



Stack Test Evaluation

Compliance Department

Reg #: **16101 - 7**

Date Received: **09/18/2023**

Reviewed: Engineer **CJS 10/30/2023**

Inspector **MM 10/30/2023**

Supervisor **AIC 11/02/2023**

Facility: **HM Pacific Northwest, Inc. dba Cadman Material Inc**

Received Paper Copy

Address: **6431 NE 175th St
Kenmore, WA 98028**

Date Received: **09/18/2023**

Date Evaluated: **10/30/2023**

Test Date: **08/16/2023**

Test Results: **Passed** **Failed**

Date Observed: **08/16/2023**

Pollutant **VOC - Volatile Organic Compounds (VOC)**

Tested:

Emission Unit Tested: **Kenmore Hotmix Asphalt Plant**

Engineer Determination: **In Compliance**

Inspector Determination: **No Enforcement Action**

NOV / WW #:

Engineer Review:

This test was performed on August 15 and 16th, saved with Offsite report 16101-4. The test results are below:

Pollutant	Test Method(s)*	Standard/Limit (Include units)	Actual Emissions (Include units)
Total Particulate	EPA Method 5 w/PSCAA 540	0.0116 gr/dscf @ 7% O ₂	0.0037 gr/dscf @ 7% O ₂
Filterable Particulate	EPA Method 5	0.0029 gr/dscf @ 7% O ₂	0.0019 gr/dscf @ 7% O ₂
NO _x	EPA Method 1, 3A, 4 & 7E	32 ppmvd @ 7% O ₂	18.1 ppmvd @ 7% O ₂
CO	EPA Method 1, 3A, 4 & 10	311.0 ppmvd @ 7% O ₂	161.5 ppmvd @ 7% O ₂
Opacity AC Oil loading	WDOE Method 9A	20%	0 %
Opacity Outlet Stack	WDOE Method 9A	5%	0 %
VOC	EPA Method 1, 3A, 4 & 25A	0.032 lb. of VOC/TON of asphalt produced	0.0064 lb. of VOC/TON of asphalt produced

Melissa McAfee observed the source test, performed by Emission Technologies. The results are all below the permit limits. I looked through the needed QA/QC. Included were the gas calibrations (direct and bias), NO_x converter checks and calibration gases certifications.

The run data is all included and appears complete.

From the method 5 data sheets, all data recorded. Temps in required ranges. Leak checks noted. Percent iso's ~ 107%. No

opacity seen.

Operating data included. The Plant through put was 185, 178, 180 tph for each of the 3 runs respectively.

Laboratory data was included. All samples weighed to constant as defined by method 5.

Stratification check was performed. Interference checks included, performed by CleanAir Engineering.

Nox converter check performed and passed.

Meter Box Pre and Post Cal included

Nozzle calibration included.

Pitot calibration included

Thermal calibrations included.

On October 5th we asked the following follow up questions:

- 1) Could you please provide the interference checks described in section 13.4 of method 7E for the analyzers used.
- 2) Could you please provide the opacity certification for Calvin Loomis.
- 3) We see the calibration gases used on page 18, and the VOC calibration results for the HC analyzer on page 23 in table 3.6. I also see the diluter information on page 51. However, I cannot find how the field evaluation check was done to satisfy section 3.2 of EPA method 205. Can that be provided?
- 4) Could you also provide the results of any baghouse inspections, tuning, or other changes done between tests?
- 5) Would you also please provide any pollutant specific changes that were made from the previous test? For example, maintenance on baghouses for PM? Any tuner adjustments for CO/NOx? Was asphalt composition different? Etc.

On 10/24 we received an updated report which included the answers for questions #1, 2, 3.

The answers for 4& 5 were:

Regarding question 4, we completed our maintenance cycle as explained in the retest plan. Some specific items of note:

- All the bags and cages (405) were removed and replaced with like for like replacements,
- The top of the baghouse was vacuumed and inspected for leaks. Two small holes were repaired.
- Blow bars were removed, cleaned and replaced.
- All downstream ducting was inspected and cleaned as required.
- The exterior of the baghouse was insulated on all sides and bottom.

Regarding question 5:

- The asphalt was the same produced during both tests. The aggregate source was the same. The main difference is aggregate contains less moisture in the summer.
- All ducting and seals in plant were inspected
- There were some electrical wiring issues found during the burner inspection, so the old wire was removed and replaced with new wire.
- The burner was retuned by a different contractor in August.

Inspector Review:

No enforcement action.