

DEP CAMDEN OFFICE
JUL 31 2019

Dear Mr. Sammarco and Mr. Martin,

Last summer, I dug a trench behind our garage, past the side yard and through some shrubbery because the garage had started flooding more and more frequently and our flower gardens had begun washing out as the amount of rainfall increased. The trench solved these problems, but it filled in a bit over the winter, and when we received over 3 inches of rain during 4th of July weekend this year, the garage flooded again.

My story relates to the reason we're gathered here tonight. DEP is considering renewing SGI's existing surface mining permit which includes a provision allowing their storm water and sediment overflow and runoff to flow into the Tom's Creek watershed when rainfall amounts reach totals commensurate with 10 year storms. These standards were set in 1994. The permit requirements do not reflect what all of us who garden or farm or fish or just enjoy the outdoors know about new weather patterns – what was happening in 1994 doesn't reflect what is happening now. According to NOAA, from May 2014 - April 2019, PA experienced its wettest period since 2008. The DEP website projects a 40% increase in annual precipitation in PA. Consequently, the mining permit SGI is seeking to renew is obsolete. It's time for the permit requirements to be changed to reflect the reality of the change in climate.

Could SGI comply with more environmentally stringent requirements? In SGI's response to comments from last January's hearing, they write that "a design could be formulated that would make discharge into Tom's Creek highly improbable." However, there is no indication that SGI is going to take this step. I can think of three reasons why this is so: corporations only do what they are required by law to do, and at present, their permit does not require them to do what they have admitted they can do. The fines they have incurred when they have violated existing permit requirements regarding discharge into the watershed provide no real incentive to comply. It's a matter of public record that their fines have ranged from about \$400 to \$4000. Not much of an incentive for a multi-million dollar corporation. The third reason for inaction is that protecting the environment costs money. Why negatively impact your bottom line if you are not required to do so?

During the information segment of the July 17, 2019 hearing, one of the SGI representatives told those of us gathered around him that he had, in fact, seen fish in the sediment ponds at SGI. Further, he said that he and a colleague had walked around Toms Creek near the SGI site kicking over rocks in the stream, and they saw plenty of macro invertebrates. To suggest that these observations support SGI's contention that they are an environmentally friendly corporation is unconscionable. The ludicrous claim that fish live in SGI's waste water ponds and the suggestion that "kicking over rocks" constitutes any kind of legitimate assessment of the health of a stream demonstrates ignorance at best.

How does DEP figure into all of this? I think DEP walks a thin line in these matters. Do they have the power and the mandate from state government to be a reliable protector of our environment? Recent actions by the state legislature as they continue to cut DEP's staff indicate otherwise. Are members of the state legislature bound by corporate donations with which no individual citizen can hope to compete? DEP is the

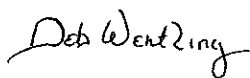
only safeguard that stands between us and environmental degradation, but can they risk upsetting powerful corporations with very deep pockets? These are scary questions for all of us.

The health of our environment, including the health of our streams, is tied inextricably to our health. The PA Fish and Boat commission warns anglers statewide not to eat more than one half pound of recreationally caught fish per week because of dangerous contaminants in them. If you weigh less than 150 lbs one fish meal per week is too much. The DEP has already declared 40% of the streams in Adams County impaired. Why are we willing to accept this? Are we ever going to draw a line and say enough is enough?

Degrading our environment has a social and economic impact too. Anglers travel to fish in our trout streams. All of us, tourists and locals alike, who enjoy walking or horseback riding in Michaux, all of us who enjoy fishing in Tom's Creek are very worried about what's happening to our wilderness areas and streams.

My last point is heart-driven and not so quantifiable, but it is no less important. I doubt that there's a single person in this room who is not thankful for the valuable gifts the earth provides. For many, however, that value is derived solely from how beneficial the gift is to us humans. The natural world is a merely a natural resource to many. What about the inherent value of the rest of earth's inhabitants? In Genesis, God said what he created was good before we arrived on the scene. The earth teems with life. We have no right to cavalierly discount its value because we think the only thing that's worth preserving is what we find useful. As long as we cling to this view, we will continue to accept the destruction of other species until, finally, we will have done ourselves in.

SGL directly provides jobs to about 145 people; that is important. I don't want these folks to lose their jobs, but SGL has a responsibility not only to them but to everyone affected by their actions. SGL can and must do more to take their environmental responsibilities seriously. We've reached a tipping point. What we do as a species will determine our children's future and the future of every other living thing on the planet. Let's draw a line here and do two things: insist that SGL's license reflect climate change realities and hold SGL accountable in a meaningful way when they fail to take seriously the detrimental effect they have on our watershed.



Deb Wentling
Fairfield, PA 17320

DEP CAMBRIA OFFICE
JUL 31 2019



Fair Shake®
Environmental Legal Services

July 31, 2019

Sent Via Electronic Mail

Chad Paronish
chaparonis@pa.gov
Cambria District Mining Office
District Mining Operations
PA Department of Environmental Protection
Commonwealth of Pennsylvania
286 Industrial Park Road
Ebensburg, PA 15931

Re: Comments on NPDES Permit Renewal Application
Permit No. PA0223239

To Whom It May Concern:

On behalf of Friends of Tom's Creek ("FOTC"), I respectfully submit the following comment on Specialty Granules, LLC's ("SGI") application for a renewal NPDES permit, Permit No. PA0223239, associated with the non-coal surface mining at the Pitts Quarry in Hamiltonban Township, Adams County ("Application" or "Renewal Application"). FOTC is a non-profit group composed of residents of the Tom's Creek¹ watershed region. Its mission is to "protect, preserve, enhance and restore the natural, scenic, historic and aesthetic resources within the Tom's Creek watershed."² The Pennsylvania Department of Environmental Protection (the "Department", "DEP", or "PADEP") is accepting comments pertaining to the Application materials until July 31, 2019, or two weeks following the July 17, 2019 public hearing. Accordingly, this comment is timely filed.

The Department should deny the NPDES permit Renewal Application and return the Application to SGI because it does not meet the criteria for permit approval. The Application underestimates the effluent and toxic pollutants expected in the discharges; fails to provide an updated anti-degradation analysis to account for new, additional, or increased discharges; mischaracterizes Tom's Creek as a High Quality (HQ) rather than Exceptional Value (EV) Water;³ lacks a nondischarge alternatives analysis; and relies on a legally insufficient Social or Economic Justification (SEJ). As a result of these deficiencies, the Department is constitutionally and statutorily obligated to deny the Renewal Application and require SGI to revise the Application and suspend all discharges to the Unnamed Tributary to Tom's Creek in the

¹ Tom's Creek and Toms Creek are used interchangeably, and the use of Tom's Creek or Toms Creek refers to the same waterbody.

² Friends of Tom's Creek (last accessed July 8, 2019), <http://www.friendsoftomscreek.org/>.

³ Specifically, the upper portion of the Tom's Creek Watershed, which is the portion at issue in the Application, should be classified by PADEP as EV.



meantime. If the permit is ultimately issued in a revised form, the scope and significance of the necessary changes merit a second public comment period.

1. The Application's Effluent Characterization Fails to Satisfy Numerous Federal and State Requirements.

As the Application does not satisfy numerous Federal and State requirements, the Department must require SGI to revise the Application and suspend all discharges until the Application satisfies all applicable permitting requirements. The US EPA's NPDES regulations specify that "[n]o permit may be issued . . . [w]hen the conditions of the permit do not provide for compliance with the applicable requirements of CWA, or regulations promulgated under CWA," or "[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States."⁴ In the present case, SGI's Application does not provide for compliance with Federal and State requirements related to effluent characterizations and water quality standards. As it currently exists, the Department must deny the Application.

As explained by official PADEP guidance, the "regulations at Chapter 92a [of the Pa. Code.], § 92a.21 which incorporates 40 CFR 122.21 (wastewater) and Chapter 92a, § 92a.32 which incorporates 40 CFR 122.26 (stormwater) require that an applicant submit an effluent characterization (i.e. identifying what pollutants are expected to be discharged) as part of the permit application."⁵ The effluent characterization is meant "to assure that the nature and quantity of pollutants in the effluent, as well as their effect on the receiving waters, is fully evaluated during the application review and permit development process."⁶ Naturally, an inaccurate characterization would violate the relevant Federal and State regulations. Since the Application's characterization fails to reflect the site's actual output as reported in its monitoring data, the Department must require SGI to revise the Application. Additionally, as SGI clearly has a record of failing to comply with its characterizations, the Department should set effluent limitations to ensure the protection of Tom's Creek.

Section D24 of the Application ("Common parameters/pollutants") estimates the Daily Max of Total Suspended Solids (TSS) as 70 mg/L based on the existing Pitts Pond NPDES Permit.⁷ 70 mg/L also represents the maximum daily discharge parameter for TSS in SGI's Noncoal Surface Mining Permit No. 01930302. However, the monitoring data attached to SGI's 2019 permit application show 88 mg/L of TSS present at SS-9, the sampling point upstream of Pitts Pond on the Unnamed Tributary to Toms Creek, on June 21, 2017, and 75 mg/L at SS-9 on August 29, 2017.⁸ As SGI has exceeded its permitted Daily Max for TSS in the past, the Department should have little reason to believe they will discharge below the effluent characterization of 70 mg/L in the future. As such, the Department should set and monitor compliance with a TSS effluent limitation.

⁴ 40 CFR § 122.4; *see also* 40 CFR § 123.25 (applying Federal regulations to States).

⁵ PADEP Bureau of Mining Programs, Developing National Pollutant Discharge Elimination System (NPDES) Permits for Mining Activities, No. 563-2112-115 at p. 3 (Dec. 5, 2015).

⁶ *Id.*

⁷ Renewal Application at part 24.

⁸ *See* Surface Water Monitoring Data attached to the Renewal Application.

Additionally, Section D28 of the Application (“Conventional and Nonconventional Pollutants”) lists phosphorus as a pollutant that was not detected in any sample of stormwater runoff at the Pitts Quarry,⁹ but the associated monitoring data shows phosphorus present at all sample points on July 25, 2017, August 29, 2017, September 12, 2017, October 17, 2017, November 14, 2017, December 12, 2017, January 16, 2018, February 20, 2018, March 20, 2018, April 24, 2018, August 19, 2018, September 7, 2018, December 13, 2018, and March 22, 2019.¹⁰ EPA has stated that “[e]ven ... very low concentrations of phosphorus can have a dramatic impact on streams,” with a modest increase potentially “set[ting] off a whole chain of undesirable events in a stream including accelerated plant growth, algae blooms, low dissolved oxygen, and the death of certain fish, invertebrates, and other aquatic animals.”¹¹ Given the relevance of phosphorus presence to stream health, the Department should investigate this discrepancy in SGI’s permit application before issuing a permit renewal.

Finally, Section D27 of the Application (“Other toxic pollutants”) contains a number of potentially fatal issues. As the NPDES Permit for which SGI applies is a noncoal renewal, SGI must provide data for the concentration of pollutants it expects to be present.¹² However, many of the estimated concentrations in SGI’s Application either fall short of the concentrations present in the associated monitoring data or fail to meet the relevant Human Health Criteria as mandated by 25 Pa. Code § 93.8c. The permit application lists the maximum concentration for copper as 0.005 mg/L,¹³ while the associated monitoring data show copper levels exceeding 0.005 mg/L on July 25, 2017, August 29, 2017, and December 13, 2018, with the concentration reaching 0.0075 mg/L at SS-9 on August 29, 2017.¹⁴ The maximum concentration for lead is listed as 0.003 mg/L,¹⁵ but the concentration on May 12, 2017 was tested at 0.0038 mg/L at SS-5.¹⁶ Additionally, the Human Health Criteria in 25 Pa. Code § 93.8c disallow antimony levels exceeding 0.0056 mg/L,¹⁷ but the permit application would allow for levels up to 0.01 mg/L.¹⁸ The Criteria likewise limit mercury levels above 0.00005 mg/L or thallium levels above 0.00024 mg/L,¹⁹ whereas the permit application would allow for mercury levels up to 0.002 mg/L and thallium levels up to 0.01 mg/L.²⁰ As it currently stands, SGI’s permit application fails to conform with the associated monitoring data or the Pa. Code’s Human Health Criteria. As such, the Department should set limitations to ensure that each discharge “complies with all applicable water quality standards.”²¹ Given SGI’s history of noncompliance with effluent parameters, the

⁹ See Renewal Application at part 28.

¹⁰ See Surface Water Monitoring Data attached to the Renewal Application.

¹¹ *Water: Monitoring and Assessment, 5.6 Phosphorus*, EPA (June 4, 2019), <https://archive.epa.gov/water/archive/web/html/vms56.html>.

¹² 40 CFR § 122.21 (g)(7)(vi)(B).

¹³ See Renewal Application at part 27.

¹⁴ See Surface Water Monitoring Data attached to the Renewal Application.

¹⁵ See Renewal Application at part 27.

¹⁶ See Surface Water Monitoring Data attached to the Renewal Application.

¹⁷ 25 Pa. Code § 93.8c, Table 5.

¹⁸ See Renewal Application at part 27.

¹⁹ 25 Pa. Code § 93.8c, Table 5.

²⁰ See Renewal Application at part 27.

²¹ 40 CFR § 122.44 (d)(1)(vii)(A).

Department should further require SGI to demonstrate how future discharges will conform to effluent limitations and their expected pollutant concentrations. Until such time as SGI provides a satisfactory plan for future compliance, the Department must deny the Application and require SGI to suspend all operations under the permit.

2. An Increase in Discharge Frequency Associated with Changing Precipitation Patterns Necessitates a New Anti-Degradation Analysis.

SGI's Application is currently faulty, as it does not include an updated anti-degradation supplement to account for new, additional, or increased discharge. Without such a supplement, the Application violates the Pa. Code's "Antidegradation Requirements" and must be denied and returned for correction.

The Pennsylvania Code's "Antidegradation Requirements" serve to ensure the maintenance and protection of "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses."²² In order to best protect the Commonwealth's important HQ and EV waters from degradation, any person who proposes "new, additional or increased discharge to High Quality or Exceptional Value Waters" must first conduct an anti-degradation analysis.²³ At a minimum, this analysis must encompass an evaluation of nondischarge alternatives and, if no such alternatives exist, an identification of "the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies."²⁴ Since SGI is proposing additional or increased discharge, an updated anti-degradation analysis is required.

SGI admits in its Application that discharge events may occur from Pitts Pond 1 during the equivalent of 10-year 24-hour storm events and from Pitts Pond 2 during the equivalent of 100-year 24-hour storm events. SGI has additionally admitted that discharges may occur during rare and unusual storm clusters or back-to-back storms of slightly less than a 10-year 24-hour magnitude. Storm events of such magnitude are increasing in frequency in Pennsylvania, which will result in additional or increased discharge under DEP's definition of the terms. In its *Water Quality Antidegradation Implementation Guidance*, the Department defines "Additional Discharge" as any "[f]low and/or loading added to an existing waste stream that **would not** require construction to accommodate the added waste flow," and "Increased Discharge" as any "[f]low and/or loading added to an existing waste stream that **would** require new construction to accommodate the increased waste flow."²⁵ Between "Additional" and "Increased" discharge, any additional flow or loading requires a new antidegradation analysis. Since discharge at the Pitts Quarry is tied to precipitation events, an increase in the frequency of those events will correlate with an increase in both flow and loading. As the Application is proposing additional or increased discharge, a new anti-degradation supplement is required.

²² 25 Pa. Code § 93.4a (b).

²³ See 25 Pa. Code § 93.4c(b)(1)(i)(A).

²⁴ *Id.*

²⁵ Commonwealth of Pennsylvania Department of Environmental Protection, Water Quality Antidegradation Implementation Guidance (2003), No. 391-0300-002 at p. 46 (emphasis in original).

a. Changing Precipitation Patterns Associated with Climate Change Will Result in New, Additional, or Increased Discharge.

More frequent severe storm events will result in additional or increased discharge from Pitts Ponds 1 and 2, requiring an updated anti-degradation supplement. As specified in SGI's Renewal Application, discharge is permitted from Discharge Point 001 during precipitation events greater than the equivalent of a 10-year 24-hour storm and from Discharge Point 002 during precipitation events greater than the equivalent of a 100-year 24-hour storm. Furthermore, and as is discussed in more detail below, SGI has admitted that discharge may occur during rare and unusual storm clusters or back-to-back storms of less than the 10-year 24-hour magnitude. Precipitation events of such magnitude are only increasing in frequency as Pennsylvania's climate becomes hotter and more volatile. SGI must properly account for this additional or increased discharge in an updated anti-degradation supplement.

Widespread reporting confirms that precipitation events in Pennsylvania are becoming more severe. As reported by the Union of Concerned Scientists, "April 2019 marked the wettest 12-month period in the United States since record-keeping began 124 years ago, breaking the previous record set from May 2015–2016."²⁶ The largest increases in heavy precipitation are occurring in the Northeast and Midwest,²⁷ with precipitation from extremely heavy storm events already increasing by 70 percent since 1958 in the Northeast.²⁸ In the Eastern U.S. more generally, "a storm with a 24-hour rain total that used to occur with a frequency of once every 20 years is projected to recur every 12 to 16 years by mid-century and every 8-10 years by the end of the century."²⁹ Furthermore, EPA has reported that Pennsylvania's changing climate has resulted in more frequent heavy rainstorms, which will lead to increased flooding in the coming years.³⁰

Precipitation in Pennsylvania is expected to increase by more than 5% above the historical average between 2010 and 2039.³¹ Central Pennsylvania, including the Pitts Quarry permitting site, will likely see the greatest rainfall extremes.³²

²⁶ Juan Declet-Barreto, *The Wettest 12 Months: New Analysis Shows Spikes in Flood Alerts in the US*, UNION OF CONCERNED SCIENTISTS (May 23, 2019, 1:24 PM EDT), <https://blog.ucsusa.org/juan-declet-barreto/spikes-in-flood-alerts-in-us>.

²⁷ *Id.*

²⁸ Teresa Bonner, *What does climate change mean for PA.?*, PENN LIVE, https://www.pennlive.com/news/2017/06/what_does_climate_change_mean.html.

²⁹ James Shortle Et Al., *Pennsylvania Climate Impacts Assessment Update 135* (May 2015), <https://www.pennfuture.org/Files/Admin/Pennsylvania-Climate-Impacts-Assessment-Update---2700-BK-DEP4494.compressed.pdf>.

³⁰ EPA, *What Climate Change Means for Pennsylvania* (Aug. 2016), <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-pa.pdf>.

³¹ Union of Concerned Scientists, *Climate Change Impacts and Solutions for Pennsylvania: How Today's Actions Shape the State's Future*,

Near the Pitts Quarry, discharge-level storms have already been occurring at a more frequent than anticipated rate. The 10-year 24-hour storm threshold in Hamiltonban Twp., PA., is 4.75 inches.³³ Precipitation data from nearby Blue Ridge Summit and Fairfield, Pa. shows that threshold being met as recently as 2018. Monitoring station Blue Ridge Summit 1.6 NNE, PA US US1PAAD0028 recorded 5 inches of precipitation on July 22, 2018, and monitoring station Fairfield 5.2 SE, PA US US1PAAD0031 recorded 5.8 inches on July 23, 2018.³⁴ The threshold has also repeatedly been approached, with Fairfield 1.8 NNW, PA US US1PAAD0043 recording 4.25 inches on September 8, 2018, and Blue Ridge Summit 1.6 NNE, PA US US1PAAD0028 recording 4.4 inches on September 10, 2018.³⁵ Precipitation trends will result in that threshold being met more frequently in the upcoming permitting period.

SGI's current anti-degradation supplement relies on the relative infrequency of extreme precipitation events to conclude that the discharges will not degrade Tom's Creek. In a July 11, 2016 response to FOTC's inquiry into why the Department did not quantify the amount of water that will be discharged to Tom's Creek during storm events, SGI wrote:

There have been two documented discharges to Toms Creek from the Charmain Plant Pitts Quarry, the most recent being in 2011. Excluding an intense storm event, a non-discharge alternative will be practiced. Discharges to Toms Creek are not designed or planned, and are only caused by intense storm events. Being this infrequent, the most accurate quantification of the amount of water that will be discharged to Toms Creek from the Charmain Plant Pitts Quarry would be 0 gallons per year.³⁶

At the time, this prediction was statistically inaccurate, as two documented discharges over a permitting period do not round down to 0 gallons per year. The prediction will become all the more inaccurate during the timespan encompassed by SGI's applied-for permit, as climate change increases the frequency of extreme storm events.

Increased severe precipitation events will trigger more frequent discharges into Tom's Creek. In light of this additional or increased discharge, the Department must, at the minimum,

https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/Exec-Summary_Climate-Change-in-Pennsylvania.pdf.

³² Dave Warner, *Earth Day 2013: Central Pa. sees the greatest extremes in temperature and rainfall in the state, scientists say*, PENN LIVE (Apr. 22, 2013),

https://www.pennlive.com/midstate/2013/04/central_pennsylvania_already_s.html.

³³ Point Precipitation Frequency Estimates for Hamiltonban Twp., Pennsylvania, NOAA (last accessed July 25, 2019), <http://www.sgicommunity.com/wp-content/uploads/2019/07/appendix-3.1-noaa-atlas-14-precipitation-frequency-data-server-report-for-northern-tract.pdf>.

³⁴ See Record of Climatological Observations (generated on July 9, 2019), attached to the document hereto.

³⁵ *Id.*

³⁶ Comment/Response Document, Specialty Granules, LLC, Large Non Coal Mining Permit No. 01930302, NPDES Permit No. PA0223239 at p. 3 (July 11, 2016).

require a new anti-degradation analysis. If the Department finds that Tom's Creek is an EV Water, as discussed below, any decrease in water quality, including through more frequent discharge events, is impermissible, and the Department should reject the Application.

b. SGI's 2014 Anti-Degradation Supplement Rests on Inaccurate Estimations of Discharge Frequency.

In addition to the effect of changing precipitation patterns, SGI's 2014 anti-degradation supplement is inadequate because it fails to fully consider the range of storm events that could result in discharges into Tom's Creek. The supplement claims that "Pitts Pond 1 has the capacity (without pumping) to have no discharge to Toms Creek for a storm event between the 10-year and 25-year/24-hour events," and that "Pitts Pond 2 will not discharge to Toms Creek up to the 100-year/24-hour storm event."³⁷ However, SGI's current Application anticipates more frequent discharges from Pond 1, stating that Discharge Point 001 may discharge "during precipitation events > equivalent of 10-year 24-hour storm."³⁸ Since the 2014 anti-degradation supplement did not anticipate discharge from Pitts Pond 1 during storm events greater than 10-year 24-hour but less than 25-year 24-hour, the current likelihood of discharges during such events constitutes new, additional, or increased discharge.

Furthermore, the 2014 supplement failed to include the possibility of discharges during storm events other than the 24-hour storms described above—possibilities that are now known by SGI and DEP. In a June 2, 2015 letter to DEP, Matthew McClure, Director-Environment and Risk Management for SGI, admitted that "back-to-back storms of slightly less than the 10-year/24-hour storm events could result in discharge from Pitts Pond #1."³⁹ In addition, Module 13 associated with the 2016 renewal application states that "Pitts Pond 1 is designed to have zero discharge to Outfall 001 for up to and including a 10-year/24-hour storm event **or potentially during rare and unusual storm clusters.**"⁴⁰ Potential discharges during back-to-back storms of less than 10-year 24-hour magnitude and during rare and unusual storm clusters are nowhere considered in the 2014 anti-degradation supplement. The Department must require SGI to account for these discharges in an updated anti-degradation supplement.

3. Tom's Creek Qualifies as an Exceptional Value Water, and the Department May Not Permit Any Degradation to Water Quality.

Before issuing any NPDES permit, the Department must determine the watershed's existing use protection, taking into consideration the input of interested parties.⁴¹ If the Department determines that a watershed qualifies as EV, any degradation to water quality is

³⁷ Anti-Degradation Supplement for Mining Permits (stamped by DEP Cambria Office Mar. 27, 2015).

³⁸ Renewal Application at part 21.

³⁹ Letter from Matthew McClure, Director-Environment and Risk Management, SGI, to Rock Martin, P.G., Chief, Technical Services Section, DEP Bureau of Mining Operation (June 2, 2015), attached to the document hereto.

⁴⁰ SGI- West Flank Lateral Development, Module 13: Improvements/Treatment Facilities (stamped by DEP Cambria Office Mar. 27, 2015) (emphasis added).

⁴¹ 25 Pa. Code § 93.4c(a)(1).

impermissible.⁴² Failure to properly determine and protect a water’s existing use would constitute a failure of the Department’s constitutional and statutory duties under 25 Pa. Code § 93.4c and Pa. Const. Art. I, § 27.

a. The Department is Statutorily and Constitutionally Obligated to Reinspect Toms Creek’s Existing Use.

Under its statutory and constitutional duties, the Department must reinspect Toms Creek’s existing use before issuing a permit renewal. Chapter 93.4 of the Pennsylvania Code, “Antidegradation Requirements,” instructs the Department to “make a final determination of existing use protection for the surface water” during any “final permit or approval action.”⁴³ To assist in this determination, “[i]nterested persons may provide the Department with additional information during the permit or approval application or review process regarding existing use protection for the surface water.”⁴⁴ Public participation is also required by Federal antidegradation regulations, which specify that, “[w]here the State identifies waters for antidegradation protection on a water body-by-water body basis, the State shall provide an opportunity for public involvement in any decisions about whether the protections described in paragraph (a)(2) of this section will be afforded to a water body, and the factors considered when making those decisions.”⁴⁵ The DEP can only satisfy these requirements by engaging with the public’s concerns surrounding specific existing use protections.

In addition, the Environmental Rights Amendment, Pa. Const. Art. I, § 27, “imposes a mandatory duty to prevent degradation of the environment and to serve as a trustee for Pennsylvania’s natural resources.”⁴⁶ Under this duty, the Commonwealth must “prohibit the degradation, diminution, and depletion of our public natural resources, whether those harms might result from direct state action *or from the actions of private parties*.”⁴⁷ Furthermore, the Department’s trustee duties require it to engage in pre-action analysis to determine the degree of degradation to the local environment expected to arise from any action.⁴⁸ Given these general duties, the Department has a corresponding obligation to ensure diligent inspection and identification of potential EV streams in order to satisfactorily protect the Commonwealth’s waters.

⁴² See 25 Pa. Code § 93.4a(d).

⁴³ 25 Pa. Code § 93.4c(a)(1)(iv).

⁴⁴ 25 Pa. Code § 93.4c(a)(1)(iii).

⁴⁵ 40 CFR § 131.12.

⁴⁶ *Delaware Riverkeeper Network v. Pennsylvania Dep’t of Env’tl. Prot.*, No. 525 M.D. 2017, 2018 WL 3554639, at *6 (Pa. Commw. Ct. July 25, 2018).

⁴⁷ *Pennsylvania Env’tl. Def. Found. v. Commonwealth*, 640 Pa. 55, 91, 161 A.3d 911, 933 (2017) (emphasis added).

⁴⁸ See *Feudale v. Aqua Pennsylvania, Inc.*, 122 A.3d 462, 468 (Pa. Commw. Ct. 2015) (“the Environmental Rights Amendment requires [Departments] to first take into consideration the environmental impact of proposed actions”), *aff’d*, 635 Pa. 267, 135 A.3d 580 (2016); See also *Robinson Twp. v. Com.*, 83 A.3d 901, 983 (Pa. 2013), n. 60 (noting that data is needed to assess impact upon natural resources and describing trust beneficiaries’ right to information necessary to enforce rights or trust limitations).

The Department's trustee duties are in fact heightened in the present case. The Pennsylvania Natural Heritage Program (PNHP)⁴⁹ has already identified the upper portion of the Tom's Creek Watershed as a Priority Conservation Watershed.⁵⁰ The PNHP's Watershed Conservation Prioritization program identifies watersheds that are significant conservation priorities based on water quality, biological assemblages, and habitat types.⁵¹ Given Tom's Creek's classification as such a watershed, the DEP must take all steps to ensure the protection of its existing use and water quality.

Furthermore, "special existing use provisions apply to the protection of threatened and endangered (T&E) species,"⁵² and there have been recent sightings of the federally listed threatened Bog Turtle⁵³ in the Watershed, making more urgent the need for reinspection of Tom's Creek. The Pa. Code's "Antidegradation Requirements" specify that, upon confirmation of the "presence, critical habitat, or critical dependence of endangered or threatened Federal or Pennsylvania species in or on a surface water, the Department will ensure protection of the species and critical habitat."⁵⁴ The Pennsylvania Supreme Court has likewise held that the Department has a constitutional duty to diligently protect sensitive species such as the Bog Turtle.⁵⁵ As Bog Turtles have recently been seen in and around the Watershed, as testified to at the July 17, 2019 hearing, the Department must ensure that any existing use protection protects not only Tom's Creek in general, but the Bog Turtle population as well.

The last time the Department surveyed Tom's Creek for water use was in 2014, when the Department affirmed the Creek's HQ protection. Since that time, convincing testimony has emerged from experts and concerned citizens alike arguing for EV protection and insisting on reinspection of the creek. In light of this testimony, failure to reinspect Tom's Creek before making a final determination of existing use would constitute a failure of the Department's trustee obligations towards the Commonwealth's environment and its statutory duties under 25 Pa. Code § 93.4c.

⁴⁹ The PNHP is a partnership between the Department of Conservation and Natural Resources, the Western Pennsylvania Conservancy, the Pennsylvania Game Commission, and the Pennsylvania Fish and Boat Commission. Its purpose is to "provide current, reliable, objective information to help inform environmental decisions." *Our Purpose*, PENNSYLVANIA NATURAL HERITAGE PROGRAM (last accessed July 10, 2019), <http://www.naturalheritage.state.pa.us/>.

⁵⁰ *Watershed Conservation Prioritization*, PENNSYLVANIA NATURAL HERITAGE PROGRAM (last accessed July 10, 2019), <http://www.naturalheritage.state.pa.us/aquaticsConservPrior.aspx>.

⁵¹ *Id.*

⁵² Water Quality Antidegradation Implementation Guidance, No. 391-0300-002 at p. 5.

⁵³ *Bog Turtle*, ENVIRONMENTAL CONSERVATION ONLINE SYSTEM (last accessed July 25, 2019), <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=C048>.

⁵⁴ 25 Pa. Code § 93.4c(a)(2).

⁵⁵ *Robinson Twp.*, 83 A.3d at 955 ("At present, the concept of public natural resources includes not only state-owned lands, waterways, and mineral reserves, but also resources that implicate the public interest, such as ambient air, surface and ground water, **wild flora, and fauna (including fish)** that are outside the scope of purely private property." (emphasis added)).

b. Because Tom's Creek Qualifies as EV, SGI's Proposed Discharges Must Be Prohibited.

If waters qualify as EV, water quality may not be reduced even with a social or economic justification.⁵⁶ Tom's Creek does in fact qualify as an EV Water, so the Department may not allow SGI's proposed discharges.

A surface water is EV if it meets the requirements for a HQ Water, which the Department has long recognized Tom's Creek does, along with one or more of the following criteria:

- (i) The water is located in a National wildlife refuge or a State game propagation and protection area.
- (ii) The water is located in a designated State park natural area or State forest natural area, National natural landmark, Federal or State wild river, Federal Wilderness area or National recreational area.
- (iii) The water is an outstanding National, State, regional or local resource water.
- (iv) The water is a surface water of exceptional recreational significance.
- (v) The water achieves a score of at least 92% (or its equivalent) using the methods and procedures described in subsection (a)(2)(i)(A) or (B).
- (vi) The water is designated as a "wilderness trout stream" by the Fish and Boat Commission following public notice and comment.⁵⁷

As specified in SGI's permit renewal application, Tom's Creek is currently recognized as an HQ Water. By definition, an HQ Water such as Tom's Creek that satisfies any of the above criteria is an EV Water.

Expert comparisons between Tom's Creek and two EV streams strongly suggest that Tom's Creek has achieved EV values in its support of benthic macroinvertebrates and local fauna.⁵⁸ Dr. Ben M. Stout III, Ph.D., a Professor of Biology retained by FOTC, issued a report on April 27, 2016 demonstrating that "Tom's Creek achieved Exceptional Value scores (100% attainment) compared to both of the Exceptional Value streams."⁵⁹ While the Department decided that Dr. Stout's reach sample locations failed to correspond with the Department's own EV references for each sample location,⁶⁰ additional expert testimony supports Dr. Stout's findings. In a letter dated May 18, 2016, Stephen P. Kunz, Senior Ecologist with Schmid & Company Inc., Consulting Ecologists, who was retained by FOTC, affirmed Tom's Creek's EV status. In the letter, he stated his confidence that "if PADEP were to examine Tom's Creek again

⁵⁶ 25 Pa. Code § 93.4c(b)(1)(iii)(allowing water quality to be reduced with justification only for HQ waters).

⁵⁷ 25 Pa. Code § 93.4b(b)(1).

⁵⁸ See 25 Pa. Code § 93.4b(b)(1)(v).

⁵⁹ Dr. Ben M. Stout III, Ph.D., Biological Conditions in Tom's Creek, Adams County, Pennsylvania (April 27, 2016), attached to the document hereto.

⁶⁰ Comment/Response Document, Specialty Granules, LLC, Large Non Coal Mining Permit No. 01930302, NPDES Permit No. PA0223239 at p. 6 (July 11, 2016).

it would concur with Dr. Stout’s conclusion”; he further proclaimed the extreme importance of using “every possible effort . . . to protect Tom’s Creek from any and all activities that might threaten or degrade its EV existing use.”⁶¹ This testimony strongly supports Tom’s Creek’s EV status. Instead of either accepting these finding or conducting sampling on its own, DEP has continued to rely on sampling from 2014 in summarily determining that Tom’s Creek is not an EV stream. Relying on 2014 sampling to dismiss more recent 2016 sampling is arbitrary, capricious, and not consistent with DEP’s mandate to protect the existing uses of streams. At the very least, the Department must reinspect Tom’s Creek before making a final determination of existing use protection in considering SGI’s permit renewal. In making this reinspection, the Department must consider the implication of the recent Bog Turtle sightings on Tom’s Creek’s use protection, as “some EV waters are classified based upon the presence of endangered species.”⁶²

In addition to achieving EV values in its support of benthic macroinvertebrates and local fauna, the relevant portion of Tom’s Creek may run through a State forest natural area, serve an exceptional recreational significance, and have achieved the criteria of a “wilderness trout stream.” If any of these criteria are satisfied, Tom’s Creek must be classified as an EV water. In keeping with its statutory and constitutional duties, the Department should diligently consider the applicability of any of these criteria to Tom’s Creek.

Tom’s Creek runs through Michaux State Forest, which contains 1,647 acres of natural area.⁶³ While the Tom’s Creek Watershed in Michaux State Forest is not officially recognized as a natural area itself, the Watershed’s status as a Priority Conservation Watershed, along with its historical and ecological significance to the surrounding community, suggests that it should be considered as such for purposes of EV classification. Pennsylvania natural areas are intended to “protect areas of scenic, historic, geologic or ecological significance, which will remain in an undisturbed state, with development and maintenance being limited to that required for health and safety.”⁶⁴ Likewise, the Watershed Conservation Prioritization program identifies watersheds that are significant conservation priorities in order to guide agency decision-making.⁶⁵ Since Tom’s Creek runs near recognized State Forest natural areas, provides great value to the local community, and is classified as having similar significance to natural areas under the Watershed Conservation Prioritization program, the Department should classify the water as EV in keeping with the intent of 25 Pa. Code § 93.4b(b)(1)(ii).

Furthermore, Tom’s Creek is a surface water of “exceptional recreational significance,” thereby satisfying 25 Pa. Code § 93.4b(b)(1)(iv). As defined in 25 Pa. Code § 93.1, a “[s]urface

⁶¹ Letter from Stephen P. Kunz, Senior Ecologist, Schmid & Company Inc, to Gary Gipe, President, Friends of Tom’s Creek (May 18, 2016), attached to the document hereto.

⁶² Water Quality Antidegradation Implementation Guidance, No. 391-0300-002 at p. 31.

⁶³ Pennsylvania Department of Conservation and Natural Resources, State Forest Resource Management Plan (2016).

⁶⁴ Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, Guidelines and Definitions for Natural Areas & Wild Areas (June 2016).

⁶⁵ *Watershed Conservation Prioritization*, PENNSYLVANIA NATURAL HERITAGE PROGRAM (last accessed July 10, 2019), <http://www.naturalheritage.state.pa.us/aquaticsConservPrior.aspx>.

water of exceptional recreational significance” is one “which provides a water-based, water quality-dependent recreational opportunity (such as fishing for species with limited distribution) because there are only a limited number of naturally occurring areas and waterbodies across the State where the activity is available or feasible.” In the July 17, 2019 public hearing, numerous area residents testified to the unique recreational opportunities afforded by the Watershed and the Watershed’s impact on daily life and activities. Given the Watershed’s exceptional recreational significance, the Department should reclassify the water as EV.

Finally, the relevant portion of Tom’s Creek should be considered a “wilderness trout stream” under 25 Pa. Code § 93.4b(b)(1)(vi). As explained by the Pennsylvania Fish & Boat Commission, “[w]ilderness trout stream management is based upon the provision of a wild trout fishing experience in a remote, natural and unspoiled environment where man’s disruptive activities are minimized.”⁶⁶ The Tom’s Creek Watershed provides such an experience and should be afforded the EV protections associated with wilderness trout streams.

Approving SGI’s permit application would lead to degradation of an EV Water, violating the Pennsylvania Constitution’s Environmental Rights Amendment and the Pennsylvania Code’s “Antidegradation Requirements.” Strong research suggests that Tom’s Creek has attained EV water quality, and the Department has an obligation to reinspect the Creek in light of such findings and the recent Bog Turtle sightings in the area. Even if the Department ultimately rejects the conclusions of Dr. Stout and Mr. Kunz, Tom’s Creek may be located in a State forest natural area, serve an exceptional recreational significance, or be a wilderness trout stream. As such, the Department may not allow any degradation to its water quality, including the degradation that will occur from discharge events that will become more frequent as Pennsylvania’s climate continues to change.

4. The Department Must Require an Updated Evaluation of Nondischarge Alternatives.

Any application that proposes an additional or increased discharge to HQ or EV waters must “evaluate nondischarge alternatives to the proposed discharge and use an alternative that is environmentally sound and cost-effective when compared with the cost of the proposed discharge.”⁶⁷ The requirement to evaluate and implement nondischarge alternatives applies to HQ and EV waters regardless of the degree of degradation or the social and economic benefit associated with a proposed discharge.⁶⁸ Importantly, DEP should not approve an additional or increased discharge “in such waters unless it has been determined that there are no feasible alternatives to a direct discharge.”⁶⁹

⁶⁶ Trout Water Classifications, PENNSYLVANIA FISH & BOAT COMMISSION (last viewed July 16, 2019), <https://www.fishandboat.com/Fish/PennsylvaniaFishes/Trout/Pages/TroutWaterClassifications.aspx>.

⁶⁷ 25 Pa. Code § 93.4c.

⁶⁸ Water Quality Antidegradation Implementation Guidance, No. 391-0300-002 at p. 45.

⁶⁹ *Id.* at p. 46.

The Renewal Application does not evaluate nondischarge alternatives and is therefore clearly incomplete. As described earlier in this comment, due to what can only be described as additional and increased discharges from more frequent and more severe storm events, including 10-year 24-hour and 100-year 24-hour storm events, the Application must provide for an updated evaluation of nondischarge alternatives, and a nondischarge alternative should be used unless SGI proves that there are no feasible alternatives to the discharges. In conducting its evaluation of nondischarge alternatives the DEP advises that applicants meet with public officials, local and regional planning agencies, economic development agencies, and watershed groups.⁷⁰ Importantly, SGI has indicated that nondischarge alternatives are highly feasible. SGI has recently stated that as its “Northern Tract Quarry comes on line, the quarry will become available for stormwater storage, providing even greater capacity should the need arise.”⁷¹ SGI additionally claims that there has only been one discharge since 2011, so presumably they can provide some improvements to develop their operations into a nondischarge alternative. For example, if under “normal” conditions water can be pumped to an adjacent NPDES permit, it is certainly feasible for water to be pumped to the adjacent permit during the 10- and 100-year storm events to prevent discharges completely.⁷² In any event, the Application for renewal should be denied until an appropriate evaluation of nondischarge alternatives takes place.

5. If the Department Does Not Classify Tom’s Creek as an EV Water, It Must Require an Updated Social or Economic Justification Before Permitting Discharge.

If the Department determines that Tom’s Creek should remain classified as an HQ water, it must still require an updated SEJ before approving SGI’s Application. Pa. Code § 93.4a(c) provides that “[t]he water quality of High Quality Waters shall be maintained and protected, except as provided in § 93.4c(b)(1)(iii) (relating to implementation of antidegradation requirements).” 25 Pa. Code § 93.4c(b)(1)(iii) states:

Social or economic justification (SEJ) in High Quality Waters. The Department may allow the reduction of water quality in a High Quality Water if it finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the Commonwealth’s continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. A reduction in water quality will not be allowed under this subparagraph unless the discharger demonstrates that the High Quality Water will support applicable existing and designated water uses (other than the high quality and exceptional value uses) in § 93.3, Table 1 (relating to protected water uses).

As discussed above, changing precipitation patterns will result in increased or additional discharge and further degradation of Tom’s Creek. SGI must rely on a SEJ to permit such

⁷⁰ *Id.* at p. 58.

⁷¹ Specialty Granules LLC Proposed Northern Tract Quarry Responses to Public Comments Received at January 30, 2019 Public Meeting and Related Period for Submission of Written Comments at p. 17 (July 3, 2019).

⁷² See Renewal Application at part 17.

degradation to an HQ Water. However, DEP has raised concerns about the adequacy of SGI's current SEJ since at least March 2015. SGI's current SEJ is also outdated as a result of SGI's repeated violations of environmental regulations at the Charmian Plant and Pitts Quarry.

DEP has itself expressed well-warranted doubts about SGI's existing SEJ. In an email dated March 10, 2015, Rock Martin, Chief of Permits and Technical Services in DEP's Cambria District Office, raised concerns about the accuracy and legal sufficiency of SGI's SEJ due to increased pumping rates. He wrote, "we are not completely sure that the SEJ would stand up to legal scrutiny."⁷³ Mr. Martin's concerns properly reflected the inadequacy of SGI's SEJ. As the SEJ has only become less sufficient along with SGI's continued violations of environmental regulations, and given the degradation to water quality associated with the Application, an updated SEJ is required.

a. DEP Must Consider SGI's Repeated Violations of Environmental Regulations in its SEJ Analysis.

The Pa. Code's "Antidegradation Requirements," including its SEJ requirements, must be satisfied before issuing a permit renewal to SGI. DEP's Water Quality Antidegradation Implementation Guidance explains that, in order to satisfy 25 Pa. Code § 93.4c(b)(1)(iii) ("*Social or economic justification (SEJ) in High Quality Waters*"), DEP must conduct a "balancing" type evaluation in which "the asserted beneficial social or economic development [is] viewed in light of, and weighed against, the degree of water quality degradation that the discharge and the proposed activity are projected to cause."⁷⁴ The permittee's compliance record is one of the key water quality factors that DEP considers in conducting its SEJ balancing test. Specifically, DEP guidance asks:

- a. Does the applicant operate other facilities authorized by an NPDES permit in Pennsylvania? If yes, identify those facilities and indicate whether they are in compliance with effluent limits and other permit conditions.
- b. If noncompliance is indicated above, explain the nature and impact of the violations including information describing whether the violations are current or historical.

Given DEP's Guidance, SGI's recorded violations of environmental regulations at the Charmian Plant and Pitts Quarry warrant an updated SEJ and further inspection by the Department.

According to Pitts Quarry inspection reports, SGI violated 25 Pa. Code § 77.564 ("Surface blasting requirements") on December 22, 2014 and July 27, 2002, along with 25 Pa. Code § 211.133 ("Blast reports") on March, 21, 2014. Furthermore, SGI has violated 25 Pa.

⁷³ Email from Rock Martin, PG, Chief, Permits and Technical Services, Department of Environmental Protection, Cambria District Office, to Mark D. Pennell, CPG, Vice President Mid-Atlantic Mining Business Leader, AECOM, subject line: RE: SGI Pitts Quarry (Mar. 10, 2015), attached to the document hereto.

⁷⁴ Water Quality Antidegradation Implementation Guidance, No. 391-0300-002 at p. 72.

Code §§ 77.521 and 77.522 (“Effluent standards”) by discharging water that does not meet water quality limits at the Charmian Facility as recently as August 10, 2018. In addition to the above violations, SGI has been found in violation of applicable regulations 32 times since 1987.⁷⁵

These recorded violations are supplemented by testimony of residents of the area. Residents have reported changes in the flow, color, water level and overall hydrology of Tom’s Creek as a result of SGI’s actions upstream. Photos attached to this comment show the water stained an unnatural grey-green,⁷⁶ a violation of the 2016 NPDES permit (“Additional Requirements for Section A and B”) and 25 Pa. Code § 92.41(c). Furthermore, Adams County residents living near SGI’s Miney Branch site have witnessed intense degradation to the water’s biological assemblages and overall water quality, including changes to water levels and the absence of once prevalent fish populations. As testified at the July 17, 2019 hearing, residents are rightfully concerned that SGI will treat Tom’s Creek and its unnamed tributary with similar neglect.

Given SGI’s violation record, there is little reason to believe that SGI will comply with a renewed NPDES permit. The Department should investigate further and should mandate an in-depth plan for future compliance before issuing a permit renewal. Furthermore, SGI’s August 10, 2018 violation of water quality limits and history of degrading Miney Branch, in addition to its broader history of noncompliance at the Pitts Quarry and Charmian Plant, should factor heavily into any balancing between the benefits of its applied-for permit renewal and the foreseeable risk to water quality. Especially considering the recency of the 2018 violation, the Department should mandate that SGI conduct an updated SEJ analysis, taking into account its history of noncompliance with water quality limits, before issuing a permit renewal.

b. SGI Must Consider Negative Impacts to the Economy, Culture, and Way of Life in its SEJ.

The relevant regulations provide for balancing the environmental impact of the discharge activities against the social and economic benefits of the proposed discharge, and the intent of the regulations is to allow some lowering of water quality *only* under those special circumstances where the economic or social need for the project outweighs the benefit of maintaining the existing water quality, and where both cannot be achieved.⁷⁷ In conducting this balance, there are a number of negative impacts to the economy, culture, and local way of life that DEP must consider as part of a SEJ for the proposed discharges. Toms Creek is a highly valued trout stream to the local community, and, as testified to at the local public hearing, there are thousands of trout stocked into the Creek every year. Communities surrounding Toms Creek benefit greatly from recreational activities, including fishing hiking, and swimming, related to having the pristine coldwater trout stream run through their communities. In addition, Toms Creek brings in tourists and anglers from out of town to enjoy its unique fishing opportunities, and the local

⁷⁵ See Facility search on eFacts found at: https://www.ahs.dep.pa.gov/eFACTSWeb/criteria_facility.aspx (It should be noted that each “Violation(s) Noted” reference on eFacts could contain multiple violations).

⁷⁶ See Photos of Water Pollution (Feb. 18, 2015), attached to the document hereto.

⁷⁷ Water Quality Antidegradation Implementation Guidance, No. 391-0300-002 at p. 74.

communities benefit greatly from this consistent tourism. The Pennsylvania Fish and Boat Commission has recognized that trout streams attracting anglers generate millions of dollars in revenue across the state and support hundreds of jobs.⁷⁸ Increased sediment and stormwater discharges due to the increased rain and storm events have the potential to harm the stream by increasing pollutants and changing the stream temperature, which trout are especially sensitive to. Harming Toms Creek's water quality in any way would be detrimental the sensitive trout stream and the positive economic and cultural impacts it provides to the local communities.

Drinking water aquifers that supply Fairfield and other communities, such as the Blue Ridge aquifer, rely on recharge from Toms Creek and its tributaries. Additionally, impacting the water quality of Toms Creek would impact valuable recreational resources to the local communities. History trails that attract tourists and community members alike run adjacent to Toms Creek, and the pristine quality of Toms Creek is a large attraction for people looking to recreate along the trails. Testimony at the public hearing provided information on lakes and golf courses that rely on the supply and pristine nature of the Toms Creek watershed. Recreational resorts, such as the Liberty Mountain Resort, rely on the Toms Creek watershed in operating their businesses. At the public hearing the DEP received evidence in the form of testimony that the Liberty Mountain Resort employs hundreds of people regularly, and over 1,000 people in the winter season, which is far more than SGI. Related to these impacts, property values in the area will be impacted if Toms Creek is negatively affected and impacts to the cultural and economic resource occur. All of these impacts must be evaluated in an updated SEJ analysis. Until that evaluation occurs, the DEP must deny the Application to renew the Permit.

6. Conclusion

Based on the Renewal Application and the issues raised in this comment and at the public hearing, it would be unreasonable and unlawful for the PADEP to issue and renew the Permit for the outfalls. Please contact the undersigned if you have any questions.

⁷⁸ See Green, R., Carline, R. Diefenback, D., Shields, M., Kaufman, M., Moase, R., Hollender, B., Angler Use, Harvest, and Economic Assessment on Wild Trout Streams in Pennsylvania. Found online at: <https://www.fishandboat.com/Fish/Fisheries/TroutPlan/Documents/WildTroutStreamAnglerUseCatchEconomicContribution.pdf>

Sincerely,



James Yskamp, Esq.
jyskamp@fairshake-els.org
(234) 571-1972
Fair Shake Environmental Legal Services
5614 Elgin Street, Second Floor
Pittsburgh, PA 15206
Counsel for Friends of Tom's Creek

Encl.



Attachments

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	07	01				0.00		0.0										
2018	07	02				0.00		0.0										
2018	07	03				0.00		0.0										
2018	07	04				0.00		0.0										
2018	07	05				0.81												
2018	07	06				0.00		0.0										
2018	07	07				0.00		0.0										
2018	07	08				0.00		0.0										
2018	07	09				0.00		0.0										
2018	07	10				0.00		0.0										
2018	07	11				0.00		0.0										
2018	07	12				0.00		0.0										
2018	07	13				0.00		0.0										
2018	07	14				0.00		0.0										
2018	07	15				0.00		0.0										
2018	07	16				0.00		0.0										
2018	07	17				0.00		0.0										
2018	07	18				0.71												
2018	07	19				0.00		0.0										
2018	07	20				0.00		0.0										
2018	07	21				0.00		0.0										
2018	07	22				5.00												
2018	07	23				2.00												
2018	07	24				0.61												
2018	07	25				1.29												
2018	07	26				0.73												
2018	07	27				0.00		0.0										
2018	07	28				0.13												
2018	07	29																
2018	07	30				0.00		0.0										
2018	07	31				0.28												
Summary						11.56		0.0										

Empty, or blank, cells indicate that a data observation was not reported.
*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown
"s" This data value failed one of NCDC's quality control tests.
"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	09	01				0.00		0.0										
2018	09	02				0.00		0.0										
2018	09	03				0.00		0.0										
2018	09	04				0.01												
2018	09	05				0.34												
2018	09	06				0.07												
2018	09	07				0.00		0.0										
2018	09	08				1.08												
2018	09	09																
2018	09	10				4.40												
2018	09	11				0.41												
2018	09	12				0.08												
2018	09	13				0.07												
2018	09	14				0.13												
2018	09	15				0.00		0.0										
2018	09	16				0.00		0.0										
2018	09	17				0.00		0.0										
2018	09	18				0.85												
2018	09	19				0.00		0.0										
2018	09	20				0.00		0.0										
2018	09	21				0.00		0.0										
2018	09	22				0.30												
2018	09	23				0.00		0.0										
2018	09	24				0.30												
2018	09	25				1.40												
2018	09	26				0.04												
2018	09	27				0.45												
2018	09	28						0.0										
2018	09	29				0.00		0.0										
2018	09	30				0.00		0.0										
Summary						9.93		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service
Current Location: Elev: 463 ft. Lat: 39.7277° N Lon: -77.3111° W
Station: FAIRFIELD 5.2 SE, PA US US1PAAD0031

Record of Climatological Observations
These data are quality controlled and may not be identical to the original observations.
Generated on 07/09/2019

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	07	01																
2018	07	02				0.00												
2018	07	03				0.00		0.0										
2018	07	04				0.00		0.0										
2018	07	05																
2018	07	06				2.22												
2018	07	07																
2018	07	08				0.05												
2018	07	09				0.00		0.0										
2018	07	10				0.00		0.0										
2018	07	11				0.00		0.0										
2018	07	12																
2018	07	13				0.00												
2018	07	14				0.00		0.0										
2018	07	15				0.00		0.0										
2018	07	16				0.01												
2018	07	17																
2018	07	18				0.38												
2018	07	19																
2018	07	20				0.00		0.0										
2018	07	21				0.00		0.0										
2018	07	22																
2018	07	23				5.80												
2018	07	24				0.22												
2018	07	25				1.16												
2018	07	26				0.23												
2018	07	27				0.00		0.0										
2018	07	28				0.10												
2018	07	29				0.00		0.0										
2018	07	30				0.00		0.0										
2018	07	31				0.21												
Summary						10.38		0.0										

Empty, or blank, cells indicate that a data observation was not reported.
*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown
"s" This data value failed one of NCDC's quality control tests.
"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	09	01				0.04												
2018	09	02				0.01												
2018	09	03				0.00		0.0										
2018	09	04				0.00		0.0										
2018	09	05				0.00		0.0										
2018	09	06				0.00		0.0										
2018	09	07				0.00		0.0										
2018	09	08				4.25		0.0										
2018	09	09				2.00												
2018	09	10				2.40												
2018	09	11				0.55												
2018	09	12				0.04												
2018	09	13				0.10												
2018	09	14				0.06												
2018	09	15				0.51												
2018	09	16				0.00		0.0										
2018	09	17				0.00		0.0										
2018	09	18				1.23												
2018	09	19				0.04												
2018	09	20				0.00		0.0										
2018	09	21				0.00		0.0										
2018	09	22				0.12												
2018	09	23				0.00		0.0										
2018	09	24				0.28												
2018	09	25				1.40												
2018	09	26				0.30												
2018	09	27				0.50												
2018	09	28				1.18												
2018	09	29				0.00		0.0										
2018	09	30				0.00		0.0										
Summary						15.01		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.



SPECIALTY GRANULES INC.

13424 Pennsylvania Ave, Suite 303 // Hagerstown, MD 21742 // Tel: 301-733-4000 // Fax: 301-733-4003

www.specialtygranules.com

June 2, 2015

Rock Martin, P.G.
Chief, Technical Services Section
Bureau of District Mining Operations
Cambria District Mining Office
Pennsylvania Department of Environmental Protection
286 Industrial Park Road
Ebensburg, PA 15931-4119

Re: Specialty Granules Inc.; Pitts Quarry
Permit No. 01930302
NPDES Permit No. PA0223239

Dear Mr. Martin:

Specialty Granules Inc. (SGI) appreciated the opportunity to meet with you and your colleagues on May 5, 2015 for what we believe was a fruitful discussion of the issues relating to the pending renewal of the above-referenced NPDES Permit for the Pitts Quarry/Pitts Pond discharges.

SGI expects stormwater discharge to occur from Pitts Pond #1 or Pitts Pond #2 only in extremely rare events. Hydraulic modeling has determined that no discharge will occur individually from Pitts Pond #2 up to and including a 100-year/24-hour storm event, and that no discharge will occur individually from Pitts Pond #1 up to a single storm event that is greater than the 10-year/24-hour storm event (which at this site is 4.80 inches of precipitation). It is possible that back-to-back storms of slightly less than the 10-year/24-hour storm events could result in discharge from Pitts Pond #1, as unlikely as that occurrence may be. As such, during these extreme occurrences and conditions when a potential stormwater discharge can occur from the Pitts Ponds, it is proposed that any future water quality discharge comparisons or limits are reflective of natural stream conditions, which during heavy precipitation events naturally contain higher sediment loads.

In follow-up to the May 5, 2015 meeting and your letter of May 7, 2015 (which we received on May 13, 2015), SGI would propose for the Department's consideration the following permit condition language to address the issue of discharges from the Pitts Pond system:

- (1) If permittee, for any operational reason, discharges from Pitts Pond # 1 and/or Pitts Pond #2 during any condition except during or following a precipitation event or series of immediately sequential precipitation events which cumulatively exceed 4.80 inches, then the TSS limits of 35 mg/l, 70 mg/L, 90 mg/L included in Part A of the Permit shall apply to that discharge.
- (2) Discharges from Pitts Pond #1 and/or Pitts Pond #2 during any precipitation event or series of immediately sequential precipitation events which cumulatively exceed 4.80 inches shall be governed by Condition (3) below.
- (3) In order to confirm that discharges from Pitts Pond #1 and/or Pitts Pond #2 do not cause a significant change in stream water quality during storms that require discharge as described in (2), the Permittee shall establish and maintain the following monitoring program:
 - (a) During any precipitation event or series of events where a discharge from Pitts Pond # 1 and/or Pitts Pond #2 occurs or is likely to occur, the Permittee shall measure flow rates and collect samples from the following sample locations (see Sample Location Map, Attachment 1):
 - SS-9 - Receiving Stream / Unnamed Tributary to Toms Creek – upstream of Pitts Pond 1 Discharge (Outfall 001);
 - Outfall 001 – Stormwater Discharge Point from Pitts Pond 1 (if any discharge);

- Outfall 002 – Stormwater Discharge Point from Pitts Pond 2 (if any discharge);
- SS-10 – Receiving Stream / Unnamed Tributary to Toms Creek – downstream of Pitts Pond 2 Discharge (Outfall 002) at SGI property boundary with Warner property;
- SS-5 – Receiving Stream / Unnamed Tributary to Toms Creek – downstream of Warner property;
- TC-8 and TC-9 – Toms Creek – upstream of confluence with Unnamed Tributary;
- TC-7 – Toms Creek – downstream of confluence with Unnamed Tributary and Pitts Ponds Outfalls; and
- TC-1 – Toms Creek – downstream of TC-7.

(b) Samples and flow measurements shall be taken at each sampling location during any precipitation event or series of events when a discharge from either Pitts Pond # 1 or Pitts Pond #2 occurs. In order to obtain representative samples, multiple samples shall be taken, at a minimum beginning with and through the duration of the discharge, aimed to collect data that represents variable flow conditions during each precipitation event that requires discharge. Water samples shall be taken on a grab basis during the storm/discharge event(s) at a frequency that will provide variable streamflow conditions during the event. Samples shall be taken at the upstream and downstream locations listed in (a) in as concurrent a manner as practicable.

(c) Samples shall be analyzed for total suspended solids (TSS) in accordance with USEPA Method S2540D-97.

(d) For discharges during precipitation events or series of immediately sequential precipitation events exceeding the equivalent of a 10-year/24-hour storm (4.80 inches), the TSS concentrations in any discharge from Pitts Pond #1 or Pitts Pond #2 during such an event or events shall not exceed maximum TSS concentrations in the receiving waters as documented by the monitoring program.

(e) If a discharge occurs from Pitts Pond #1 or Pitts Pond #2 during any month, the Permittee shall report the sample results for any such discharges, together with the results of any required upstream and downstream sampling conducted as part of the monitoring for the related precipitation event at the time that the Permittee submits its applicable Discharge Monitoring Report.

(f) After the monitoring program required under this condition has developed a sufficient data base of sample results to permit a statistically valid analysis of the data, the permittee shall prepare and submit to the Department a report providing an analysis of the data.

Should you have any questions concerning the above proposed approach, please contact me at your earliest convenience.

SGI will under separate cover address the issues relating to the Lower Mill Pond NPDES Permit application referenced in the last paragraph of your May 7, 2015 correspondence.

Thank you again for your consideration in this matter.

Sincerely,

Matthew S. McClure
 Director-Environment and Risk Management
 13424 Pennsylvania Ave-Suite 303
 Hagerstown, MD 21742
 Director-Environmental and Risk Management

cc: Wade Kemp, Vice President and General Manager, Specialty Granules Inc.
 Mark Pennell, AECOM
 Timothy Weston, K&L Gates LLP

Biological Conditions in Tom's Creek
Adams County, Pennsylvania

Prepared on:
April 27, 2016

Prepared for:
Friends of Tom's Creek
www.friendsoftomscreek.org
P.O. Box 611
Fairfield, PA 17320-0611

Prepared by:
Dr. Ben M. Stout III, Ph.D.
Professor of Biology
Wheeling Jesuit University
Wheeling, WV 26003
(304) 243-2316
bens@wju.edu



Executive summary

I measured the biological condition of Tom's Creek to determine if it merits consideration for classification as an Exceptional Value stream. I sampled benthic macroinvertebrates and compared the fauna in Tom's Creek to 1) Carbaugh Run, a nearby PA DEP Exceptional Value reference stream, and 2) an Exceptional Value stream in Greene County within Ryerson Station State Park. Based on biological condition scores Tom's Creek achieved Exceptional Value scores (100% attainment) compared to both of the Exceptional Value streams.

Introduction

I was retained by to assess the Friends of Tom's Creek (www.friendsoftomscreek.org) to assess the biological conditions of Tom's Creek, Adams County, Pennsylvania. Tom's Creek currently is listed as a High Quality Coldwater Fishery. The purpose of this study was to determine if Tom's Creek might qualify as an Exceptional Value stream according to Pennsylvania Department of Environmental Protection (PADEP) methodology.

Methods

Experimental design

Tom's Creek and two PA DEP Exceptional Value "reference stream" were sampled using standard Pennsylvania Department of Environmental Protection metrics and biological sampling methods. Results of the biological sampling were used to compare Tom's Creek to the two EV streams. The comparisons were standardized to determine Biological Condition Scores which were then used to calculate Percent Attainment of the EV reference conditions (PA DEP, 2003; PA DEP, 2009).

Physical and chemical conditions

A YSI 556 MPS water quality meter was used to measure pH, conductance, temperature, and dissolved oxygen in streams (Table 1). Water quality was measured once at each site at the downstream end of a 100 meter stream reach coinciding with the location of biological sampling. The meter had been checked against laboratory standards for pH and conductivity prior to sampling. Dissolved oxygen was recalibrated at each site to adjust for changes in temperature and pressure.

Stream locations are depicted in Maps 1-3. These streams appeared to be in good physical condition with full canopy, cobble substrate, moss, and salamanders and fish as top vertebrate predators.

Biological conditions

Standard Pennsylvania Department of Environmental Protection field and laboratory methods were used for assessing water quality status of streams at each site (PA DEP, 2003). The method consisted of collecting 6, 1 meter-square benthic macroinvertebrate (500 micron mesh net) kick samples in cobble riffles at random intervals along a 100 meter transect. The 6 samples were then composited into a single container, numbered with inner and outer labels, preserved with 95% ethanol, and returned to the laboratory for processing.

In the laboratory each sample was handled independently beginning with rinsing the sample contents into a #30 sieve to remove the preservative. The contents of the sieve were then placed into a 20x35cm white enamel pan gridded into 28, 5x5cm cells. A goldfish bowl with 28 pieces of paper numbered 1 through 28 was used to randomly select each grid for picking macroinvertebrates from the sample. For all of the streams 4 grids were picked (see appended laboratory data sheets) as needed to accomplish the 200+/- 20% number of the individuals required to complete the method. A 5x5cm grid cutter was used to segregate the material in the randomly selected grid from the surrounding sample.

Aquatic macroinvertebrate taxa were identified using Merritt & Cummins (1996) as the primary taxonomic reference. Functional feeding group assignments and pollution tolerance values were assigned based on Appendix D: Pollution tolerance values and functional feeding group designations (PA DEP, 2009). Stewart & Stark (1988) and Wiggins (1996), with my notes, were used as supplemental taxonomic references.

The metrics 1) Taxa richness, 2) Modified EPT, 3) Modified Hilsenhoff Index, 4) Percent dominant, and 5) Percent modified mayflies were calculated for each Site (Table ____). Metrics from Tom's Creek were compared to Carbauch Run and the Exceptional Value Reference Stream in Ryerson Station State Park.

Study sites

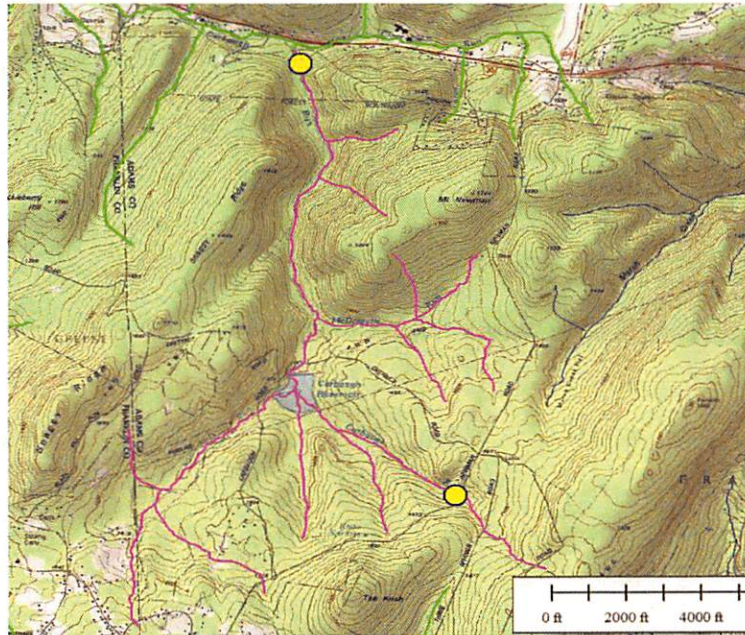
Tom's Creek was sampled at Friends of Toms Creek site #1 (N 39° 46.173, W 77° 26.771, Map 1). The stream substrate in this reach is dominated by un-imbedded head-size cobble, gravel, and sand. The forest canopy is closed deciduous.

Carbaugh Run was sampled upstream of Newman Road (39° 51' 43.2012" N, 77° 26' 7.6493" W), a gravel road in Michaux State Forest (Map 2). At this location Carbaugh Run is relatively small and well-forested. Native brook trout and an eastern copperhead were observed, both iconic species of an undisturbed reference condition. This EV stream has a bolder/cobble dominated substrate with un-imbedded gravel and sand riffles. The forest canopy is primarily deciduous and closed. An attempt to sample Carbaugh Run in a reach further downstream was defeated by relatively high water conditions. It was decided to add an additional EV stream that more closely approximates the watershed size of Toms Run.

An additional EV comparison stream was sampled ____ days later as part of another project. This unnamed tributary to North Fork of Dunkard Fork of Wheeling Creek drains an undisturbed, forested watershed in Ryerson Station State Forest in Greene County, Pennsylvania (Map 3). This stream is the finest remaining EV stream in southwestern Pennsylvania, and one that I have sampled each year for the past five years. The substrate is dominated by un-imbedded bolder and cobble riffles. The forest canopy is mature deciduous and is closed over the stream.



Map 1. Toms Creek sampling location.



Map 2. Sampling location on Carbaugh Run Exceptional Value stream.



Map 3. Google Earth Image of the Exceptional Value (EV) reference stream in Ryerson Station State Park, Greene County, Pennsylvania.

Results

Physical and chemical conditions of study streams

Table 1. Physical (latitude, longitude, water temperature) and chemical (specific conductance, conductivity, total dissolved solids, dissolved oxygen, pH, oxidation-reduction potential, Orp) conditions during field sampling.

Stream	Date	Time	Lat (39°)	Long (60°)
Location	M/D/Y	hour	(Deg/Min/Sec)	(Deg/Min/Sec)
Toms Creek				
Carbaugh Run EV				
Ryerson EV				

Location	Temp	SpCond	Cond	TDS	Sal	DOsat	DO	pH	Orp
Location	C	uS	mS	g/L	ppt	%	mg/L		mV

Biological condition of study streams

A total of 532 macroinvertebrates including 42 taxa were identified and enumerated in study streams (Table). Each stream require four grids to pick between 172 and 186 individuals per sample. Taxa common to all streams included midges (Diptera: Chironomidae), the crane fly (Diptera: Tipulida) *Hexatoma*, the stoneflies (Plecoptera) *Allocapnia*, *Amphinemura delosa*, and *Sweltsa*, and the caddisfly (Trichoptera) *Neophylax*.

Only 3 individuals in all of the study streams had pollution tolerance values greater than 6 (Figure 1). Both Toms Creek and the Ryerson EV stream had multiple taxa with zero pollution tolerance, dominated by the mayflies *Epeorus* and *Ameletus*. Both of these streams also had a preponderance of taxa with pollution tolerance values of 6, primarily midges (Diptera: Chironomidae) and the relatively tolerant mayfly *Baetis* (Ephemeroptera: Baetidae).

In contrast to the other streams, Carbaugh Run had the bulk of its taxa with pollution tolerance values of 1-3, and had the fewest of any of the streams with pollution tolerance values of 6. Carbaugh Run had a lot of midges and also larvae of the pollution tolerant blackfly *Stegopterna*. *Stegopterna* is also notable as being a headwater specialist, attesting to the smaller watershed drainage area compared to the other streams.

Table 2. Total number of individuals collected in each taxonomic category, and in each study stream.

<u>Order or Class</u>	<u>Taxa</u>	<u>Toms Run</u>	<u>Carbaugh Run EV</u>	<u>Ryerson EV</u>	<u>Total #</u>
Coleoptera	Dubraphria	0	12	0	12
Coleoptera	Stenelmis	0	1	0	1
Coleoptera	Optioservus	9	0	0	9
Coleoptera	Ectopria	0	0	1	1
Diptera	Chironomidae	10	21	32	63
Diptera	Ceratopogonidae	0	0	2	2
Diptera	Hexatoma	6	2	1	9
Diptera	Limnophila	0	1	0	1
Diptera	Prosimulium	36	59	0	95
Diptera	Antocha	1	0	0	1
Diptera	Simulium	0	0	4	4
Diptera	Stegopterna	0	12	0	12
Diptera	Tipula abdominalis	1	0	0	1
Diptera	Dicranota	0	2	0	2
Amphipoda	Amphipoda	0	2	0	2
Decapoda	Cambarus	2	1	0	3
Ephemeroptera	Ameletus	2	0	2	4
Ephemeroptera	Baetis	2	0	24	26
Ephemeroptera	Epeorus	26	0	28	54
Ephemeroptera	Ephemerella	42	0	12	54
Ephemeroptera	Paraleptophlebia	10	0	1	11
Ephemeroptera	McCaffertium	21	8	0	29
Plecoptera	Acroneuria carolinensis	2	0	4	6
Plecoptera	Remenus bilobatus	1	0	0	1
Plecoptera	Shipsa rotunda	1	0	0	1
Plecoptera	Allocapnia	1	6	12	19
Plecoptera	Amphinemura delosa	5	17	22	44
Plecoptera	Nemora	0	15	0	15
Plecoptera	Isoperla	0	0	3	3
Plecoptera	Ostrocerca	0	0	1	1
Plecoptera	Peltoperla	0	0	1	1
Plecoptera	Sweltsa	0	5	5	10
Plecoptera	Leuctra	0	0	2	2
Trichoptera	Diplectrona	0	0	13	13
Trichoptera	Hydropsyche	1	0	0	1
Trichoptera	Cheumatopsyche	4	0	0	4
Trichoptera	Psychomyia	0	1	0	1
Trichoptera	Lepidostoma	0	2	0	2
Trichoptera	Neophylax	1	3	1	5

Table 2 (cont.). Total number of individuals collected in each taxonomic category, and in each study stream.

<u>Order or Class</u>	<u>Taxa</u>	<u>Toms Run</u>	<u>Carbaugh Run EV</u>	<u>Ryerson EV</u>	<u>Total #</u>
Trichoptera	Rhyacophila	0	0	3	3
Trichoptera	Cyrnellus	1	2	0	3
Megaloptera	Nigronia serricornis	1	0	0	1
Total number		174	186	172	532
Taxa Richness		21	23	19	

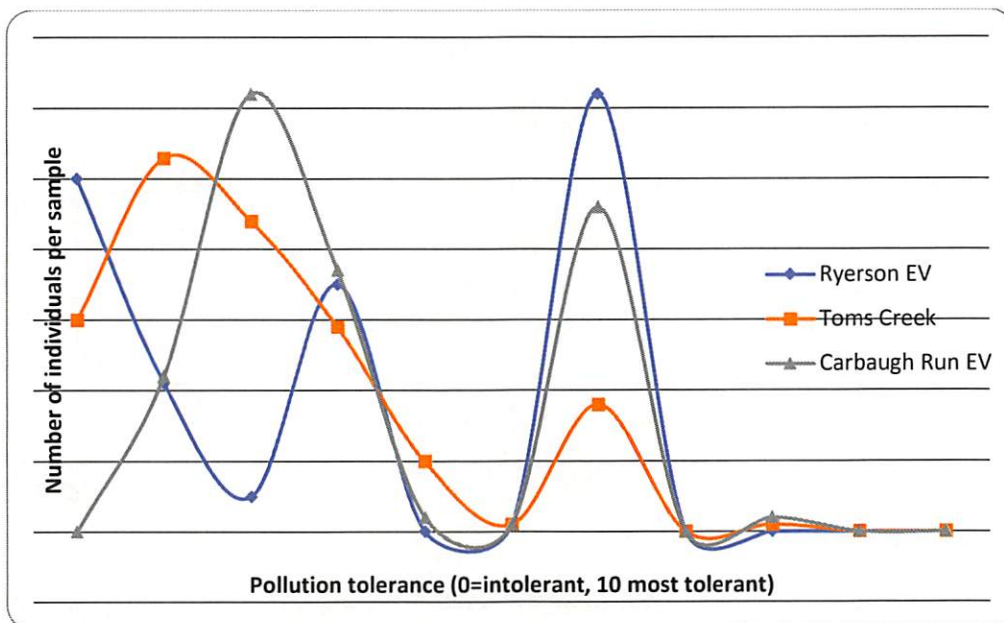


Figure 1. A comparison of pollution tolerant individuals in study streams by plotting the number of individuals collected at each pollution tolerance level.

Do streams within the Study Area meet Exceptional Value standards?

Table 3. Comparative metrics and Biological Condition Scores of the "candidate stream" Toms Creek compared with two PA DEP Exceptional Value reference streams.

	<u>Carbaugh Run</u>		
<u>Biotic index:</u>	<u>Toms Creek</u>	<u>EV</u>	<u>Ryerson EV</u>
Richness	23	19	21
modified EPT	14	9	15
Hilsenhoff index	2.09	3.27	2.95
Percent dominant	22.58	34.30	18.39
percent modified mayflies	54.30	4.65	24.71

<u>Compare Tom Creek to EV streams:</u>	<u>Toms Creek vs Carbaugh EV</u>	<u>Toms Creek vs Ryerson EV</u>
Richness	1.21	1.10
modified EPT	1.56	0.93
Hilsenhoff index	-1.18	-0.86
Percent dominant	-11.72	4.19
percent modified mayflies	-49.65	-29.59

<u>Biotic Conditions scores:</u>	<u>Toms Creek vs Carbaugh EV</u>	<u>Toms Creek vs Ryerson EV</u>
Richness	8	8
modified EPT	8	8
Hilsenhoff index	8	8
Percent dominant	8	8
percent modified mayflies	8	8
Sum Biotic Condition scores	40	40

	<u>Toms Creek vs Carbaugh EV</u>	<u>Toms Creek vs Ryerson EV</u>
<u>Percent attainment:</u>	100%	100%

<u>indicated Stream Classification:</u>	Exceptional Value (EV)	Exceptional Value (EV)
---	------------------------	------------------------

Conclusion

At the ecosystem scale these streams provide a link between the surrounding forest and the downstream river ecosystem. The leaf shredder based communities in these headwater streams provide energy and nutrient flow to the downstream ecosystem by converting coarse leaves and sticks into fine particles that wash downstream. Shredders also convert carbohydrates to fats and proteins that are exported back to the

forest during emergence of the adult insect forms. These biomolecules are rare in the forest ecosystem and highly utilized owing to their consumable size and high food value. In addition to reptiles and amphibians, aquatic insect emergence from these streams coincides with the return of migratory birds during nesting and rearing season.

Credentials

Dr. Benjamin M. Stout III is a Professor of Biology at Wheeling Jesuit University where he has taught and conducted stream ecosystem research since 1990. His contributions to peer-reviewed literature address impacts from road building, forest management, and mining on the structure and function of Appalachian headwater stream ecosystems. Dr. Stout's early studies contributed to the elimination of off road vehicle impacts on wetlands and the creation of the Nation's 500th National Wildlife Refuge in Canaan Valley, West Virginia. He has described the distribution of aquatic insect species and their interactions with other species in wetland and stream ecosystems. His 1990 testimony in the case of Bragg *et al* in United States Federal Court Southern District in Charleston, West Virginia regarding valley fill impacts on streams catalyzed an on-going national debate about the specific tenets of the Clean Water Act. His recent testimonies before Legislative Subcommittee's in West Virginia have contributed to water line extensions for whole communities and a legislatively mandated study of environmental and health impacts of coal slurry underground injection. Citing his work on water quality issues critical to national policy, Dr. Stout was named an Environmental Steward by the North American Benthological Society in 2007 and received the 2013 Don Gasper award from The West Virginia Environmental Council. Dr. Stout has recently attracted significant funding to work with communities to address pressing environmental and health needs in Appalachia.

Bibliography

- Barbour, M.T., J. Gerritsen, B.D. Snyder, and J.B. Stribling. 1999. Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish, Second Edition. EPA 841-B-99-002. U.S. Environmental Protection Agency; Office of Water; Washington, D.C.
- Merritt, R.W., and K.W. Cummins 1996. A Guide to the Aquatic Insects of North American. Kendall/Hunt.
- PA DEP, 2003. (Pennsylvania Department of Environmental Protection). Water quality antidegradation implementation guidance. Document Number 391-0300-002. Bureau of Water Supply and Wastewater Management. Harrisburg PA. 137 p.
- PA DEP, 2007. Pa Code Chapter 93 - Water Quality Standards
<http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>
- PA DEP, 2009. Commonwealth of Pennsylvania Assessment and Listing Methodology for Integrated Water Quality Monitoring and Assessment Monitoring (DRAFT).
<http://www.depweb.state.pa.us/watersupply/cwp/view.asp?a=1261&q=545541>
- Stewart, K. W., and B.P. Stark. 1988. Nymphs of the North American Stonefly Genera (Plecoptera). Allen Press. 461p.
- Wiggins, G.B. 1996. Larvae of the North American Caddisfly Genera (Trichoptera). 2nd Edition. University of Toronto Press. 457p.

SCHMID & COMPANY INC., CONSULTING ECOLOGISTS
1201 Cedar Grove Road, Media, Pennsylvania 19063-1044
610-356-1416 fax: 610-356-3629
www.schmidco.com spkunz@aol.com

EXHIBIT

tabbles

D

18 May 2016

Gary Gipe, President
Friends of Tom's Creek
P.O. Box 611
Fairfield, PA 17320-0611

In re: Exceptional Value Use of Tom's Creek

Dear Mr. Gipe

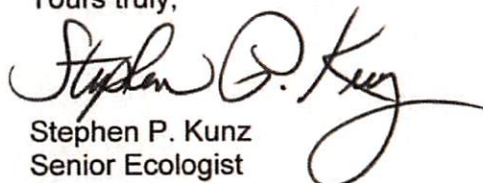
As you know, I have been working full-time as a private sector ecological consultant for more than 35 years now. My primary focus has been on water quality and wetland issues. I am certified as a *Senior Ecologist* by the Ecological Society of America, and as a *Professional Wetland Scientist* by the Society of Wetland Scientists. I routinely deal with state and federal water quality laws and regulations on projects throughout Pennsylvania as well as other states.

I have reviewed the report prepared for you by Dr. Ben Stout entitled "Exceptional Value Conditions in Tom's Creek, Adams County, Pennsylvania", dated April 27, 2016. I have collaborated with Dr. Stout on a number of projects over the years, and I have always found his aquatic biology expertise and stream assessment work to be of the highest technical caliber. I believe that Dr. Stout's findings and conclusions regarding Tom's Creek are credible.

I know that it is PADEP policy to *not* accept the findings of anyone (even someone such as Dr. Stout whose assessment work they know and trust), but to always do their own stream assessment before formally assigning an EV existing use designation to any stream. Furthermore, I understand that PADEP had investigated Tom's Creek during November 2014, and did not find it to be meeting "exceptional value" existing use at that time.

The excellent physical, chemical, and biological conditions that Dr. Stout found in Tom's Creek this spring, however, suggest that it is achieving EV existing use. I am confident that if PADEP were to examine Tom's Creek again it would concur with Dr. Stout's conclusion. In the meanwhile, I believe that it is extremely important, and I would strongly recommend, that every possible effort be made to protect Tom's Creek from any and all activities that might threaten or degrade its EV existing use.

Yours truly,


Stephen P. Kunz
Senior Ecologist

Miller, Jeffrey L.

From: Pennell, Mark <mark.pennell@aecom.com>
Sent: Tuesday, March 10, 2015 11:26 AM
To: Martin, Rock
Cc: Nalisnick, Thomas; Miller, Jeffrey L.; Sammarco, Daniel
Subject: RE: SGI Pitts Quarry

Rock - Thank you very much for that clarification. Mark

Mark D. Pennell, CPG
Vice President, Mid-Atlantic Mining Business Leader
D 1-717-635-7950 C 1-717-253-6405
mark.pennell@aecom.com

AECOM
4507 N. Front St., Suite 200, Harrisburg, PA 17110
T 1-717-635-7901 F 1-717-635-7902
www.aecom.com

From: Martin, Rock [mailto:martin@pa.gov]
Sent: Tuesday, March 10, 2015 11:13 AM
To: Pennell, Mark
Cc: Nalisnick, Thomas; Miller, Jeffrey L.; Sammarco, Daniel
Subject: RE: SGI Pitts Quarry

Mark,

From our perspective, the updated pumping rate numbers could constitute an increased discharge. The SEJ may protect this site from this stipulation, however the SEJ was written prior to the documented quantification of the pumping rate, and we are not completely sure that the SEJ would stand up to legal scrutiny. We feel that the only responsible way for us to continue to permit this site is by requesting an anti-degradation supplement. Should for some reason the SEJ not hold up, the site would then be correctly permitted under current regulations.

Thanks,

Rock Martin, PG | Chief, Permits and Technical Services
Department of Environmental Protection
Cambria District Office
286 Industrial Park Road | Ebensburg, PA 15931
Phone: 814.472.1891 | Fax: 814.472.1898
martin@pa.gov
www.depweb.state.pa.us

From: Pennell, Mark [mailto:mark.pennell@aecom.com]
Sent: Tuesday, March 10, 2015 11:02 AM
To: Martin, Rock
Cc: Nalisnick, Thomas; Miller, Jeffrey L.; Sammarco, Daniel
Subject: RE: SGI Pitts Quarry

Rock,

Photos of Water Pollution

This is an aerial view of the ISP quarry, with the green arrow showing the direction of flow of water flow down from the area of the sediment pond to Gum Springs Road. This water later flows into Toms Creek, a Cold Water High-Quality Fishery stream. The aerial view was obtained from the Adams County GIS site, and was taken in 2009.



The photo below is a tributary of Tom's Creek flowing down from the ISP quarry. This photo was taken from Gum Springs Road, at about the 300 block, where this tributary flows under the road. All the following photos were taken around noon on May 2, 2011. This was 5 days after the April 27 rainstorm.

Note the grey-green color of the water, which appears to be due to contamination by greenstone dust from mining operations at the quarry.



The photo below was taken of the Tom's Creek tributary coming from the ISP quarry as it exits the culvert under Gum Springs Road in the 300 block. Again, note the grey-green color of the water, similar to the color of the metabasalt mined at ISP and known as Catoclin Greenstone.



The photo below is of another nearby tributary of Tom's Creek, taken at the same time as the other photos on May 2, 2011. Note the that the water is very clear, 5 days after a rainstorm.

At the time these photos were taken, all the streams in this area were running clear like this, except for the tributary coming down from the ISP quarry.



The photo below shows the grey-green water coming from the ISP quarry as it merges with the crystal clear water of Toms Creek on May 2, 2011. This photo was taken on privately owned property a short distance from Gum Springs Road. It is the first junction of the ISP tributary and Toms Creek. The flow is from the upper part of the photo to the lower part.



Here's another photo of the merger of the two streams. Note the difference between the silty water coming from the left and the clear water coming down Toms Creek from the right.



Interestingly enough, this problem has been going on ever since the Pitts quarry above Gum Springs Road was opened. The photo below of the same junction of Toms Creek with a tributary coming from ISP taken by a local property owner on October 19, 1996. Note the grey-green water coming from the ISP siltation pond 15 years ago the same as it is now, as it merges with the clear water of Toms Creek.



Here is the tributary coming from ISP in 1996.



This problem did not exist at this location until ISP started quarrying the area above Gum Springs Road that it purchased from the Pitts family in 1985. If more quarrying is conducted on the land that DCNR proposes to transfer to ISP, it is very likely that more of this will occur, further polluting Toms Creek and ultimately the Chesapeake Bay watershed.

July 31, 2019

Sent Via Electronic Mail to chaparonis@pa.gov

Chad Paronish
Cambria District Mining Office
District Mining Operations
PA Department of Environmental Protection Commonwealth of Pennsylvania
286 Industrial Park Road
Ebensburg, PA 15931

Re: Comments on NPDES Permit Renewal Application Permit No.
PA0223239

Dear Mr. Paronish:

Attached are my oral comments made July 17, 2019, concerning the above-referenced permit renewal. I respectfully request that each of my questions and concerns be addressed before any permit is renewed.

I also request that your office consider adopting the following groundwater management and protection stipulations as part of all NPDES permits to discharge into Toms Creek, its tributaries, and watershed:

- impose a ‘cradle-to-grave’ approach to legal responsibility and a financial provision for groundwater conservation through an ‘environmental liability’ clause as a condition of NPDES permitting.
- impose strict liability on SGI should private or municipal water wells be compromised due to any negative impacts. This would require mandatory well-testing by an independent hydrologist BEFORE mining proceeds.
- require more detailed studies and improved mitigation measures, including a study whether any outfalls/discharges are even necessary in view of SGI’s large land holdings.
- declare a moratorium on expansion of any mining enterprise in the most highly-vulnerable hydrogeologic settings, e.g., the “special protection watershed”.
- exert stricter control over mine water abstraction and discharge by providing citizen participation during water monitoring.

There are many ways in which you may fulfill your constitutional obligation to protect our common waters, including vital drinking water. Most notably, no mining operation should degrade groundwater under any circumstances, and that means these destructive operations must never approach a vital aquifer.

Thank you for protecting our water.

Very truly yours,

/s

Hazel Keahey
PO Box 328
Blue Ridge Summit, PA. 17214

ATTACHMENT (1)

ATTACHMENT

Oral Comments, July 17, 2019
Hazel Keahey
Monterey Historic District

“Water has been called “mining’s most common casualty” by James Lyon, Mineral Policy Center, Washington DC.

According to the website of the Mineral Policy Center, “Once a mine is in operation water protection must remain the highest goal of the company and our water regulators, even if it means reduced mineral productivity.”

Today, I question whether mineral productivity is SGI’s highest goal, and water discharge merely a means to that goal.

So, why are we here? There are many reasons why I personally oppose SGI operations: multiple nuisances and the negative economic impacts on the local community are high on the list. But, today the focus is on WATER: specifically, the renewal of a “NPDES” permit... short for National Pollution Discharge Elimination System. That permitting process has been delegated by national EPA to PADEP, and all eyes are on PADEP to protect our critical water resources.

The NPDES permit under consideration today was first issued in 1994 and has been periodically renewed over 25 years. I strongly suspect that past renewals have been rubber stamped with little regard for changing demographics, exponential expansion of SGI operations (including the advent of dying to create colorful roofs), changing weather patterns, and the degradation of surface waters, and more importantly, the impacts on ground water, the primary source for drinkable water in Fairfield and surrounding communities.

PADEP may be poised to rubber stamp this pending application. After all, SGI has made extraordinary efforts to reassure us that surface waters of Toms Creek and its unnamed tributaries will be protected from degradation. The

efforts include an elaborate, engineered pumping system that transports contaminated waste water from the Pitts quarries, and the proposed expansion onto Pine Hill, all the way to southern sediment ponds. But, history and current conditions show that southern Miney Branch Creek is a degraded mess. Will PADEP now permit northern, pristine waters to be degraded?

This permit application raises several serious concerns and questions in my mind:

Why is it OK to degrade Miney Branch?

Why are ANY discharges into Toms Creek and its tributaries allowed, or even necessary?

SGI operates on 800 acres. So, why are there any outfalls? My guess is outfalls enhance mineral extraction and corporate profits. But, with over 800 acres it is reasonable to deny outfalls of contaminated wastewater to the fullest extent possible. It is reasonable to require SGI to contain its waste water and direct its storm waters within its interior.

If there is a demonstrated need for outfall of contaminated wastewater — i.e., a legitimate need not tied to corporate profits — why would the outfall be allowed within an area that has been designated by the Adams County Planning Commission, and approved by Hamiltonban Supervisors, as a “Specially Protected Watershed” ?

Adopting a bright line that excludes all waste discharges into a “specially protected watershed” is the only way to ensure that SGI mining does not turn Toms Creek and its watershed into a poisoned stream and source of polluted groundwater. It is the only way to ensure that our ground water, the source of drinking water, is protected from harmful mining contaminants. Elaborate engineering goes only so far, and I must project into the future: what happens when the elaborate engineering fails or when the pumping stops? Presumably the ground water will leach back into the pits and combine with waste tailings. We know with certainty that long term, large scale mining modifies the circulation of air and water, and may damage or destroy stream-side habitat and ground water resources many miles from the actual mine site.

Protecting pristine surface waters of Toms Creek, its tributaries, wetlands and fragile ecosystem are all important, but what independent studies have been done to test the long term impact of this permit on surface waters. And what independent studies have been done to protect precious ground water resources?

I stress the word “independent”. It is not sufficient to accept SGI’s projected impacts. These impacts must be independently studied by PADEP. It’s been 25 years since the NPDES permit was first issued. It’s past time for a hydrogeology study, a study of Toms Creek High Quality Classification, and if the surface waters are not elevated to EV status, an updated social and economic justification.

SGI seeks to expand mining operations directly atop the aquifer that supplies drinking water to Fairfield and other communities. A 1999 hydrogeology report by the US Dept of Interior indicates the “Blue Ridge” aquifer is recharged, in part, by surface waters of Toms Creek and its multiple tributaries. The recharge happens, apparently over many years. Notably, the Fairfield municipal well (identified as Well AD 754 in the study) is less than five miles away from the points at which SGI seeks a permit to discharge pollutants! It is sheer folly to risk the purity of our drinking water to mining discharge.

More than 500 Pennsylvania citizens, many of whom live in the shadow of SGI operations, have petitioned Governor Wolf to stop intrusion of SGI mining into our “special protection watershed”.

The Adams County Water Plan describes four important ground water resources. In our area, the most important aquifer is located in the “Blue Ridge” region, right below our feet. That aquifer is threatened by mineral extraction and processing. Our community leaders have identified the boundaries that must be “specially protected”. The lines are clear.

This permit renewal must be denied to prevent pollutant migration into our ground water. Please respect the boundaries of our special protection watershed.

In summary, we must recognize that in some places mining should not be allowed to proceed because the identified risks to other resources, such as water, are simply too great. That is the point of designating a specially protected watershed.

Regulatory & Planning Considerations

There are ways in which groundwater management and protection considerations can be built into mining legislation, especially where they relate to vital drinking water supply and aquatic ecosystem sustainability including :

- imposing a ‘cradle-to-grave’ approach to legal responsibility and financial provision for groundwater conservation through an ‘environmental liability’ clause (or directive or similar) as a condition of licensing
- requiring more detailed studies and improved mitigation measures before mining approvals
- declaring a moratorium on the development of certain types of mining enterprise in the most highly-vulnerable hydrogeologic settings
- exerting stricter control on licensing mine-water abstraction and discharge
- including consideration of closure plans prior to mining commencement, so as to specify long-term needs for impact mitigation.

From: [jack handshaw](#)
To: [Paronish, Chadwick](#)
Subject: [External] Tom's Creek
Date: Sunday, July 28, 2019 11:04:03 AM

ATTENTION: *This email message is from an external sender. Do not open links or attachments from unknown sources. To report suspicious email, forward the message as an attachment to CWOPA_SPAM@pa.gov.*

To whom this may concern,

I am a neighbor of SGI on one of the neighboring ridges. I am a devout trout fisherman and believe in protecting our most valuable resource, WATER. We cannot survive without clean water. I have lived on Mt. Hope area for 40 years and have watch the ridge disappear slowly. I know you give lots of jobs to locals and believe you should be more concerned about our future. Pollution starts here and trickles down to the Chesapeake Bay. I am a member of many conservation groups and many are involved in protecting this area. Please don't let greed take away the scenic and valuable area this is. I have seen property values drop because of this and some just move away.

Thank you for your time,

Jack Handshaw

TO: Chad Paronish
chaparonis@pa.gov
Cambria District Mining Office
District Mining Operations
PA Department of Environmental Protection
Commonwealth of Pennsylvania
286 Industrial Park Road
Ebensburg, PA 15931

FROM: Jeffry Dull
12537 Monterey Circle
Blue Ridge Summit, PA 17214

Re: Comments on NPDES Permit Renewal Application Permit No. PA0223239

To Whom It May Concern:

I submit the following comments on Specialty Granules, LLC's ("SGI") application for a renewal NPDES permit, Permit No. PA0223239, associated with the non-coal surface mining at the Pitts Quarry in Hamiltonban Township, Adams County ("Application" or "Renewal Application"). The Pennsylvania Department of Environmental Protection (the "Department", "DEP", or "PADEP") is accepting comments pertaining to the Application materials until July 31, 2019, or two weeks following the July 17, 2019 public hearing. Accordingly, this comment is timely filed.

In my opinion the Department should deny the NPDES permit renewal Application and return the Application to SGI for updating and revision.

The following are some of my concerns:

1. The SGI ownership trail leads from Hagerstown, MD, to New Jersey, to New York, and possibly even to Germany. Since they seem not to be based in Pennsylvania, how can we guarantee that they will clean up their mining sites when they have exhausted the greenstone?
2. Is SGI bonded with the state of Pennsylvania for clean up monies? If so, how much are they bonded for?
 - a. Does SGI actually pay into a state fund?
 - b. If so, how much?
3. It seems that SGI leans heavily on Social Economic Justification to justify the dumping of waste water into Miney Creek, which seems to be ruined, and for the use of Toms Creek for the same purpose, which may actually be EV but now carries HQ designation. What is the true basis of this justification?
 - a. None of their headquarters seem to be in Pennsylvania so where does the real money go?
 - b. I am a neighbor of the mine and the traffic that travels to and from there. I see a lot of Maryland tags on vehicles going to the mine at shift change. How many jobs actually go to Pennsylvania residents since the mine is so close to the Maryland state line?
 - c. Since Maryland would probably not allow this kind of mining on their side of the line, or would have more stringent regulations regarding it, it seems to me that this non-Pennsylvania based company is taking advantage of our state, basically plundering it of resources and taking the money out of state. Is this true?

4. It concerns me that on SGI's web site they have posted, "SGI Responds to Second Round of Public Comments on Northern Tract Permit Application" on 10 July 2019 but in those comments SGI never seems to mention a willingness to partner with organizations like Friends of Toms Creek or other Eco-friendly groups to work toward eliminating pollution of all kinds that may come from the mining operations. They simply seem to give a rebuttal to many of the concerns and complaints that their neighbors have raised.

a. Another interesting point regarding the public meeting held on 30 January 2019, was that seemingly without exception those who spoke for SGI did not live near the mine (the exception may have been one employee of SGI) and all received monies from SGI. Those who spoke against SGI's mining operation, who were in the majority, were without exception, neighbors of SGI and affected directly by truck traffic, noise, light pollution, vibrations from blasting, and drainage pollution. SGI seems more than willing to hand money out to people and agencies who are not affected by their operation but much less willing to deal with those who are.

5. Why is it that SGI is tasked by PADEP to conduct their own testing of run-off, asbestos in the air and water, blasting damage in the local area, and other pollutant related testing and seemingly accepts the results without question but when groups like Friends of Toms Creek contract a professional like Dr. Ben M. Stout III, Ph.D., a Professor of Biology, whose testing shows that Toms Creek achieved Exceptional Value scores those results are contested and not accepted by PADEP? Is there a double standard for businesses and the resident voters who are making no money off this manufacturing, may be risking their health just by living near it, and just want to have a clear EV stream in which to fish?

6. SGI says they will dump very little if any waste into Toms Creek. If this is true, why do they need the permit at all?

a. The initial application for this permit was submitted around 1994. Since then the climate has changed in the area and substantial rain events occur a number of times each year. Is the basis upon which this permit was originally requested out of date? I believe it must be. This is why it should be completely revamped with an emphasis on keeping Toms Creek clean and EV.

The bottom line is that I do not trust SGI, or any corporation, to properly monitor themselves, especially when their profits are at stake. As an LLC they could shut down and leave when they choose and, as they are not based in this state, there may be no way to make them pay for clean up. PADEP should be the honest broker that watches what they do. Those of us who are concerned about what is happening with SGI do not want to see them "take the money and run." Once a mountain top is gone it is gone forever. Once Toms Creek and its watershed is ruined it is ruined forever. We could all work together to stop this from happening and still help the economy. I hope this is what SGI has in mind but I have not seen any proof of it. Our children and their children deserve better. We need to make it happen.

Sincerely,

//signed//

Jeffry A. Dull
Catherine K. Dull



Pennsylvania Aggregates and Concrete Association

2040 Linglestown Rd
Suite 204
Harrisburg, PA 17110
Tel 717-234-2603
Fax 717-234-7030

July 18, 2019

Sent via email to chaparonis@pa.gov

Mr. Chad Paronish
PA Department of Environmental Protection
Cambria District Mining Office
286 Industrial Park Road
Ebensburg, PA 15931

**RE: Specialty Granules LLC
NPDES Permit Renewal
Pitts Quarry, Hamiltonban Township, Adams County**

Dear Mr. Paronish:

The Pennsylvania Aggregates & Concrete Association (PACA) represents the broad interests of over 200 member aggregates (stone, sand and gravel), concrete and cement companies, and companies supporting these industries (equipment manufacturers, dealers, consultants and service providers) in the Commonwealth. PACA's members account for more than 80 percent of the total aggregates production in Pennsylvania. Pennsylvania consistently ranks in the top national producers of crushed stone and sand and gravel.

We are confirming our support for the issuance of the NPDES permit renewal for Specialty Granules' Pitts Quarry located in Hamiltonban Township, Adams County. SGI's presentation at the public hearing held July 17, 2019 in Fairfield gives us confidence in their approach as being scientifically sound, as well as conforming to Pennsylvania regulations.

Should you have any questions, don't hesitate to contact us.

Sincerely,

Peter T. Vlahos
President

cc: Rock Martin - DEP, Cambria DMM
Dan Sammarco - DEP, Director, Bureau of District Mining Operations
John Stefanko - DEP, Deputy Secretary, Active & Abandoned Mine Operations
Josie Gaskey - PACA



DEP CAMBRIA OFFICE

JUL 29 2019

July 27, 2019

Cambria Office, Bureau of District Mining Operations
286 Industrial Park Road
Chensburg, PA 15931

Members of the Bureau,

On behalf of Toms Creek I ask you to refuse renewal of the permit for SGI.

Any run-off from SGI into the creek will destroy its purity and have negative consequences all the way to the Chesapeake Bay.

As our climate continues to warm, rain storms will pour more and more water into the area. What guarantee do we have that an incident similar to 2011 will not occur?

Pure water creeks are becoming more and more difficult to find. Please protect Toms Creek as an example of Pennsylvania's commitment to keeping our creeks and streams free of pollution.

Sincerely,

Kathleen D. Avery

107 Rodes Ave.

Gettysburg, PA 17325

July 31, 2019

Sent via Electronic Mail

Chad Paronish
chaparonis@pa.gov
Cambria District Mining Office
District Mining Operations
PA Department of Environmental Protection
Commonwealth of Pennsylvania
286 Industrial Park Road
Ebensburg, PA 15931

Re: Comments on NPDES Permit Renewal Application
Permit No. PA0223239

To Whom It May Concern:

My family has owned a home and property on the Green Ridge of South Mountain since 1964. It occupies a very special place in the hearts of three generations of my family. We are located about 3 to 4 miles northeast of Toms Creek as the crow flies. Some of the headwaters of Middle Creek, an Exceptional Value sister stream to Toms Creek, are located on our land. We drink the spring water from a spring next to our house that has never run dry. Abundant clean water is the most precious resource we have on our property.

The upper Toms Creek watershed, which is where Specialty Granules Inc. (SGI) proposes to release storm water and sediment under this NPDES storm water discharge permit, is classified as a Priority Conservation watershed. This designation is reserved for stretches of streams in watersheds that are undisturbed and have a "significant conservation priority based on its water quality, biological assemblages and habitat types."

The designation of "Priority Conservation Watershed" is a category under the Pennsylvania Natural Heritage Program, which is a partnership between the Pennsylvania Department of Conservation and Natural Resources (DCNR), the

DEP CAMBRIA OFFICE

AUG 02 2019

Western Pennsylvania Conservancy, the Pennsylvania Game Commission and the Pennsylvania Fish and Boat Commission. Toms Creek, in the upper section of its watershed, has macro invertebrates (aquatic insects), plants and animals that are only seen in the most pristine conditions. This is an extremely sensitive and environmentally important area – for people who live downstream as well as those who live in and around upper Toms Creek. It deserves the highest level of protection from the state of Pennsylvania.

Those seeking permits to discharge storm water and sediment into Toms Creek and its tributaries must be held to the highest standards, and their justifications for discharge must be scrutinized carefully.

Times have changed since SGI first received their permit to discharge to a tributary of Toms Creek. The area occupied by the quarry has expanded exponentially and the frequency and intensity of storms has increased dramatically in recent years. We had record-setting amounts of precipitation in the past year.

In fact, during the hearing held before DEP on July 17, 2019, SGI and DEP claimed that SGI had never discharged to Toms Creek under this NPDES permit. The need for it is therefore in doubt. If the permit has never been used, and if there is a non-discharge alternative (which SGI has described in their response to comments re: the permit to mine Pine Hill), then there is no need to renew this permit.

In addition to the existence of a non-discharge alternative and the fact that SGI has never used the NPDES permit to discharge to Toms Creek, I ask the Department of Environmental Protection to take into account changing weather patterns, increased population in the watershed, the large area being mined by SGI, and the well-documented environmental significance and sensitivity of the Upper Toms Creek watershed.

DEP CAMBRIA OFFICE

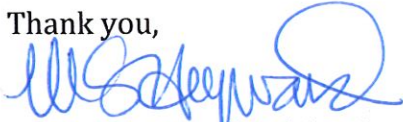
AUG 02 2019

Hamiltonban Township and neighboring townships can no longer be viewed as remote rural backwaters from which natural resources can be extracted without consequence or objection. We are awake and aware and are objecting.

The state of Pennsylvania has recognized the value of Toms Creek as a natural resource meriting PRIORITY CONSERVATION.

DEP - please give meaning to that designation and deny SGI's permit application to discharge to Toms Creek.

Thank you,



Maggie Heyward and family

300 Wilderness Lane

Fairfield PA 17320

Maggie_heyward@yahoo.com

(mail received at: 1404 Bolton Street, Baltimore MD 21217)

DEP CAMBRIA OFFICE

AUG 02 2019

Comment on Large Surface Mining Permit #01180301 and NPDES #PA0279617

Chad Paronish
chaparonis@pa.gov
Cambria District Mining Office District Mining Operations
PA Department of Environmental Protection
Commonwealth of Pennsylvania
286 Industrial Park Road
Ebensburg, PA 15931
Re: Comments on NPDES Permit Renewal Application
Permit No. PA0223239

This is to offer the following comment, both in what was stated at the July 23, 2019 Fairfield public hearing and in follow up support thereof.

On July 30, 2019 I visited a tributary which continuously flows from the SGI property to the west of the Pitts quarry, which runs through a culvert underneath Gum Springs Road and turns right into a wetland within the Michaux State Forest boundary. On the east side of the culvert, is a post displaying a small sign with “SS5”, with a SGI no trespassing sign hanging from a wire strung across the tributary upstream.



This turtle as observed was 7-8” long, had yellow spots completely over its shell, a yellow splotch on top of and around its neck, appeared yellow on the bottom side of its jaw, with yellow spots on leg scales. It initially appeared to be a “stone” amongst silted stones in clouded water, then saw it move as it fed on underwater vegetation between 2 stones. I managed to take photos of it, glare and cloudy water aside.

This appears to be a Wood turtle as when I blow up the photos, see pyramidal layering segments and keel on it’s shell, which should be definitive characteristics per wood turtles). It displayed color patterning (shell, spots on leg scale and dull yellowish jaw and neck splotching) similar to a Blanding turtle—very unlikely as it is very far from range reported for Blanding turtles.



This is silt-choked streambed and sediment piles just upstream before unnamed tributary (SS5) takes a right turn into a wetland upon entering the Michaux State Forest. This tributary subsequently flows through the state forest and into Toms Creek, which continues further downstream inside Michaux State Forest.



Wood turtle—notice yellow neck, patterning of spots on shell, and if you zoom in, pyramidal shell segment layering



Rear of wood turtle, silt/sediment covering stream bottom, rocks and turtle



Photo of pool on west side of Gum Springs across from SS5.

This tributary to upper Toms Creek and adjacent Gum Springs Road are already damaged by past storm overflow erosion along the road shoulder adjoining the SGI site; the larger unnamed tributary (outfall?) from culvert pipe segments separating. already receives uncontrolled overflow discharge from past and present site operations. Gum Springs is presently being rebuilt, with a small sinkhole just repaired over this culvert and repaved going north along the northern and western SGI property boundary lines.



Unnamed tributary (SS5 sign across Gum Springs Road) coming from SGI site, which flows down from between Pine Hill--Pitts quarry area; this is opposite road side of culvert from pool in which the wood turtle was found

Inadequacy of the bog turtle survey:

1-SGI submitted a Bog Turtle survey which was performed in December 2015, using data which was only valid for 2 years, using one form to compile and list data for multiple wetlands--this was previously objected to at the January 2019 hearing, with statement that this was inadequate and should be redone with current methodology and updated data. I reiterate this objection for the pending proposed Pitts Quarry discharge permit renewal in addition. There is a wetland area just inside Michaux State Forest immediately across the road from SGI (SS5) that appears to critical habitat, apparently impacted with sediment and silt eroding offsite into it from SGI Pitts quarry area. (photos above, taken 7/29/19 at Gum Springs Road culvert on opposite west side from SS5)

2-The present discharge permit review is addressing hydrology effects on wetlands within SGI boundaries ONLY and appears to accept as “adequate” upon minimal administrative walk through, an assessment using 2006 bog turtle survey methodology and outdated, not timely filed on the PNDI, invalid data which has determined to be incomplete and inadequate on its face, now appears to cite this assessment to state there will be no hydrological impact on habitats and wetlands—without any further assessments based upon findings from using updated criteria and methodology.

To reiterate once again, any adverse impacts on adjoining wetlands and tributaries, now with a confirmed occurrence of an endangered species and another species of concern, involving adjacent connected and disconnected habitat, have not been assessed adequately, if not at all. There is no evidentiary basis to conclude that adjacent habitat and wetlands are not being adversely impacted without actually and completely assessing these natural resources.

3- There has no consideration given whatsoever to the effects of repetitive blast shock impacts on adjacent wetlands adjoining the Northern Tract proposal and biota, especially adverse shock effects upon fish and turtles therein.

4- There have been no assessments nor analysis of chemicals and fungicides it uses onsite and impacts to wetlands, biota, endangered or non-endangered, and whether such may be presently impacting degrading water quality, wetlands or biota.

4- Any mention of a bog turtle occurrence within the upper Toms Creek watershed was first documented in 2016 by the Pa Fish & Boat Commission, which was not timely registered on the PNDI nor publicly disclosed. A confirmed bog turtle presence should also have timely informed public participation and awareness during this discharge permit and the proposed Northern project reviews—information that bog turtles are an endangered species from habitat loss and are about to lose more critical wetlands, during a time when other citizen efforts were being made to have Toms Creek designated an “exceptional value waters”—presence of an endangered species is a critical factor in any EVW evaluation and review. Such irregularities and timing in making such information available have an adverse impact on the effectiveness of public awareness and actions in protecting their interests in ecological resources from politico-economic interests and resultant impacts therefrom. Potential threatened wetland habitat and actual protection of habitat following an actual endangered species’ confirmed presence convey two very different understandings as to the urgency of public participation.

5- “The characteristic wetlands of bog turtles are essentially habitat islands; movements between sites likely assist in maintaining genetic variation in the populations and support colonization or recolonization of suitable sites. The probability of population extinction may increase if movement between sites is restricted (Gibbs 1993;

Semlitsch and Bodie 1998; Carter et al. 2000). Genetic similarity is greater between bog turtles in the same drainage than between adjoining watersheds (King, in Herman 2003), consistent with extensive use of wet corridors.

Although the turtle movement reported here was along a stream corridor, bog turtles clearly use upland routes for dispersal (Herman 2003; Tryon 2004). The diversity of pathways used suggests that landscape-level protection would offer the best opportunity for gene flow between populations.

We are unaware of any reports of bog turtles utilizing undercut banks in streams prior to this account. Permit reviewers should recognize this potential when environmental impact is expected from projects in streams within the range of the bog turtle.”

(“In Stream, Streamside, and Under Stream Bank Movements of a Bog Turtle, *Glyptemys muhlenbergii*. Chelonian Conservation and Biology 6(Dec 2007):286-288 · January 2009

Somers, Ann & Mansfield-Jones, Jennifer & Braswell Alford, Jennifer. (2009)

“Additional Considerations

- The action area includes all areas that will be affected directly or indirectly by the action and not merely the immediate area involved in the action. For example, if the proposed action is a wetland fill to accommodate access to a proposed development, then the development is

included in the action area.

Surveys as extensive as outlined below are usually sufficient to detect bog turtles; however, there have been instances in which additional effort was necessary to detect bog turtles, especially when habitat was less than optimum, survey conditions were less than ideal, or turtle densities were low.

And:

6. A minimum of four (4) surveys per wetland site are needed to adequately assess the site for presence of bog turtles.

- At least two of these surveys must be performed in May.
- From April 15 to April 30, surveys should be separated by six or more days.
- From May 1 to June 15, surveys should be separated by three or more days.

Surveys during this time period are optimum as wetland vegetation growth is not too thick.

Note that bog turtles are more likely to be encountered by spreading the surveys out over a longer period. For example, erroneous survey results could be obtained if surveys were conducted on four successive days in late April due to possible late spring emergence, or during periods of extreme weather because turtles may be buried in mud and difficult to find.”

(source: “GUIDELINES FOR BOG TURTLE SURVEYS 1 For the Northern Population Range Phase 1 and 2 Surveys (Revised October 26, 2018)” can be found at <https://www.fws.gov/northeast/nyfo/es/bogturtle.htm>)

§ 93.4b. Qualifying as High Quality or Exceptional Value Waters.

(a) Qualifying as a High Quality Water. A surface water that meets one or more of the following conditions is a High Quality Water.

(b) Qualifying as an Exceptional Value Water. A surface water that meets one or more of the following conditions is an Exceptional Value Water:

(1) The water meets the requirements of subsection (a) and one or more of the following:

(2) The water is a surface water of exceptional ecological significance.

§ 105.17. Wetlands.

Wetlands are a valuable public natural resource. This chapter will be construed broadly to protect this valuable resource. (1) *Exceptional value wetlands.* This category of wetlands deserves special protection. Exceptional value wetlands are wetlands that exhibit one or more of the following characteristics:

(i) Wetlands which serve as habitat for fauna or flora listed as “threatened” or “endangered” under the Endangered Species Act of 1973 (7 U.S.C.A. § 136; 16 U.S.C.A. § § 4601-9, 460k-1, 668dd, 715i, 715a, 1362, 1371, 1372, 1402 and 1531—1543), the Wild Resource Conservation Act (32 P. S. § § 5301—5314), 30 Pa.C.S. (relating to the Fish and Boat Code) or 34 Pa.C.S. (relating to the Game and Wildlife Code).

(ii) Wetlands that are hydrologically connected to or located within 1/2-mile of wetlands identified under subparagraph (i) and that maintain the habitat of the threatened or endangered species within the wetland identified under subparagraph (i).

In its response, SGI acknowledges potential impacts to Wetland D and it being an “...expansive habitat extending well beyond the Northern Tract permit boundary”—and stating “...no impacts have been reported to any of the wetlands as a result of the adjacent Pitts Quarry operations.” There are no assessments of wetlands outside the Northern Tract permit boundary submitted with this application in support of this statement, as objection was made to this for exclusion of potential impacts on adjoining wetlands from consideration in the 2015 Bog Turtle survey at the January 2019 public hearing.

“Drawing from the experience in operation of the adjacent Pitts Quarry, it is noted that no impacts have been reported to any of the wetlands as a result of the adjacent Pitts Quarry operations; and similarly no significant wetlands impacts are anticipated from the Northern Tract quarry operations.” (SPECIALTY GRANULES LLC PROPOSED NORTHERN TRACT QUARRY RESPONSES TO PUBLIC COMMENTS RECEIVED AT JANUARY 30, 2019 PUBLIC MEETING AND RELATED PERIOD FOR SUBMISSION OF WRITTEN COMMENTS Large Noncoal Surface Mining Permit Application No. 01180301 NPDES Permit Application No. PA0279617 Submitted: July 3, 2019 P. 18-19)

The above photos (SS5) are submitted in response to the unsupported claim that “no impacts have been reported to any of the wetlands as a result of the adjacent Pitts Quarry operations.”

The SINGLE 2015 BT (which served only to approximate whether bog turtles might be present and was performed using outdated 2006 criteria) is inadequate to support any conclusion the effect of the proposed project will be insignificant discountable. The photos included herein demonstrate alteration to ground and surface waters has already occurred and continues to date.

There should be a more complete comprehensive survey and review of Toms Creek’s watershed for potential designation of exceptional value water, with measures and planned actions to better protect upper Toms Creek’s biota and waters from further degradation, as warranted by the presence of an endangered species and co-concurrent turtle species presence, a Species of Concern (US FWS National Listing Workplan 5 year work plan (May 2019 version), has been found present in unsurveyed wetlands.

nonasbestiform toxicity

NIOSH recognizes that results from such research may impact environmental as well as occupational health policies and practices. Many of the issues that are important in the workplace are also important to communities and to the general population. As more information became available on the relationship between the dimensions of asbestos fibers and their ability to cause nonmalignant respiratory disease and cancer, interest increased in exposure to other “mineral fibers.” The term “mineral fiber” has been frequently used by nonmineralogists to encompass thoracic-size elongate mineral particles (EMPs) occurring either in an asbestiform habit (e.g., asbestos fibers) or in a nonasbestiform habit (e.g., as needle-like [acicular] or prismatic crystals), as well as EMPs that result from the crushing or fracturing of nonfibrous

minerals (e.g., cleavage fragments). Asbestos fibers are clearly of substantial health concern. Further research is needed to better understand health risks associated with exposure to other thoracic-size EMPs, including those with mineralogical compositions identical or similar to the asbestos minerals and those that have already been documented to cause asbestos-like disease, as well as the physicochemical characteristics that determine their toxicity.

Appendix 1 Historical significance of “Lee’s Retreat”, route taken by main body of the Confederate Army through Fairfield Gap following its defeat in the Battle of Gettysburg; historical research and excerpts

Respectfully submitted

Stephen Roy

67 Meadowlark Trail, Carroll Valley, PA 17320

July 31, 2019

Appendix 1

Historical significance of “Lee’s Retreat”, route taken by main body of the Confederate Army through Fairfield Gap following its defeat in the Battle of Gettysburg; historical research and excerpts:

The significance of the Fairfield Gap-Monterrey Gap route over South Mountain during the period weeks before the battle of Gettysburg, and especially during the Lees’ Retreat following the defeat at Gettysburg on July 3, 1863, went virtually unrecognized in popular Civil War history until recent years. Fairfield Gap-Monterrey Pass was, by far, the shortest geographic route from Gettysburg to Williamsport, MD, in returning back to Virginia. The following accounts and statements are offered in support of comments on the historical significance of the Fairfield Gap route over South Mountain, just before and following the Battle of Gettysburg, the largest battle of the American Civil War.

On June 22nd [1863] a skirmish erupted at Monterey Pass near the Mason and Dixon Line of South Mountain as Company D of the 14th Virginia Cavalry of General Albert Jenkins' Brigade ran into an armed militia of Captain Robert Bell's 21st Pennsylvania, Captain David Conaughy's Home Guard and a detachment of 1st Troop Philadelphia City Cavalry under Captain Samuel Randall. Confederate skirmishers scoured the woods on foot on each side of the Emmitsburg and Waynesboro Turnpike. When the Federal cavalry left, the Confederates reached Monterey Springs and continued firing at several bodies on horseback to enter Fairfield at dusk. This was the first fight that took place on South Mountain during the Pennsylvania Campaign.

Henry F. Long of the 17th Pennsylvania Cavalry wrote had this to say in regards to the movement around Zora (now Carroll Valley):

" June 29, we marched from Middletown, through Boonsborough to Cavetown, to Monterey Springs, PA to near Fairfield where Confederate troops were encountered; withdrew a short distance toward Emmitsburg, MD; June 30, moved from near Fairfield, through Emmitsburg, Maryland, and then toward Gettysburg; July 1, on picket duty somewhere near Gettysburg in Adams County, PA."

Major General Alfred Pleasonton wrote this in his official report of the Gettysburg Campaign:

"Orders having been issued for the advance of the army toward Pennsylvania, on June 29, Buford's division moved as follows, to cover and protect the left flank of the line of march: The Reserve Brigade was detached under Brig. General Merritt, and moved to Mechanicstown and afterward to Emmitsburg. The First and Second Brigades passed through Boonsborough, Cavetown, and Monterey Springs, and encamped near Fairfield, within a short distance of a considerable force of the enemy's infantry.

On June 30, 1863, Captain Ulric Dahlgren of the Union Army passed west over the Monterey Pass on a mission to intercept a packet of dispatches en route from Richmond to General Lee, and after succeeding, returned back via Monterey Pass to Zora (Carroll Valley).

https://www.emmitsburg.net/archive_list/articles/history/civil_war/zora_%20and_gettysburg_part_1.htm

As soon as Colonel Preston and the 1st Vermont Cavalry rode off toward Smithsburg, General Kilpatrick ordered Colonel Town to take a regiment of his battalion to head off the retreating wagon train. Near the

Clermont House, the 1st Michigan Cavalry under Lt. Colonel Peter Stagg was sent on a road leading to Fairfield Gap to head off the Confederate wagon train coming out of Fairfield.

General Custer hired Emmitsburg resident James McCullough on June 27th as a guide during the Pennsylvania Campaign, when the Michigan Brigade encamped at the old Toll House south of Emmitsburg. During the battle of Monterey, McCullough guided Colonel Stagg's 1st Michigan Cavalry to Fairfield Pass.

https://www.emmitsburg.net/archive_list/articles/history/civil_war/monterey_civilians.htm

Lee and the MAIN BODY of the Confederate Army

The Confederate Army's use of this much shorter route, facilitated its escape from Gettysburg and avoided total destruction by the Union Army. This turned out to be a critical factor in why the Civil War continued on another 1.5 years after the Battle of Gettysburg. Lee and the MAIN BODY of the Confederate Army, with trailing wagon trains, went through Fairfield Gap along Iron Springs Road, Lower Gum Road and Maria Furnace Road. The scale of this desperate massive movement back to Virginia, "Lee's Retreat" following its loss at Gettysburg was very impressive in the enormous scale of the retreating Corps and their trailing wagon trains.

The horrendous weather and road conditions, as well as the Union Army interception of a miles long Confederate wagon train at the Waynesboro-Emmitsburg Pike, Martha Furnace Road At Fairfield, many Confederate troops became bottle necked. To relieve the congestion, Lt. Gen. Longstreet's Corps would march along Jacks Mountain Road to the Emmitsburg and Waynesboro Turnpike at Fountaindale. From there, they would march into South Mountain to Monterey Pass. Lieutenant General Ewell's Corps would move behind Hill's Corps on the Hagerstown Road.

General Ewell's Corps marched into the mountain on Maria Furnace Road following Hill's Corps. When Ewell's Corps cleared Fairfield, they left behind severely wounded soldiers who were too critical to be placed in Imboden's wagon train that had already moved out of Cashtown. The rain and the dampness added to the misery. The soldiers marched through water and mud that was knee to ankle deep.

General Ewell recalled "We encamped for the night on a hill 1½ miles west of Fairfield, and next day, July 6, the Third Corps moving by another road, we were still in the rear, Rodes' division acting as rearguard, and repelling another attack of the enemy." General Ewell then continues "Attacked the troops making the summons, and drove them out of a wood in which they were posted. The enemy did not follow much beyond Fairfield. The road was again blocked till noon. That night we encamped near Waynesboro, and reached Hagerstown about noon of July 7."

https://www.emmitsburg.net/archive_list/articles/history/civil_war/recoil_of_monterey.htm

The account above describes a vast logjam already overloading the very narrow confines of the Iron Springs Road gorge!! The length of the Confederates' wagon trains going through the Fairfield Gap to Monterey, variously estimated by historic accounts as between 14-22 miles in length. Rodes' and Ewell's Corps were literally trapped overnight within the very narrow confines of the Toms Creek gorge by the Battle of Monterey Gap raging atop South Mountain. This was the main body of Lee's Confederate army estimated at 40,000 following the loss at Gettysburg, at least 2/3s of which went in on Iron Springs Road, got blocked overnight when the battle raging in a wide area around the toll gate, bridge and intersection with Emmitsburg and Waynesboro turnpike, subsequently spilling over into the Cumberland Valley, would have clogged any open ground in its enormity, as it did when part of the wagon train subsequently became a debris logjam between Rouzersville, PA and Leitersburg, MD after General Custer and Michigan cavalry attacked and set the retreating Confederate wagon train ablaze.

The enormous scale of these wagon trains and troops belie the recognition and significance of Lee's incredibly successful retreat from the battle of Gettysburg through the Fairfield Gap. Had it been unsuccessful and the Confederate Army destroyed, the Civil War would have likely ended soon after, instead of almost 2 years after "Lee's Retreat" as it is now popularly renown in Civil War history.

That night, Longstreet's Corps bivouacked along the Emmitsburg and Waynesboro Turnpike. Major General Lafayette McLaws Division encamped along the eastern base of South Mountain. Major General George Pickett's Division encamped on the grounds of the Monterey Inn. Major General John B. Hood's Division, commanded now by Brigadier General Evander M. Law, encamped in the area that the Monterey Pass Battlefield Park Museum is located, in addition to points west, down Old Route 16.

After marching up South Mountain, Hill's Corps bivouacked for the night. Major General Richard Anderson's Division encamped along the Maria Furnace Road near the Monterey Pass toll house. Brigadier General James Lane, now commanding Pender's/Trimble's Division, encamped along Maria Furnace Road. Major General Henry Heth's Division, now commanded by Brigadier General James Pettigrew, brought up the rear.

Just at the eastern base of South Mountain, along modern day Iron Springs Road, was Lt. Gen. Ewell's Corps. Major General Robert Rodes's Division, followed by Major General Edward Johnson, and bringing up the rear of the Confederate army was Major General Jubal Early's Division.

Early the next morning on July 6, the Confederate army began marching. Lieutenant General James Longstreet's Corps would take up the lead as they marched down the western slope of South Mountain into Waynesboro, PA. Major General Lafayette McLaws's Division would take the lead down South Mountain along Old Route 16. Following behind would be Brig. Gen. Law's Division. Major General Pickett's Division was ordered to move along with Hill's Corps.

Lieutenant General Hill's Corps moved directly behind Longstreet's Corps. Brigadier General Lane led the advance of Hill's Corps. Following behind was Brig. Gen. Pettigrew, followed by Maj. Gen. Anderson's Division. Bringing up the rear of Hill's Corps was Maj. Gen. Pickett's Division and Lee's Headquarters.

Moving up South Mountain and skirmishing with elements of the Union Army VI Corps was Lt. Gen. Ewell's Corps. His corps marched with Maj. Gen. Early in advance, followed by Maj. Gen. Johnson. Bringing up the rear of the entire Confederate army was Maj. Gen. Rodes's Division. The last Confederate soldier to march through Monterey Pass occurred at around 3:30 p.m. [July 6, 1863]

Wittenberg, Eric J., J. David Petruzzini, and Michael F. Nugent, *One Continuous Fight: The Retreat from Gettysburg and the Pursuit of Lee's Army of Northern Virginia, July 4-14, 1863*, Savas Beatie, 2008, ISBN 978-1-932714-43-2, pp. 54-58

Brown, Kent Masterson, *Retreat from Gettysburg: Lee, Logistics, and the Pennsylvania Campaign*, University of North Carolina Press, 2005, ISBN 978-0-8078-2921-9; p. 131.

General Ewell's Corps marched into the mountain on Maria Furnace Road following Hill's Corps. When Ewell's Corps cleared Fairfield, they left behind severely wounded soldiers who were too critical to be placed in Imboden's wagon train that had already moved out of Cashtown. The rain and the dampness added to the misery. The soldiers marched through water and mud that was knee to ankle deep.

General Ewell recalled "We encamped for the night on a hill 1½ miles west of Fairfield, and next day, July 6, the Third Corps moving by another road, we were still in the rear, Rodes' division acting as rearguard, and repelling another attack of the enemy." General Ewell then continues "Attacked the troops making the summons, and drove them out of a wood in which they were posted. The enemy did not follow much beyond Fairfield. The road was again blocked till noon. That night we encamped near Waynesboro, and reached Hagerstown about noon of July 7."

https://www.emmitsburg.net/archive_list/articles/history/civil_war/recoil_of_monterey.htm

Major John Harman, whose reserve wagon train was estimated to be about 20-22 miles in length, was located close to Cashtown. Major Harman was ordered to relocate the reserve wagon train to Fairfield, where the wagons of Lt. Gen. Ewell's Corps were ordered to follow behind. Lt. Gen. Ewell's wagon train was estimated to be about 17-20 miles in length and were strung out to the north and northwest of Gettysburg. Escorting these two wagon trains, under the direction of Major Harman, were Brigadier Generals William Jones and Beverly Robertson, both being instructed to lead the wagons back into the safety of Virginia through Monterey Pass. Brown, Kent Masterson. *Retreat from Gettysburg. Chapel Hill and London: The University of North Carolina Press, 2005. 93, 95-97, 103.*

The old Wagon Road today would make up the following modern day roads. From Gettysburg, it was the Fairfield Road (Route 116) to Iron Springs Road, west of Fairfield into South Mountain to Gum Springs Road, through Fairfield Gap, onto Maria Furnace Road, and would have connected to Old Waynesboro Road. From there, it ran west of the mountain, sidestepping Waynesboro, continuing to Hagerstown, and ended at Williamsport. Many historians state that Iron Springs Road was used during the Confederate retreat, however, no road past the current intersection of modern day Gum Springs Road exists on any Civil War period maps. Iron Springs Road from Gum Springs Road that leads to Old Waynesboro Road today, was established in the late 1860's when copper was discovered in the mountain. The earliest map that shows the Monterey Pass area and the Great Wagon Road was first surveyed in 1751 by Colonel Joshua Fry and Peter Jefferson and was known as Nicholson Gap. FOOTNOTE #4

<https://southmountaincw.wordpress.com/category/fairfield-pass/>

By July 5, 1863, the Confederate infantry was well on its way back to Virginia, marching on the Hagerstown Road. Lieutenant General A. P. Hill's Corps moved first to Fairfield. From there the advance units of Hill's Corps began marching into South Mountain at 8:00 a.m. Lieutenant General James Longstreet's Corps marched behind Hill's Corps. Bringing up the rear was that of Lieutenant General Richard Ewell's Corps. At Fairfield, Lt. Gen. Hill's Corps was the first to enter South Mountain via Fairfield Gap and Monterey Pass.

In today's terms, regarding the Hagerstown or Fairfield Road, Hill's Corps left Route 116 and marched onto Iron Springs Road. From Iron Springs Road, Hill's Corps marched due west on Gum Springs Road, which turns into Furnace Road on the Franklin County side. At the top of the South Mountain, Furnace Road became Maria Furnace Road, which connected at the Monterey Pass toll house, along Old Rt 16, west of Blue Ridge Summit. The Old Waynesboro Road, Charmian Road, and Old Rt 16 was known as the Emmitsburg and Waynesboro Turnpike during the Civil War. <https://southmountaincw.wordpress.com/2016/09/16/the-confederate-retreat-and-the-union-pursuit-part-three/>

Brigadier General Kilpatrick will reorganize his force for the next attack, sending the majority of Custer's brigade up the turnpike to hit the Confederate front and right flank. He will also order the 18th Pennsylvania Cavalry to move along Furnace Road, and then head into the woods and hit the Confederate left flank. Rodenbough, Theophilus Francis, Grier Thomas J. *History of the Eighteenth regiment of cavalry, Pennsylvania volunteers.* New York, NY: 1909. 84.

Comments to DEP on SGI's NPDES renewal for permit # PA 0223239 July 17,2019

My name is Sue deVeer. I live beside a beautiful stretch of Toms Creek here in Fairfield.

The upper portion of the Toms Creek Watershed is listed as a Priority Conservation Watershed by the Pennsylvania Natural Heritage Program, which is a partnership between the Department of Conservation and Natural Resources, the Western Pennsylvania Conservancy, the Pennsylvania Game Commission, and the Pennsylvania Fish and Boat Commission. This designation is a recognition that the watershed is a "significant conservation priority based on its water quality, biological assemblages, and habitat types."

I am a member of the Friends of Toms Creek because the preservation of its water quality matters so much to me. I live beside Toms Creek, downstream from SGI and the permitted stormwater outfalls discussed in this permit renewal. I take my stewardship duty seriously here. I have said before, ALL OUR WATER STARTS HERE IN ADAMS COUNTY. No water flows in, we in this community are the stewards of these headwaters for all communities downstream.

I read with interest on the SGI website their posted responses to comments and questions the community here had expressed about the proposed mining of Pine Hill, which they call their Northern Tract Expansion. The following statement by them makes me seriously wonder about the need to renew the NPDES permit we are discussing here today:

"Another point explained in the SGI First Responses and elsewhere is that the NT (Northern Tract) ponds are not the only feature being used to store stormwater and avoid discharges to Toms Creek. As indicated in the SGI First Responses (pg. 24), although Pitts Quarry is currently operational, SGI can use (and has used) the lower level of that quarry for temporary storage of stormwater. As the Northern Tract Quarry comes on line, the quarry will become available for stormwater storage, providing even greater capacity should the need arise." (sgi-responses-to-public-comments-second-round-7-3-2019.pdf pages 16-17.)

My question is: Why are we even talking about renewal of this NPDES permit? What is the operational need which justifies even the "unlikely" discharge of stormwater to this Priority Conservation Watershed, to HQ or not-yet-classified EV water? If stormwater can be stored in the bottom of the quarry why is this not the plan?

The above paragraph marks the end of my verbal comments at the public hearing, and I thank you all again for coming here and hearing us. I have an additional comment which occurred to me afterwards:

I understand that there have been newly reported recent sightings of Federally Endangered Bog Turtle(s) in the upper reaches of Toms Creek and/or its unnamed tributaries, by inspectors from the Fish and Boat Commission. I BELIEVE THE DESIGNATION OF TOMS CREEK AS HQ RATHER THAN EV WATER IS INCORRECT BECAUSE OF THE EXISTING USE NOT ONLY BY TROUT AND THEIR ASSOCIATED MACROINVERTEBRATE ECOSYSTEM BUT BY THE EXISTING USE BY THE ENDANGERED BOG TURTLE. IF THE BOG TURTLE SIGHTING DOES NOT AUTOMATICALLY PROTECT ITS HABITAT TO BE DESIGNATED AS EV, I URGE THE DEP TO SCHEDULE A NEW REVIEW AND DATA COLLECTION AT THE APPROPRIATE SEASON AND DO THEIR OWN REEVALUATION OF THE DESIGNATION OF TOMS CREEK. The permitting process may need to pause to fully accommodate and incorporate the new Bog Turtle information.

Respectfully submitted,

Sue deVeer 240-367-4403 cell suedeveer@juno.com
700 Iron Springs Rd.
Fairfield, PA 17320