

February 10, 2019

Christina Wilhelm
Pennsylvania Department of Environmental Protection
230 Chestnut Street
Meadville, PA 16335

Dear Ms. Wilhelm,

I have reviewed the HARMS AND BENEFITS sections of Tri-County Landfill Inc.'s Major Permit Modification – Replacement Application. I have found much of their analysis to be erroneous, contradictory and unachievable. The Pennsylvania Department of Environmental Protection must deny the permit. Following is an evaluation of their analysis.

Harm and Benefits Analysis – Executive Summary

Tri-County Landfill, Inc.'s (Tri-County) assessment of harm versus benefits is invalid.

1. Tri-County failed to use statistically valid methodology in assessing real estate value harm. The potential residential real estate harm can exceed \$13,000,000.
2. Tri-County overstated the direct economic benefit to Mercer County by \$133,045,300 and to the entire state of Pennsylvania by \$90,815,000.
3. Tri-County understated the harm to traffic by using 20 year-old data, failing to include the impact of the bird control program truck traffic flow "daylight hours" restrictions and excluding additional traffic due to daily cover requirements and off-site leachate treatment.
4. Tri-County understated the potential harm from odor, dust, landfill gas, leakage and litter by failing to factor the effect of hundreds of recent solid waste law violations into the probability of 100% compliance.
5. Tri-County understated potential aviation harm by creating a wildlife hazard within distances that do not comply within FAA standards. Tri-County's bird strike plan does not factor the effect of hundreds of recent solid waste law violations into the probability of 100% compliance. Plan failure will result in death(s) and catastrophic damage.
6. Harm estimates for odor, dust, liter and general solid waste law compliance is understated. All plans to control these harms are based upon 100% execution success. Tri-County and the related Vogel enterprises have hundreds of solid waste law violations. The violations are evidence that compliance rates will be less than acceptable and all harms are understated.

Analysis Details

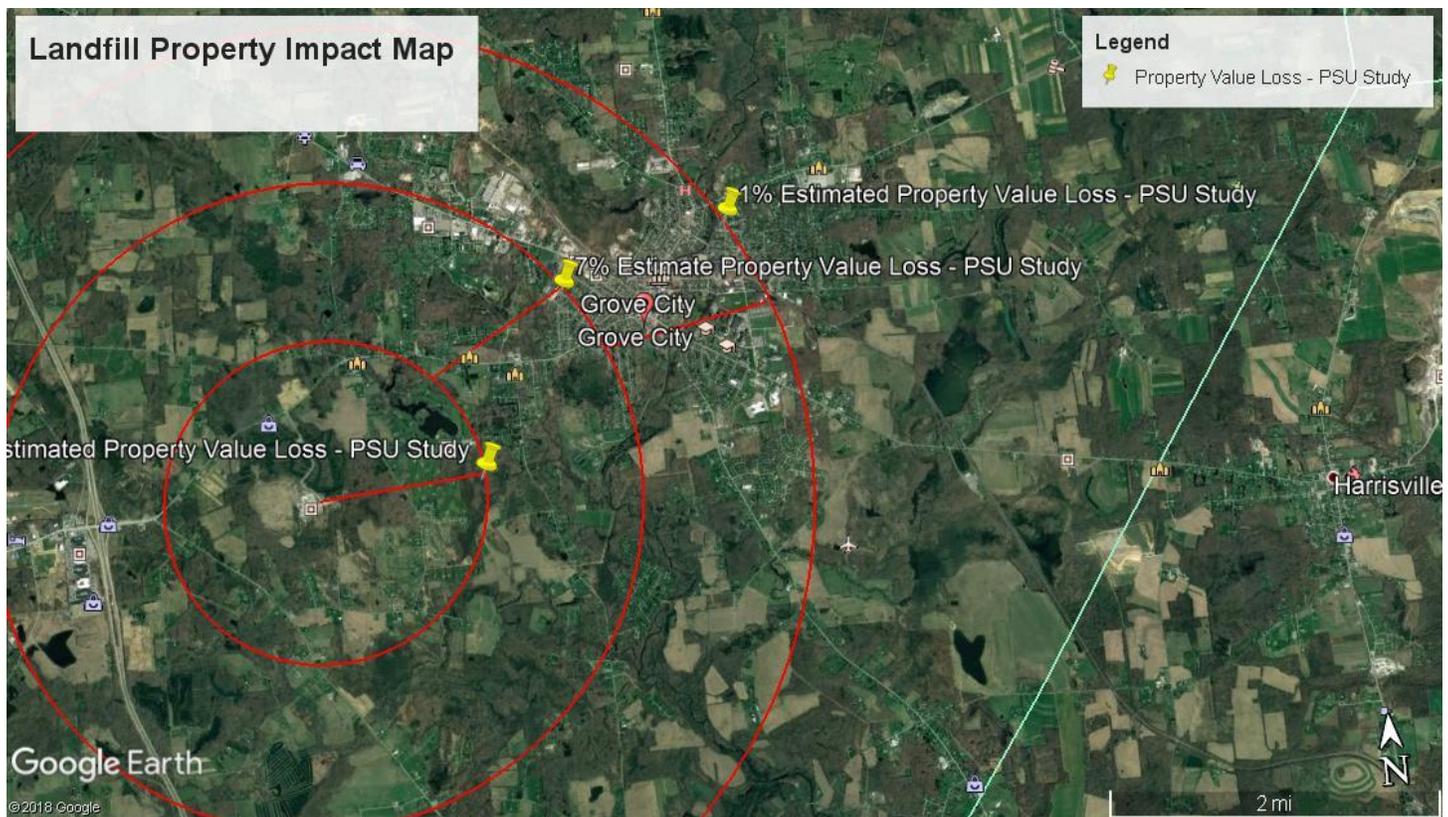
Real Estate:

Tri-County's application states that property values are not negatively impacted by municipal solid waste landfills. The Pennsylvania State University Department of Agricultural Economics and Rural Sociology issued Rural Development Paper No. 27 in May of 2005 (attached) which states "A meta-analysis shows that landfills that accept high volumes of waste (500 tons per day or more) decrease adjacent residential property values by 12.9%, on average. This impact diminishes with distance at a gradient of 5.9% per mile." "The meta-analysis conducted here represents an advance in modeling in that it distinguishes between variation among landfills in their house price impacts and sampling error in each estimated". This study applied rigorous statistical methodologies and adequate sample sizes which are not demonstrated Tri County's analysis. Tri-County's analysis indicates occurrences of increased property values. A related paper published in 2010 by the American Real Estate Society indicated that most studies cited by the solid waste

industry were not reliable. “Solid waste industry representatives have pointed to these studies as evidence that landfills need not have negative impacts on nearby property values (Parker, 2003). However, these studies were based on relatively small samples of house sales, so that the sampling variability in the estimated relationship between proximity and house price was high. It is possible that the landfills studied had negative impacts on nearby property values, but that the relationship could not be statistically identified due to small sample sizes.” The following studies also found that landfills negatively impacted property values:

- Nelson, Genereux, and Genereux (1992)
- Havlicek, Richardson, and Davies (1971)
- Thayer, Albers and Ramatian (1992)
- Hite, Chern and Hitzhusen (2001)
- Lim and Missios (2003)

There are more than 1,000 homes located within two miles of the proposed landfill. Residential properties within one mile of the proposed landfill include The Legends and on Schmidt Road, Arnold Palmer Drive and Center Church Road. Macrae Drive, Kimberly Estates, North Liberty Road, Sunset Avenue, Greg Drive, Stockton Avenue, Glenora Drive, Stratford Court are within two miles of the proposed landfill. A map of the impact area is presented below. The economic loss estimate based upon the Pennsylvania State University report is estimated to exceed \$13,000,000. The projected average loss for homes within one mile is \$34,000 and homes within two miles is \$12,000. See attached RESIDENTIAL REAL ESTATE LOSS ANALYSIS exhibit.



Traffic

The traffic study data cited in Tri-County’s application is from December 1999. The data is twenty years old and does not reflect additional tourism and business development along route 208 or route 258. It does not reflect additional

infrastructure development around the Premium Outlets. It does not include commuter traffic changes related to business developments in the Cranberry and Mars area.

The plan calls for truck traffic to be evenly spread across the landfill's 24-hour operating cycle. This directly contradicts the proposed Bird Strike Plan which limits the application of waste to one hour after sunset to one hour before sunrise. The Bird Strike Plan documents that no third-party haulers will be admitted to the facility until the evening hours. Therefore the 332 truck and tractor trailer round trips will be disproportionately packed into the evening hours. The traffic study does not factor in truck traffic to provide daily cover (1,825,000 cubic yards) or the estimated monthly 222 tanker trucks required to remove the estimated 2,000,000 gallons of leachate. The plan does not include the estimated 30 employee daily round trips cited in the Dust Control section.

Odor and Dust Control

Tri-County claims that their plan will control harm created by odor impacting areas outside of the permitted area. In 2009 the DEP received numerous odor complaints over a six-month period for Vogel Enterprises' Seneca Landfill. The DEP found that the facility failed to fully implement the odor control plan. In 2010 Vogel Enterprises Seneca Landfill was fined for *chronic* environmental violations. Seneca Landfill was fined \$107,147 for actions including failure to control litter and poor procedures related to on-site and off-site odor control. In 2016 Vogel Holdings paid \$682,500 in fines for penalties of the Solid Waste Management Act. The fine was for actions including failure to implement odor control measures. The DEP records document multiple instances of odor, litter and dust control violations. The citations show that Tri-County is not capable of executing any proposed odor control plan. Therefore, the odor harm is understated.

Economic Benefits

Tri-County estimates Total Economic and Financial Benefits of \$140,413,600. Only \$7,368,300 will directly benefit Liberty Township, Pine Township and Mercer County. This is only 5.2% of the estimated benefit. There are no requirements that the remaining \$133,045,300 be spent in the Mercer County area and employees are not required to live in the county. Tri-County is not required to purchase any materials or services in Mercer County. In terms of net direct economic benefits, the \$7,368,300 must be offset by the estimated \$13,000,000 of residential property value loss. The provable direct economic impact to the townships, county and state are significantly overstated by Tri-County.

Aviation Hazard

The Grove City Regional airport supplies Jet A aviation fuel. The FAA standard states that airports selling Jet-A fuel normally serve turbine-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 10,000 feet at these airports for any of the hazardous wildlife attractants. For all airports, the FAA recommends a distance of 5 statute miles between an airport's AOA and the hazardous wildlife attractant. Special attention should be given to hazardous wildlife attractants if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace. The FAA also reports that 74% of strikes occur at less than 500 feet above grade level.

Tri-County's proposed landfill is less than 6,700 feet from Grove City's runway. The most commonly used glideslope is 3%. Aircraft will be between 350 and 400 feet above grade when they reach the permitted area. This is in the 74% strike zone area. Tri-County's Bird Strike plan will require a zero-defect rate. A chronic violator of solid waste regulations has a very low chance of executing the bird strike plan with zero defects. The Vogel family of companies averages about 20 solid waste violations per year. Given that the industry is largely self-regulated, the actual violation occurrence rate is likely significantly understated. The bird strike plan did not address that daily cover containing sand may not be effective in excluding birds from the waste. The soil in the permit area contains sand. It should also be noted that Global- Marine, Inc., an engineering design, environmental planning and construction management company and recognized environmental experts, stated that until the plan is modified it cannot be judged as adequate. Tri-

County landfill's location increases potential harm from aircraft bird strikes. The proposed solution does not adequately reduce the harm due to past chronic violations and poor design.

Improperly Contained and Leaking Loads

The harms and benefit materials fail to mention their long and extensive history of leaking loads. The harms associated with leaking loads is understated.

Solid Waste Law Violations

The solid waste industry is largely self-regulated. Operators may or may not self-report violations. It is logical and realistic to assume that the number of actual violations greatly exceed the number cited. Vogel Holding's companies have over 340 violations in the past twenty years. The violations include:

1. Failure to notify/report emergency situations to the DEP
2. Odor control plan violations
3. Litter control plan violations
4. Residual waste acceptance without prior DEP approval
5. Leachate tank overfilling
6. Dumping of solid waste on ground
7. Inadequate daily cover
8. Unapproved staging or storage containers (563 containers)
9. Leachate collection procedures that did not coincide with approved Operations Plan
10. Clean Stream law violation
11. Leaking loads violations
12. Transporting hazardous waste without permits
13. Transfer waste without permits
14. Unapproved waste acceptance

Past behavior is a valid predictor of future performance. Vogel Holdings is a chronic solid waste law violator. The harms that Tri-County proposes to control with the plans included in the application can and will not be executed to the degree required. Tri-County has repeatedly demonstrated non-compliance with solid waste rules and regulations. Attached is the violation documentation.

Thank you for your consideration. Again, the above stated reasons show that time and again, Vogel Holdings have consistently not adequately executed their basic responsibilities and our robust community cannot live and thrive with the consequences of their poor compliance practices. They do not deserve a permit. To quote PA DEP Protection NW Regional Director Kelly Burch: "Seneca Landfill (Vogel Holdings) has been lax in following the environmental regulations that direct how municipal landfills are required to operate (2010)."

Regards,

William C. Pritchard, CPA, CGMA
225 Center Church Road
Grove City PA 16127
724.992.2435

CC:
Representative Tedd Nesbit

Senator Michelle Brooks
Mayor Randy Riddle
Borough of Grove City
GCC President Paul McNulty
Mercer County Commissioners
Liberty Township Commissioners
Mercer County Convention and Visitors Bureau
Governor Tom Wolf
PA DEP Secretary Patrick McDonnell
Pittsburgh Post-Gazette
Pittsburgh Tribune-Review
Rick Dayton, KDKA