

dataset pursuant to the proposed 0.010 lb/MMBtu fPM limit EPA needs to establish that the PS-11 correlation will still be valid at such low levels.

2. Colstrip's Challenges with PM CEMS

Colstrip has utilized PM CEMS as a particulate control performance indicator in its PM CAM Plan since 2014. The initial PM CEMS were a light scattering technology that encountered times when they did not accurately indicate particulate emissions from the wet venturi scrubber at Colstrip Units 3&4. In September 2020, the PM CEMS were changed to the MSI BetaGuard 3.0 PM CEMS. The BetaGuard PM CEMS has performed better than the light scattering technology at Colstrip; however, it still exhibits variability that would not be acceptable to be used as a continuous compliance monitor. When compared to the quarterly MATS PM compliance test results, the BetaGuard PM CEMS has provided mg/m³ values that varied from the RM5 mg/m³ value by -24% to +31%. Talen Montana believes this range of variability with the PM CEMS is not acceptable for use as a compliance monitor, but its use as part of a PM CAM Plan like Colstrip utilizes, is reasonable.

The PM CAM Plan is a requirement under Colstrip's Title V Operating Permit to help ensure compliance to the particulate standard utilizing performance indicators and an operational parameter. The performance indicators include opacity monitoring and PM CEMS, and the operational parameter is scrubber plumb bob delta P.

PM CEMS requirements under Colstrip's PM CAM Plan are robust and include:

- Installation per manufacturer's standards.
- Daily zero and span checks using manufacturer's standards.
- Initial correlation based on three levels (zero, normal operations, and at scrubber operations that increase PM but not at a level that puts Colstrip's Title V requirements at risk). This initial correlation used three RM5 runs at normal operations and two RM5 runs at the higher PM level. This correlation relates PM CEMS mg/m³ to RM5 mg/m³.
- A PM CEMS CAM Plan excursion limit in terms of mg/m³ is established.
- A PM CEMS CAM Plan excursion requires a prompt investigation to identify and correct the condition, followed by a RM5 test to confirm compliance with the particulate standard.
- On a quarterly basis, one RM5 test (comprised of three runs) will be conducted to update the initial correlation. If the result from the average of the three runs differs