any interested party, the 1st-high numbers can be found in the 24H1GALL.PLT files produced by AERMOD for PM_{2.5} and PM₁₀.

Best regards,
Ronn