

BEFORE THE ZONING HEARING BOARD OF FAYETTE COUNTY  
ZHB 10 20R

Findings of Fact

1. The proceedings before the Fayette County Zoning Hearing Board (hereinafter “ZHB”) arise from a remand order by the Honorable Judge Steve P. Leskinen in Joseph A. Bezjak and Mildred P. Bezjak, his wife and Carl F. Bezjak and Lara Bezjak, his wife, plaintiff(s) v Fayette County Zoning Hearing Board, respondent and Laurel Mountain Midstream Operating, LLC, (hereinafter “LMM”) Intervenor, No 2089 of 2010, G.D.
2. The order of Judge Leskinen issued on July 7, 2014 is attached hereto as Attachment 1 ( hereinafter “Remand Order”) and provides in part: “ For all of the above reasons, the court concludes that the only just and appropriate result is to remand the within matter to the Zoning Hearing Board to allow the Bezjaks to resume the hearing that terminated on May 26, 2010, and to allow them time to present evidence in favor of conditions that should be attached to any approval of the applied for Special Exception.”
3. The seminal case of *Robinson Twp. v Commonwealth*, 93 A. 3d 901 (Pa. 2013), <sup>1</sup>incorporated into the Remand Order, was decided on December 13, 2013 and it established in part, that the provisions of Act 13 of 2012, 58 Pa.C.S. §§ 2301-3504 (hereinafter “Act 13”) could not deprive local governments and their constituent entities including the ZHB of their zoning powers and that under Section 27 of the Declaration of Rights in the Pennsylvania Constitution, “circumscribes the conduct of state and local government entities and officials of all levels in their formulation, interpretation and enforcement of statutes, regulations, ordinances and other legislation as well as decisional law” 83 A.3d at 125 and 126 (page 42 of Attachment 2).
4. Section 1000-507 of the Fayette County Zoning Ordinance (hereinafter “Zoning Ordinance”) regulates air pollution by any use permitted by the Zoning Ordinance.
5. The LMM Springhill Compressor Station has been operating since 2005. LMM did not seek its first zoning approval until its application in the instant case.
6. Air pollution emissions from Springhill Compressor Station leaving the property have been documented over the years of its operation and in particular:
  - A. FLIR (“Forward Looking InfraRed”) video shot by Sharon Wilson on April 7, 2015 using FLIR Systems GF 320 Gasfinder Camera shows likely hydrocarbons leaving the property of Springhill Compressor Station. (Testimony of Jim Rosenberg, Sharon Wilson, Exhibit 2 pp. 21-23.) The date of this video is subsequent to Judge Leskinen’s remand order.
  - B. FLIR video shot by an inspector from EPA on November 10, 2015 using a FLIR camera shows a large cloud of likely hydrocarbon emissions leaving the property of Springhill Compressor Station from the new dehydrator. (Testimony of Jim Rosenberg, Sharon Wilson, Exhibit 5.) The date of this video is subsequent to the most recent construction at Springhill Compressor Station and is pursuant to the current Air Quality Permit, GP5-26-00587D.
  - C. FLIR Gasfinder cameras with VOC filter engaged are tuned to a narrow range of infrared

---

<sup>1</sup> The decision is 86 pages long and is attached as Attachment 2. It deals with many non-zoning issues. The pertinent part setting forth the applicability of Pennsylvania Constitution Art I Section 27 begins at Headnote 32 beginning on page 40. Pennsylvania Zoning Law and Practice (known as Ryan) based upon its analysis of *Robinson, supra*. in its 2016 Supplement at § 3.3.14A asks the question: “ ... does a municipality or a state agency, both creatures of the sovereign, have the right (and even the duty) to override state legislation in circumstances where environmental resources may be at issue.”

wavelengths at which many hydrocarbons are known to absorb infrared. (Exhibit 2 pp. 21-23, 25).

- D. Emission clouds detected by FLIR Gasfinder cameras are not “just heat”. (Testimony of Sharon Wilson). In fact the EPA FLIR video of the leaking gas valve cited in the November 10, 2015 EPA Inspection Report (Exhibit 5 FLIR Disk) showed leaking hydrocarbons. The valve is located by the slug catcher facility and not by or part of a source of heat.
  - E. Sharon Wilson is a certified thermographer. (Testimony of Sharon Wilson, Exhibit 2 p. 21.)
  - F. LMM presented no expert witness to refute the testimony of Sharon Wilson.
  - G. FLIR videography is a recognized means of Leak Detection and Repair and is required to be performed quarterly by LMM’s current DEP permit for the Springhill Compressor Station, GP5-26-00587D (Exhibit 1 p. 7, text of General Plan Approval And/Or General Operating Permit BAQ-GPA/GP-5, Version January 16, 2015 <sup>2</sup>, Section H (2.)).
7. Sound was measured on the neighboring property in excess of a widely used federal standard. The sound was measured not far from where the property owner testified he had intended to locate a nursing home, and at a time where the facility was likely operating at less than full capacity. (Exhibit 4, Exhibit E)
  8. Joseph Bezjak testified that because of the noise and emissions his property was valueless and could not be developed for any economic purpose.
  9. Prior to the construction and operation of the Springhill Compressor Station the area noise levels were typically on the order of 45-50 dBA during daytime hours ( 7 AM – 9 PM) and 25-35 dBA during nighttime hours (9 PM – 7 AM) as is common throughout rural areas including rural Western Pennsylvania. (Testimony of William Thornton, Exhibit 4)
  10. An increase in noise level of 10 dB is generally perceived as a doubling of loudness and increase in level of 20 dB is generally perceived as a quadrupling of loudness. The loudness increase is not linear due to the logarithmic scale and thus must be considered when interpreting noise level increases. (Testimony of William Thornton)
  11. The Fayette County Noise Ordinance is ambiguous in that it does not provide direction as to which of the many possible metrics, weightings and averaging networks should be used to quantify the noise level and the choice of these metrics can strongly skew the measured noise results. (Testimony of William Thornton)
  12. LMM noise report (Exhibit E prepared by ATCO) documents noise levels of 59 dBA at the Bezjak property line which is consistent with the Bezjak noise report (Exhibit 4 prepared by TAV). The ATCO noise report methodology used metrics which would inherently skew the measured noise values lower and incorrectly attributes these metrics to the requirements of the Zoning Ordinance.
  13. The Zoning Ordinance at § 1000 – 503 prohibits noise that would be objectionable because of volume and frequency and it requires that these noise sources be controlled. Noise levels far below the 90 dBA ordinance limit would be highly disruptive and objectionable to persons of normal hearing acuity and sensitivity and this relationship is well documented in the scientific literature. (Testimony of William Thornton)
  14. FERC and EPA (as well as the World Health Organization and many municipalities (city)) have established a day-night noise level (Ldn) limit of 55 dBA at noise sensitive receiver locations (any

pertinent location on the receiving property). The day-night noise level is a 24 hour weighted averaging that penalizes night time noise levels by adding 10 dB to reflect the expectation of decreased night-time noise levels to minimize the incidence of sleep disturbance. (Testimony of William Thornton, Exhibit 4)

15. The noise levels generated by the compressor station (the compressor station produces a day-night noise level (Ldn) of 65 dBA) are significantly in excess of the noise limits of 55 dBA day-night level (a weighted 24 hour average which is not directly comparable to the short term average noise levels reported by ATCO (Exhibit E) or TAV (Exhibit 4)) established by FERC and the US EPA to prevent noise related human disturbance and disruption. To meet this bare minimum standard the noise level generated by the Springhill Compressor Station would need to be reduced to a 24 hour steady-state level of 48.6 dBA at any property line.
16. The Springhill Compressor Station emits significant low-frequency noise which at that frequency is not only a noise but a vibration prohibited by § 1000 – 504 of the Zoning Ordinance.
17. This low-frequency noise is not effectively controlled by the existing noise control methods. This low frequency noise is highly disruptive due to the fact that it penetrates residential and commercial structures with minimum reduction. The low frequency noise and the subsequent impact is significantly underestimated by A-weighted sound levels. (Testimony of William Thornton, Exhibit 4)
18. Residents living near Springhill Compressor Station testified that in their opinion, at its loudest the compressor station is louder after the recent construction than it was before (Testimony of Stan Burns, John Ryczek).
19. LMM reported (erroneously, as it turned out) as part of its Marcellus Shale Air Emissions Inventory a staggeringly large emission of a known neurotoxin (toluene) from the Springhill Compressor Station, with no scrutiny or consequence from any regulatory agency for nearly two and a half years from the end of the reporting period.
  - A. LMM reported to the DEP a figure of 5.1 tons of toluene for 2013 for the Springhill Compressor Station in its annual air emissions inventory.<sup>3</sup> (Testimony of Jim Rosenberg, Exhibit 2 p. 1.)
  - B. 5.1 tons is approximately 5 times more toluene than any other compressor station in Pennsylvania reported emitting in 2013. (Exhibit 2 p. 1.)
  - C. Toluene is a known neurotoxin (Testimony of Jim Rosenberg, Exhibit 2 pp. 3-14.)
  - D. The Air Quality Permit in force for the 2013 reporting period was GP5-26-00587B (Exhibit 1, p. 5).
  - E. In its letter of application for GP5-26-00587B, LMM estimated its total Potential To Emit (PTE) of Hazardous Air Pollutants (HAP) at 3.57 tons per year (tpy) (Exhibit 1 p.10). The only HAP enumerated was formaldehyde (HCHO). Thus, an emission of 5.1 tons of toluene (which is classified by DEP as an HAP) would have significantly exceeded LMM’s self-evaluated PTE for HAP.
  - F. DEP was not made aware of this error until May 19, 2016, as result of it being raised in the hearings in the instant case (LMM Exhibit A).
20. Emissions of any hydrocarbons such as Toluene or any other HAP from a dehydrator, or other source

not including engine exhaust, such as fugitive emissions, including but not limited to a leak in a valve or tank, during transfer from a tank to a truck for hazardous waste disposal, a blowdown intentional or otherwise as allowed under a GP permit for the Marcellus Shale Air Emissions Inventory, are modeled, not measured. The value for non-exhaust emission of all gases including toluene depends only on the total amount of gas released and the proportion of toluene or other hydrocarbon or other HAP in the input gas from LMM's collection pipelines. This computer modeling is determined by a gas analysis, which is undertaken at most quarterly based on a one-hour sample. EPA requires a three hour sample once a year. (Testimony of Lindsay Sunpter.)

21. The amount of an HAP such as toluene in the input gas is presumed to be constant for the entire reporting period of the emissions inventory (LMM Exhibit A shows only 1 run of GRI-GlyCalc is used for an entire year's emissions report). A 10x error in the amount of toluene or any other HAP present in the gas results in a corresponding 10x error in the amount of toluene or any other HAP emitted. (Testimony of Taylor James, Lindsey Sumpter, LMM Exhibit A.)
22. The Springhill Compressor Station gas fired engines are assumed to be in operation 8,713 hours per year or 362 24 hour days. (Exhibit A)
23. Combustion gases including HCHO from the gas fired engines are based on a stack test when the engine is first installed and a yearly test thereafter. The reliability of such limited testing is based upon the engine manufacturer's certification.
24. The analysis of the erroneously reported Springhill Compressor Station toluene emissions inventory demonstrates that a dehydrator is a pathway for emissions of a known neurotoxin. Even if erroneous, major discrepancies between reported emissions numbers and evaluated PTE are not receiving scrutiny. (LMM Exhibit A shows the first notice of the error, nearly two and a half years after the end of the reporting period).
25. Residents who live near Springhill Compressor Station report a variety of ill effects, which they believe to be associated with Springhill Compressor Station. These include neurological effects, impairment of the useful enjoyment of their property due to noise, sleep disruption due to noise, and diminution of property value.
26. Nathan Carr, grandson of Phyllis Carr and brother of Rhonda Carr, a resident who lives near Springhill Compressor Station, has suffered from tremors of the central nervous system (Testimony of Rhonda Carr, Phyllis Carr).
27. Delma Jean Burns, wife of Stan Burns, a resident who lives near Springhill Compressor Station, has suffered tremors of the central nervous system, which she believes to be associated with Springhill Compressor Station (Testimony of Stan Burns).
28. Joseph Bezjak (plaintiff), owner of a property adjoining the property on which the Springhill Compressor Station is located, testified that his intended use of the property was to locate a nursing home, that he believes the effects of Springhill Compressor Station make this impossible and his property is thereby devalued (Testimony of Joseph Bezjak).
29. John Ryczek, a resident who lives near Springhill Compressor Station, testified that he has suffered sleep deprivation due to noise at Springhill Compressor Station. He also believes his property has been devalued due to the proximity of the compressor station, and bases that assessment on an appraisal of his property. (Testimony of John Ryczek.)
30. LMM is required by the Zoning Ordinance at §1000-507(B) to receive all required Air Quality Permits from DEP before any zoning approval can be issued by Special Exception. The current Air Quality

Permit for Springhill Compressor Station is permit # GP5-26-00587D (Exhibit 1, p. 7).

A. The current Air Quality Permit for Springhill Compressor Station includes a condition that it not unreasonably interfere with the comfortable enjoyment of life or property.

B. Permit GP5-26-00587D is subject to the following condition:

“(b) All sources and associated air pollution control equipment located at a natural gas compression and/or processing facility shall be:

(i) Operated in such a manner as to not cause air pollution, as that term is defined in 25 Pa. Code § 121.1 (relating to definitions);”

(text of General Plan Approval And/Or General Operating Permit BAQ-GPA/GP-5, Version January 16, 2015, Section A 9 (b) (i) *op cit.*)

31. The definition of Air Pollution in 25 Pa. Code § 121.1 is as follows:

“The presence in the outdoor atmosphere of any form of contaminant, including, but not limited to, the discharging from stacks, chimneys, openings, buildings, structures, open fires, vehicles, processes or any other source of any smoke, soot, fly ash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, vapors, odors, toxic, hazardous or radioactive substances, waste or other matter in a place, manner or concentration **inimical or which may be inimical to public health, safety or welfare** or which is or may be injurious to human, plant or animal life or to property **or which unreasonably interferes with the comfortable enjoyment of life or property.**” [Emphasis added.]

32. The history of DEP Air Quality permitting of Springhill Compressor Station shows significant irregularities and lack of regard for best practice at protecting nearby residents from the harmful effects of air pollution.

A. The DEP permit in force at the time of the original ZHB 10-20 Hearing was GP5-26-00587A (Exhibit 1 pp. 1, 4; ZHB 10-20 Transcript p. 57).

B. LMM applied for GP5-26-00587B on the same equipment as covered by GP5-26-00587A, “to allow the Springhill Compressor Station to remain a minor source of emissions” (Exhibit 1, p. 9), thereby demonstrating that GP5-26-00587A was in fact inadequate to comply with the Fayette County Zoning Ordinance at §1000-507.

33. The equipment installed at Springhill Compressor Station under GP5-26-00587A and GP5-26-00587B included two gas-fired reciprocating compression engines, only one of which included an oxidation catalyst. (Exhibit 1 p. 10.)

34. An oxidation catalyst reduces emissions of several kinds of pollutants by as much as an order of magnitude (Exhibit 1 p. 10, differences in PTE between Engine 2 and Engine 3).

35. The engine with no oxidation catalyst remained in place until approximately July-August 2015 (Exhibit 5 p. 4).

36. The prior gas fueled engines ran hot and LMM opened the doors to the engine enclosures to allow open air cooling greatly increasing the off-site noise of the facilities operation.

37. The recently installed modified gas fueled engine enclosures are designed to handle all cooling needs without open doors.

38. Blowdown gases whether the blowdown is planned or accidental are released directly to the atmosphere.
39. Gas Fueled engines when shut down for any reason must be manually restarted.
40. Portions of LMM's facilities encroach upon the Bezjak property. (Partial Survey Exhibit 3)
41. The General Permit allows produced water truck load-out of hazardous liquid wastes of 11,000 bbl/yr (Exhibit I) which LMM testified was removed out at a rate of 1,000 bbl/month.
42. The leaking valve emitted raw gas from the collection pipeline directly to the atmosphere in the neighbor. There is no way to know how long this valve had been leaking.
43. Residents and property owners in the vicinity of the Subject property cannot easily monitor LMM activity on the Subject Property or determine actual compliance with LMM's governmental permits.
44. DEP permits and correspondence is kept in Pittsburgh, Pennsylvania approximately 70 miles away and can be viewed only by appointment.<sup>4</sup>
45. The Compressor Station as presently permitted can process at full capacity approximately 38 MMscfd of raw gas from LMM's collection pipelines.
46. The Compressor Station is operating near its maximum capacity.(Testimony of Taylor James)
47. All of the active emission and noise generating components of the LMM Springhill Compressor Station are within 200 feet of the Bezjak Property. (Exhibit 3 Partial Parcel Survey and Exhibit F Springhill Compressor Station Plot Plan)

#### Conclusions of Law

1. Air pollution emissions leaving the property of Springhill Compressor Station have been demonstrated and conditions are required to be imposed by the ZHB to protect the citizens living in the vicinity of the Subject Property.
2. A gas-fired reciprocating compression engine with no oxidation catalyst was left in place at Springhill Compressor Station from its installation under a permit issued December 10, 2009, until removal approximately July-August 2015, demonstrating blatant disregard for best practices at protecting nearby residents from the harmful effects of air pollution.
3. A data entry error by LMM regarding the amount of toluene — a known neurotoxin — in the gas stream input to Springhill Compressor Station resulted in publication to and by DEP in its Marcellus Shale Air Emissions Inventory of an emission of toluene for 2013 by Springhill Compressor Station at least approximately 5 times greater than every other compressor station in Pennsylvania. This error was not corrected until May 19, 2016 by virtue of the attention it received in the instant case, demonstrating conclusively that air emissions inventory data from LMM for Springhill Compressor Station are not receiving proper scrutiny by either LMM, Fayette County, or DEP.
4. The Zoning Ordinance in its present form has withstood attack by oil and gas drillers as preempted by the Oil and Gas Act, 58 P.S. 601-101 et seq. in *Penneco Oil v. Fayette County*, 4 A.3d 722 (*Pa Cmwlth*

---

<sup>4</sup> <http://www.dep.pa.gov/Citizens/PublicRecords/Pages/Informal-File-Review.aspx#.V2Sy--3sDFY>

2010). The findings and conclusions of the ZHB do not attempt to replace or modify any provision of the Pennsylvania Air Pollution Control Act or federal Clean Air Act in their regulation of air pollution. The Zoning Ordinance merely supplements and integrates those regulation into its general land use scheme. The condition cited above in GP5-26-00587D requiring not causing air pollution as defined in 25 Pa. Code § 121.1 requires the ZHB mandate that LMM actively meet federal and state conditions as a condition of maintaining zoning approval and to provide frequent reports demonstrating such compliance.

5. Citizens living near Springhill Compressor Station have the right to clean air as provided under Article 1 Section 27 of the Constitution of the Commonwealth of Pennsylvania. That same article imposes the affirmative obligation of Fayette County, including its boards and commissions to act as trustee of that right. This obligation requires that Fayette County maintain scrutiny of compliance with Section A 9 (b) (i) of GP5-26-00587D and the Zoning Ordinance § 1000-507.
6. Citizens living near Springhill Compressor Station believe that their rights under Article 1 Section 1 and Article 1 Section 27 Constitution of the Commonwealth of Pennsylvania have been infringed by LMM in its operation of Springhill Compressor Station.
7. In order to mitigate the noise disturbance produced by the Springhill Compressor Station noise emissions and to preserve the noise environment that existed prior to construction and operation, the noise emitted by the Springhill Compressor Station should be limited to 50 dBA during daytime hours (7 AM- 9 PM) and 35 dBA during nighttime hours (9 PM – 7 AM) as measured at any property line boundary or location on an adjacent property. The sound level should be measured using a 15 minute, A-weighted equivalent continuous sound level (LAeq) metric.
8. Conditions that LMM use best practices for noise mitigation and provide Fayette County with the same data provided to DEP for its air emissions inventory but on a more timely basis are both reasonable and not contrary to law.
9. Consistent with DEP's ability to require active monitoring of emissions of air, ground and water pollutants, the ZHB may require the same monitoring and reports there on to be submitted to the Fayette County Office Planning Zoning and Community Development so that the citizens may be secure in their homes and property and have reasonable access to such reports within a reasonable driving distance of their homes.
10. While parts of Chapter 35 of Act 13 have been enjoined from enforcement the definitions of Oil and Gas Operations have not and provide useful guidance to the ZHB. Likewise mandated noise and setback controls (enjoined) also set forth useful guidance that the oil and gas industry and the legislature deemed reasonable.

#### Conditions of Approval

In accordance with the Remand Order and after a full hearing where the residents, property owners and LMM had a full and fair opportunity to present evidence and cross examine witnesses, the Fayette County Zoning Hearing Board hereby imposes the following conditions in accordance with the Zoning Ordinance and *Robinson Twp., supra.* upon the use and operation of the LMM compressor station Spring Hill #2:, to wit:

1. LMM shall install and maintain sound mitigation so that the measured sound level is 50 dBA during daytime hours (7 AM- 9 PM) and 35 dBA during nighttime hours (9 PM – 7 AM) as measured at any property line boundary or location on an adjacent property. The sound level should be measured using a 15 minute, A-weighted equivalent continuous sound level (LAeq) metric. Compliance shall be tested with all compression engines and other sources of noise running at full capacity.

2. LMM shall implement blowdown injection technology, or equivalent means to prevent blowdowns from venting directly into the atmosphere.
3. LMM shall file quarterly with Fayette County a report providing the following information:
  - A. All data appropriate to the facility as described in the DEP publication “Spreadsheet Reporting Guide for Conventional and Unconventional Midstream Natural Gas Compressor Station Emissions Reporting System”<sup>5</sup> (or its successor document) for the quarter ending no greater than 60 days prior to the date on which the report is filed.
  - B. Total amount of gas input into the compressor station for the same reporting period as item A above.
  - C. Total amount of gas output from the compressor station to transmission for the same reporting period as item A above.
  - D. Copies of any and all LDAR “FLIR” (or equivalent technology) imaging taken pursuant to the BAQ-GPA/GP-5 section “REQUIREMENTS FOR EQUIPMENT LEAKS” for the same reporting period as item A above.
  - E. Copies of any and all EPA Air Compliance Inspection Reports immediately upon receipt and copies of its response immediately and all other responses no less than its quarterly filing.

It shall be understood that Fayette County’s copy of this report is a Public Record under the terms of the Right To Know Law.

4. LMM shall file with Fayette County an Emergency Response Plan, including an evacuation plan for residents of Hope Hollow Road and Honor Roll Road in the event of an accident. The evacuation procedure under this plan will be communicated to nearby residents of Hope Hollow Road and Honor Roll Road in writing.
5. LMM shall communicate to nearby residents notice of all planned blowdowns.
6. LMM shall not operate the gas fired engines at any time with the doors to the engine enclosures open.
7. LMM shall at the same time it notifies PaDEP of any incidents, including without limitation Springhill Compressor Station Malfunctions, email a copy of the incident notification to the Fayette County Office of Planning, Zoning and Community Development.
8. LMM shall plant and maintain a Number 1 bufferyard pursuant to § 1000-212 Table 5 along the common border of the Bezjak property.
9. No future improvement which will generate emissions, glare, or noise shall be installed within 200 feet of the Bezjak Property line and no current improvement may be moved or reconstructed closer than its current location.
10. LMM shall reapply to the ZHB for a new Special Exception in the event that the equipment at Springhill Compressor Station changes or the capacity of the Springhill Compressor Station is increased by any other means by more than 10%.
11. LMM shall remove the encroachments on the Bezjak property.



12. Zoning approval shall be revoked by the Zoning Officer for violations of these conditions as well as after notification by DEP of violations of permit # GP5-26-00587D, or any subsequent GP5 permits which may be issued from time to time.

Respectfully submitted by

\_\_\_\_\_/S/\_\_\_\_\_  
David F. Toal, Esq.  
Counsel for Plaintiffs

Dated: June 22, 2016