

Memorandum

DATE: 10/02/2019

TO: Dan Howard
Williams Field Services Company, LLC.

SUBJECT: Report 3972 for the Leaf-on Post Construction Survey for the Dunbar Compressor Station.


Attached to this memorandum is the H&K generated report with our measurement results for the leaf-on sound test as conducted in the early morning hours of 10/2/19. The data indicates that the operation of the Station is in compliance with the station with all of the criteria as required by the Order with the possible exception of the 40-dBA absolute criterion. Due to the elevated sound level of the insect activity it is not possible to use the measured data to state that the sound levels due to the Station is equal to or less than 40-dBA at the selected measurement locations. As you are aware over the years we have used computer simulations to estimate the Station sound levels at the off-site community locations. We have recently revised the computer model input based on sound measurements taken with the new equipment in operation. Table 1 shows the overall A-weighted sound levels as measured on 10/2/19 with the insect activity present and our modeled estimate of Station only noise.

Position	Measured Station + Background SPL on 10/2/19	Modeled A-Wt SPL for Station Only
1	48.6	30.9
2	46.3	29.7
3	40.6	31.8
4	50.6	33.6

Table 1: Measured vs. Modeled A-Weight Sound Level.

Based on this analysis we believe that the sound level due to the Station operation is less than 40-dBA at the measurement locations and we are confident this can be demonstrated with the leaf-off test.

In addition it should be noted that the low frequency sound levels obtained during the leaf-on survey are significantly lower than the limit set by the Order. We are also confident that this will be re-verified during the leaf-off survey.

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And finally the station monitors documented that the sound level due to the maintenance venting activity (blow down and burn down) are 10 to 15 dBA less than the sound level due to the normal Station operation.

We hope this information is beneficial and if questions arise please do not hesitate to contact us.

Sincerely
Hoover & Keith Inc.
Reginald H. Keith