

Comment #	Comment	Commenter #	Written or Oral	Category	Response
1	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 Consequently, the mining permit SGI is seeking to renew is obsolete.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.	8	Written	NPDES	The Department utilizes the National Oceanic and Atmospheric Administration's Hydrometeorological Design Studies Center's Precipitation Frequency Data Server to determine the amount of rainfall equivalent to a 10 year/24 hour storm in the vicinity of the Pitts Quarry. This service includes recent storm data, which would account for any changes in the intensity as a result of climate change. Pitts Pond 2 was recently upgraded to hold the capacity of a 100 year/24 hour storm event. Pitts Pond 2 is designed to retain the stormwater from a 100 year/24 hour storm, which is significantly larger than what is required. This interpretation comes from EHB Docket nos. 2002-131-C (Zlomsowitch & East Penn Concerned Citizens v. Department & Lehigh Asphalt Paving & Construction Company), 2007-287-L (Crum Creek Neighbors v. Department & Pulte Homes of PA), & 2005-077-K (Blue Mountain Preservation Association, Inc. v. Department & Alpine Rose Resorts, Inc.). Also, the Department's Erosion and Sediment Pollution Control Program Manual (Technical Guidance Document No. 363-2134-008, March 2012), incorporated by reference in 77 Pa. Code §102, requires a minimum sedimentation pond design capable of retaining the runoff from a 10 year/24 hour storm. SGI chose to design the Pitts Pond 2 with a capacity based on the 100 year/24 hour storm, which is greater than the required pond design capacity. In addition, the volume of Pitts Pond 1 was increased, and two additional pumps (now four total) were installed. Pitts Pond 1 originally had two 800 gpm pumps. Two additional pumps were installed at 1,000 gpm each at Pitts Pond 1 in 2018; and Pitts Pond 2 as two 1,600 gpm pumps installed. These pumps can be used to convey additional water from Pitts Pond 1 and Pitts Pond 2 to the J Stand. In each pond, pumping systems are installed as a primary system and a backup system, in case one set encounters mechanical problems. SGI has also installed an emergency diesel generator that engages automatically in the event of grid power failure.
2	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?	8	Written	NPDES	SGI recently upgraded Pitts Pond 2 (Outfall 002) to increase the capacity from the 10 year/24 hour storm event to the 100 year/24 hour storm event. SGI also increased the pumping capacity at Pitts Pond 1 (Outfall 001). This will result in a reduction in the frequency of potential discharges to Unnamed Tributary to Toms Creek. The permittee is required to operate according to all necessary protocols, acts, laws and regulations required for the SGI permit. Noncompliance with these regulations will result in enforcement action which may include penalties, orders, or cessation of operations.
3	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.	8	Written	Surface Water Quality	The Pitts Quarry permit includes a surface and groundwater monitoring program that includes both Pitts Pond 1 and Pitts Pond 2 (Outfalls 001 and 002), stream monitoring points (SP-5, SP-21, SS-1, SS-2, SS-3, SS-4, SS-5, SS-9, SS-10, TC-1, TC-7, TC-9 and TC-9), and groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-3R, MW-4R, and MW-7). Quarterly sampling of each stream and groundwater monitoring well is collected and bi-monthly sampling for sediment ponds 001 and 002 for both quality and quantity. In addition to the quarterly monitoring program, SGI has committed to conducting annual macroinvertebrate stream surveys of Toms Creek and Unnamed Tributary to Toms Creek with the issuance of the adjacent Northern Tract Quarry.
4	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.	8	Written	DEP Regulation	DEP has been delegated the authority to enforce applicable laws with respect to environmental protection in the Commonwealth of Pennsylvania. DEP takes seriously its obligations to do this. Part of DEP's authority includes the review and approval of permit authorizations including Pitts Quarry. 25 Pa. Code §77.126 outlines the specific requirements for approval or denial of a permit. DEP has adequate staff and funding to complete its obligation.
5	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?	8	Written	Surface Water Quality/Public Health Concern	The Pennsylvania Fish and Boat Commission does not list Toms Creek as having a fish consumption advisory. There is currently no protected use impairment for Toms Creek in Adams County.

6	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.	8	Written	Aesthetics Economy	Regarding the NPDES renewal application, the Department has fully considered the environmental effects of its action to approve the NPDES renewal application and has determined that the NPDES renewal will not result in the unreasonable degradation, diminution, depletion or deterioration of the environment.
7	SGI directly provides jobs to about 145 people; that is important. I don't want these folks to lose their jobs, but SGI has a responsibility not only to them but to everyone affected by their actions. SGI 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 SGI's license reflect climate change realities and hold SGI accountable in a meaningful way when they fail to take seriously the detrimental effect they have on our watershed.	8	Written	NPDES	Please see response to comments 1 (NPDES) and 2 (NPDES).
8	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.	11	Written	NPDES	An applicant is required to collect and submit effluent characterization samples no later than two years after the initial discharge from each facility in compliance with 40 CFR §122.21(k)(5)(vi). Pitts Quarry has not reported a discharge from either Pitts Pond 1 or Pitts Pond 2 since the last renewal and all stormwater and pit water is pumped to the adjacent permit identified as SMP No. 6477SM5 – Charmian Plant and discharged under NPDES No. PA0009059. Therefore, no effluent characterization sample was provided with the renewal application. SGI provided estimates of what is expected to be present in the discharge based on a dip sample collected from Pitts Pond 1 in 2014. The Department completed a reasonable potential assessment of the sample and did not identify any reasonable potential for an exceedance of the water quality criterion for any of the parameters assessed. Reasonable potential will be reevaluated once a discharge is reported and a sample is collected.
9	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.	11	Written	NPDES	SGI pumps all groundwater from the active pit and stormwater from Pitts Pond 1 and Pitts Pond 2 to the adjacent permit identified as SMP No. 6477SM5 – Charmian Plant. The adjacent permit is owned by Specialty Granules, LLC. A portion of the surface and groundwater pumped from the Pitts Quarry is used as process water for SMP No. 6477SM5 while the remaining water discharges to Miney Branch, designated as a Cold Water Fishes-CWF under NPDES No. PA0009059. The Pitts Quarry NPDES permit No. PA0223239 includes a monitor and report requirement for the emergency spillways for discharges greater than 10-year/24-hour storm event for outfall 001 and discharges greater than 100-year/24-hour storm event for outfall 002 for Total Suspended Solids (TSS). The NPDES permit No. PA0223239 NPDES Individual Permit Condition number 4 states that the operator must not cause or contribute to degradation of Unnamed Tributary to/and Toms Creek in the event of a discharge from the emergency spillways for outfalls 001 and 002. This condition also requires that the operator conduct sampling during a discharge event of the discharge and upstream and downstream monitoring points that will be evaluated to determine reasonable potential for an exceedance of the corresponding water quality criterion for TSS and effluent characterization parameters. Should a reasonable potential for an exceedance be established, water quality based effluent limits will be calculated and implemented during precipitation events, as described above, and the permit will be revised at that time to include these limits.

10	<p>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.</p>	11	Written	NPDES	<p>In accordance with Technical Guidance Document 361-0100-003, when a parameter is below the laboratory detection limit and the laboratory detection limit is equal to or less than the applicable water quality criterion, the parameter is considered not present in the effluent. Note that the phosphorus results for the samples collected 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 by SGI represent in-stream concentrations and are not representative of outfall 001 or 002. There were no reported discharges from Pitts Pond 1 and Pitts Ponds 2 on these dates.</p>
11	<p>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 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.</p>	11	Written	NPDES	<p>SS-9 is an upstream monitoring point located on the Unnamed Tributary to Toms Creek above outfall 001. SS-5 is a downstream monitoring point located on the Unnamed Tributary to Toms Creek below outfall 001 and 002. The sample analysis collected from SS-5 and SS-9 represent stream concentrations and are not representative of outfall 001 or 002. The effluent characterization analysis uses both the stream concentrations and discharge concentrations to calculate whether or not an effluent limit is required. At this time, SGI has not reported a discharge within the last five (5) years; however, a permit condition requires the operator to collect an effluent characterization sample within two (2) years of an initial discharge. An evaluation of the effluent characterization constituents will be conducted when an actual effluent characterization sample is provided from either outfall 001 or 002. The NPDES Individual Permit Condition number 4, however, states that the operator must not cause or contribute to degradation of Unnamed Tributary to/and Toms Creek in the event of a discharge from the emergency spillways for outfalls 001 and 002. This condition also requires that the operator conduct sampling during a discharge event of the discharge and upstream and downstream monitoring points that will be evaluated to determine reasonable potential for an exceedance of the corresponding water quality criterion for TSS and effluent characterization parameters.</p>
12	<p>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 antidegradation 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.</p>	11	Written	Anti-Degradation Analysis	<p>Please see response to comment 1 (NPDES). SGI does not propose a new, additional or increased discharge with this renewal application. The Department’s Water Quality Antidegradation Implementation Guidelines are outlined in Technical Guidance Document (TGD) 391-0300-002. A change in flow rate based solely on precipitation does not constitute an additional or increased discharge, which would trigger a new antidegradation analysis in the Department’s implementation guidelines, since there has been no change in drainage area to the ponds. Chapter 7 of the TGD outlines the requirements for permitting new, additional or increased discharges. The capacity of Pitts Pond 2 has been increased to 100 year/24 hr design and the pumping capacity of Pitts Pond 1 and Pitts Pond 2 has also been increased. These modifications were not necessary for treatment purposes but rather to reduce the frequency of a point source discharge to Unnamed Tributary to Toms Creek as part of the nondischarge alternative, which is consistent with the antidegradation requirements.</p>

13	<p>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.</p> <p>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 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, 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.</p>	11	Written	Anti-Degradation Analysis	Please see response to comments 1 (NPDES) and 12 (Anti-Degradation Analysis). The discharge rate and frequency is dependent on the amount of rainfall in excess of the design capacity of Pitts Pond 1 and Pitts Pond 2. As noted in the response to comment 1, the capacity of Pitts Pond 1 and the pumping capacity of Pitts Pond 1 and Pitts Pond 2 have been increased which will result in a reduction in the frequency of discharges to Unnamed Tributary to Toms Creek.
14	<p>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.</p>	11	Written	Anti-Degradation Analysis	Please see response to comments 1 (NPDES) and 12 (Anti-Degradation Analysis). The pumping capacity at Pitts Pond 1 and Pitts Pond 2 has been increased to reduce the potential frequency of a discharge to the Unnamed Tributary to Toms Creek.

15	<p>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 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.</p>		Written	Surface Water Quality & Article I § 27	<p>The current designated use of Toms Creek is High Quality-HQ, Cold Water Fishes-CWF, Migratory Fishes-MF. DEP is required by law to review permit applications such as SGI's in accordance with established laws and regulations and the Pennsylvania Constitution. DEP takes seriously its obligations to do this. DEP concurs that Article I, Section 27 of the Pennsylvania Constitution is a central consideration during DEP's review of environmental permit applications.</p> <p>Regarding the SGI NPDES permit renewal application and the underlying surface mining permit, DEP has fully considered the environmental effects of its action to approve the application and has determined that this approval will not result in the unreasonable degradation, diminution, depletion or deterioration of the environment. The permit application process itself regulatorily required SGI to provide extensive detailed information related to the environmental effects of the Pitts Quarry, including but not limited to effluent characterization consistent with 40 CFR 122.21(g)(7) and 122.26(c)(1)(E); whether there is a reasonable potential to cause or contribute to an excursion from the water quality standards or contribute to a violation of the public water supply narrative water quality standards; and whether there are sufficient evaluation of and measures taken to prevent violation of the aquatic life narrative water quality standard.</p> <p>In addition, as extensively catalogued and detailed elsewhere in the Comment Response document, DEP specifically required SGI to provide additional and updated information as a result of the application review and public participation, and DEP's awareness of hydrologic and stormwater management matters unique to the SGI site, general nuisance questions, surrounding natural resource and recreation concerns, and the presence of naturally occurring asbestos (NOA). The information was provided over an extended review period, with a public hearing conducted and public participation provided. Meanwhile, throughout the SGI application process, DEP's Cambria District Mining Office – which has considerable knowledge of and experience with oversight of the SGI operation – coordinated internally with other DEP mining offices, other DEP regional offices, DEP's Central Office, and other Commonwealth agencies to evaluate the issues raised as a result of this permit application. DEP thus brought to bear its own team of expert geologists, engineers, and other technical professionals to address the various issues raised by the SGI applications.</p> <p>By coordinating its action with multiple other DEP offices, DEP has pursued issuance of the SGI NPDES renewal permit in a holistic fashion. Further, the review and permitting was done in an impartial manner that gave due regard to the interests of both the current citizens and future citizens of Pennsylvania.</p> <p>The SGI NPDES renewal permit also contains numerous detailed special conditions to address the specific issues presented by the SGI application for the Pitts Quarry. These special conditions and other requirements of the permit build in multiple layers of protection and conservatism.</p> <p>In addition, because NPDES permits expire every five years, any issues that may arise in the interim will be part of DEP's periodic consideration. DEP may also revisit the conditions of the NPDES permit at any time if circumstances warrant and need not wait until another renewal period has passed.</p> <p>By pursuing a vigorous review of the SGI NPDES permit renewal application, DEP met its Article I, Section 27 obligations and satisfied its trustee duties by acting with prudence, loyalty and impartiality with respect to the beneficiaries of the natural resources impacted by the DEP decision.</p>
16	<p>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.</p> <p>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. 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.</p>	11	Written	Surface Water Quality & Existing Use	<p>Please see the response to comment 15 (Art. I, § 27). The current designated use of Toms Creek is High Quality-HQ, Cold Water Fishes-CWF, Migratory Fishes-MF.</p> <p>The Department is required by 25 Pa. Code § 93.4c to make a final determination of existing use protection for a surface water as part of a final permit or approval action. The Department has determined that the existing use of Toms Creek for the reach for this NPDES Permit No. PA0223239 is consistent with its current designated use of High Quality – Cold Water Fishes, Migratory Fishes.</p> <p>The Friends of Toms Creek submitted a rulemaking petition for redesignation according to 25 Pa. Code § 23, which was accepted by the Environmental Quality Board for study on July 21, 2020. The petition requests the Toms Creek basin, from its source to Copper Run, be redesignated to Exceptional Value. Consistent with 25 Pa. Code § 93d (relating to processing of petitions, evaluations and assessments to change a designated use), the Department provided notice of the evaluation in the Pennsylvania Bulletin on October 24, 2020 and on the Department's website on October 23, 2020. In addition, notifications were sent to the petitioner, local municipalities, county planning and conservation district offices. The Department agrees that the Clean Streams Law, the antidegradation regulations and the Pennsylvania constitution are applicable and require the Department to make a final determination of existing use and to prevent the unreasonable degradation, diminution and depletion in its final decision. The Department also agrees that public input is a required and important element of its decision-making process. DEP is undertaking the evaluation of the existing use status and review of the proposed activities consistent with its constitutional, statutory and regulatory responsibilities.</p>

17	<p>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.</p>	11	Written	Endangered Species (Bog Turtle)	<p>SGI’s permit employs a nondischarge alternative for most discharges to Unnamed Tributary to Toms Creek. The Department has determined that there is no reasonable potential for occasional discharges from the emergency spillways in excess of the 10 year/24 hour and 100 year/24 hour storm events to cause or contribute to a water quality violation. NPDES Individual Permit Condition number 4 of the NPDES permit imposes additional monitoring requirements for point source discharges to the Unnamed Tributary to Toms Creek and prohibits degradation above background conditions. Therefore, no impacts to the Bog Turtle are anticipated.</p>
18	<p>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 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 decisionmaking. 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 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.</p>	11	Written	Surface Water Quality & Existing Use	<p>The current designated use of Toms Creek is High Quality (HQ)-Cold Water Fishes-(CWF), Migratory Fishes (MF). A protected use of Exceptional Value does not necessarily prohibit discharges or permitted activities. For the Pits Quarry NPDES Permit No. PA0223239 the Department has determined that the existing use of Toms Creek is consistent with its current designated use of HQ-CWF-MF. The existing use evaluation considered the qualifications described at 25 Pa. Code § 93.4b(b) (Qualifying as an Exceptional Value Water). The public comment period provided for the draft permit satisfies the public participation requirement for an existing use determination as part of the NPDES permitting process. The Department reviewed all relevant data available as part of the existing use evaluation including benthic macroinvertebrate data collected by Dr. Ben Stout, Ph.D. in 2016; data collected by Mr. Scott Bush with GHD Consultants in 2020, as well as DEP data collected in 2011, 2014, 2018 and 2019. Dr. Stout’s sample results do not meet the Department’s Index of Biotic Integrity lower quartile score, used by the Department to rank exceptional value stations. Surveys of Toms Creek were conducted in 2011 and 2014, both indicating that the existing use of Toms Creek is High Quality – Cold Water Fishes. Subsequent to the 2014 surveys, DEP staff collected additional data from the Toms Creek basin in 2018 and 2019, which also demonstrates an existing use of High Quality – Cold Water Fishes. Additional data collected by Mr. Scott Bush with GHD was submitted by the Friends of Toms Creek as part of a rulemaking petition for redesignation. The additional data submitted by Mr. Bush did not include the appropriate quality assurance materials that the Department would need to evaluate the data. DEP data collection efforts in 2011, 2014, 2018 and 2019 provide a consistent existing use determination of High Quality – Cold Water Fishes for Toms Creek. In addition to the biological qualifier at Pa. Code § 93.4b(b)(1)(v), the Department also evaluated additional exceptional value qualifying criteria under § 93.4b(b). Those criteria considered include: 1) The water is located in a National Wildlife refuge or a State game propagation and protection area (§ 93.4b(b)(1)(i)); 2) 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 (§ 93.4b(b)(1)(ii)); 3) the water is an outstanding National, State, regional or local resource water (§ 93.4b(b)(1)(iii)); 4) the water is a surface water of exceptional recreational significance ((§ 93.4b(b)(1)(iv)); 5) the water is designated as a “wilderness trout stream” by the Fish and Boat Commission following public notice and comment ((§ 93.4b(b)(1)(vi)); 6) the water is a surface water of exceptional ecological significance ((§ 93.4b(b)(2)). Upon review, the Department determined that the reach of Toms Creek in the vicinity of the discharge regulated under NPDES permit No. PA0223239 was not located in: a) 1) National wildlife refuge 2) State game propagation and protection area 3) Designated State park or State forest natural area 4) National natural landmark 5) Federal or State wild river 6) Federal wilderness area, or 7) National recreational area. Due to Michaux State Forest encompassing portions of the Toms Creek basin in the vicinity of the discharge, the Department evaluated antidegradation criteria listed in § 93.4b(b)(1)(iii) – the water is an outstanding National, State, regional or local resource water. Outstanding National, State, regional or local resource water is defined at 25 Pa. Code § 93.1 as, “A surface water for which a National or State government Agency has adopted water quality protective measures in a resource management plan, or regional or local governments have adopted coordinated water quality protective measures along a watershed corridor.” Coordinated water quality protective measures is defined at 25 Pa. Code § 93.1 as,“(i) Legally binding sound land use water quality protective measures coupled with an interest in real estate which expressly provide long-term water quality protection of a watershed corridor. (ii) Sound land use water quality protective measures include: surface or ground water protection zones, enhanced stormwater management measures, wetland protection zones or other measures which provide extraordinary water quality protection. (iii) Real estate interests include: (A) Fee interests. (B) Conservation easements. (C) Government owned riparian parks or natural areas (D) Other interests in land which enhance water quality in a watershed corridor area.” The Department evaluated water quality protective measures included in DCNR Bureau of Forestry’s State Forest Resource Management Plan. The Plan contains “Aquatic Habitat Buffer Guidelines” that provide operating procedures to be followed when conducting management activities in or near aquatic habitats. One purpose of the guidelines is to protect water quality. The procedures utilize inner buffers zones as a critical area of protection that allow only minimal human activity (e.g. tree cutting can only occur to protect property and human safety). The inner buffer zones range from 30 feet to 200 feet. Inner buffer zones of 200 feet are applied to Wilderness Trout Streams and Wild Rivers, whereas an inner buffer zone of 135 feet is applied to EV streams. For HQ streams, a 30-foot inner buffer zone is required, and coupled with a requisite 105-foot outer buffer zone, provides a total habitat buffer of 135 feet. Stream buffer protections qualify as water quality protective measures that are incorporated into a resource management plan. The water quality protective measures described in DCNR – Bureau of Forestry resource management plans meet the “outstanding National, State, regional or local resource waters” definition and would otherwise apply to stream segments where the Michaux State Forest is situated along watershed corridors in a manner that provides protection to substantial reaches of the corridor within the Toms Creek basin. The Toms Creek mainstem originates near the edge of Michaux State Forest and flows south through State forest and private property before turning east; picking up flow from two small tributaries, one which originates within State forest lands before traveling across private property, the other does not flow through State forest lands. Toms Creek flows east where it once again begins to flow through State forest lands and where additional tributaries; one within State forest lands, one not, and a third mostly within; confluence with Toms Creek before exiting Michaux State Forest for the last time. There are portions of the Toms Creek basin where Michaux State Forest is situated along watershed corridors in a manner that provides protection to substantial reaches, however there are portions of the basin that include the reach in the vicinity of the discharge regulated under NPDES permit No. PA0223239 where protection is not provided to substantial reaches that does not satisfy the “outstanding State resource waters” qualification at § 93.4b(b)(1)(iii). The Department typically evaluates “outstanding local resource waters” by identifying and reviewing “coordinated water quality protective measures,” which require legally binding measures coupled with a real estate interest. Typically, these measures are presented in conservation easements that are held in perpetuity by or that benefit certain governmental entities. Local conservation easements must be situated along the watershed corridor in a manner that provide protective measures to substantial reaches of the corridor, and also require that such measures be “coupled with” an interest in real estate, as described at § 93.1. Definitions - “Coordinated water quality protective measures”. The Department was unable to identify such protective measures within the basins surveyed. The “exceptional recreational significance” EV criterion described at 25 Pa. Code § 93.4b(b)(1)(iv) may be applied to Toms Creek since it is currently designated High Quality. The area surrounding Toms Creek offers recreational opportunities including ATV riding, hiking, camping, fishing and hunting opportunities. These activities are not uncommon in this area or within the Commonwealth and do not satisfy this EV qualification. Toms Creek is not classified as a Wilderness Trout Stream and does not meet this EV criterion described at ((§ 93.4b(b)(1)(vi)). A surface water of exceptional ecological significance is defined as a</p>

	<p>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.</p>			<p>surface water which is important, unique or sensitive ecologically, but whose water quality as measured by traditional parameters (for example, chemical, physical or biological) may not be particularly high, or whose character cannot be adequately described by these parameters. These waters include thermal springs or wetlands which are exceptional value wetlands under 25 Pa. Code § 105.17(1) (relating to wetlands). The DEP reviewed information gathered for the Pennsylvania Natural Heritage Program and reported in a 2002 Natural Heritage Inventory of Adams County, Pennsylvania (The Nature Conservancy 2002). The information did not identify any surface waters with statewide or local ecological significance. No areas were identified that tie Toms Creek to rare or endemic ecological community types. The commenter does mention bog turtles (<i>Glyptemys muhlenbergii</i>), which are federally listed as threatened under the Endangered Species Act and listed as endangered under 58 Pa. Code § 75. Although threatened and endangered species status alone, is not an EV qualifier, such species are provided protection through the Department's permitting and approval process (See implementation of antidegradation regulations at 25 Pa. Code Section 93.4c(a)(2)).</p>
<p>19</p>	<p>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 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.</p>	<p>11</p>	<p>Written</p>	<p>Anti-Degradation Analysis (Nondischarge Alternatives)</p> <p>Please see response to comment 12 (Anti-Degradation Analysis).</p>
<p>20</p>	<p>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 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.</p>			<p>SEJ (Updated)</p> <p>Please see response to comments 1 (NPDES) and 12 (Anti-Degradation Analysis). An updated SEJ is only required when the applicant proposes a new, additional or increased discharge. However, the Department continues to evaluate SEJs at each permit renewal. With the previous permit renewal issued July 11, 2016, the Department imposed additional monitoring requirements for discharges to Unnamed Tributary to Toms Creek via the emergency spillways of Pitts Pond 1 and 2 and prohibits a degrading discharge. This data will be utilized to develop nondegrading limits if required once sufficient data is available. These monitoring requirements have been retained with this renewal as NPDES Individual Permit Condition number 4.</p>

21	<p>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.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</p>	11	Written	SEJ (Violations)	<p>SGI's SEJ was approved on September 7, 1994. Current SEJ requirements did not become effective until July 17, 1999 and the approved SEJ is not subject to those new requirements. The violations cited for Pitts Quarry were related to blasting and not related to the NPDES permit No. PA0223239 or the associated SEJ. Charmian Plant NPDES permit No. PA0009059 discharges to Miney Branch designated as a Cold Water Fishes (CWF) and is not subject to an SEJ or nondegrading effluent limits. To date, SGI has not been issued any NPDES violations for the Pitts Quarry NPDES permit No. PA0223239. The Charmian Plant Discharge Monitoring Reports (DMR) for outfall 001 for the Lower Mill Ponds are submitted by SGI on a quarterly basis. A review of the sample analyses submitted by SGI over the last five (5) years shows that the highest reported Total Suspended Solids (TSS) was 38.0 milligrams per liter (mg/L) on December 20, 2018. The TSS of outfall 001 ranged from non-detect (ND or less than the laboratory detection limit) to 38.0 mg/L with an average TSS of 10.6 mg/L. In addition to the DMRs submitted by SGI, the Department collects samples from outfall 001 during inspections. Over the past five (5) years, the Department has collected 18 samples. A review of the 18 samples collected by the Department show that the highest TSS was 178 mg/L collected on July 23, 2018. The TSS of outfall 001 of samples collected by the Department ranged from < 5 to 178 mg/L with an average of 19.8 mg/L. The Department wrote a compliance order for the sample collected on July 23, 2018. Since the compliance order issued on July 23, 2018, SGI has taken measures to upgrade the Lower Mill Ponds by: 1. Grouting an abandoned discharge point (P-29) to eliminate a leak that was identified in the Fall of 2018; 2. Added the use of filtration to outfall 001; 3. Upgraded an existing sediment basin to allow for additional retention of surface water runoff prior to entering the Lower Mill Ponds. Recent discharge samples from outfall 001 collected by SGI and the Department show compliance with the effluent limitations with TSS ranging from ND to 21.0 mg/L.</p>
22	<p>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 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 to 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.</p>	11	Written	SEJ (Economy)	<p>Please see response to comments 20 (SEJ, Updated) and 21 (SEJ, Violations).</p>
23	<p>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.</p>	2	Written	NPDES	<p>SGI's mining permit already contains specific monitoring requirements for surface and groundwater in the vicinity of the quarry. 25 Pa. Code §77.533 addresses the requirements for replacement of public and private water supplies that have been affected by surface mining operations. SGI is also required to maintain a water loss bond to ensure a financial mechanism is in place to restore or replace any affected water supply in the event SGI cannot do so.</p>

24	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.	14	Written	Surface Water Quality & Aesthetics	Please see response to comment 6 (Aesthetics/Economy).
25	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?	13	Written	Reclamation	SGI is required to post a bond to cover the reclamation liability on each permit in accordance with 25 Pa. Code § 77.59. This liability is calculated based on the cost to the Department to complete the reclamation should the permittee become incapable of completing it. Bond rates are periodically evaluated by the Department and updated rates are published in the Pennsylvania Bulletin. The noncoal bond rates were most recently updated on February 15, 2020. Currently, SGI has \$4,920,554.00 in reclamation bond posted for the Pitts Quarry as surety. The Department has determined that this bond amount is sufficient to complete the required reclamation should SGI go into forfeiture.
26	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?	13	Written	Bonding	Please see response to comment 25 (Reclamation).
27	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?	13	Written	SEJ	SGI discharges stormwater into Miney Branch occasionally, which discharge is regulated under the NPDES standards set by both state and Federal regulations. Discharge limitations are designated to protect the receiving stream's water quality, and the water is analyzed twice per month when discharging to verify its compliance with the regulations. These results, as well as the results of in-stream sampling, are reviewed by SGI and the Department on a quarterly basis. SGI and the Department take necessary action to ensure Miney Branch is protected. Currently, Miney Branch is not listed as impaired. SGI has been operating in the Toms Creek Watershed since the mid-1960s when the West Ridge Quarry was opened. The current High Quality-HQ, Cold Water Fishes-CWF, Migratory Fishes-MF designation of Toms Creek exemplifies the effectiveness of the installed water handling system, and no changes to the system are proposed with this application. SGI appears committed to being a good steward of the environment and uses a number of protocols each day with the safety of people and the environment in mind. In addition to environmental safety measures, SGI tests the water of Toms Creek regularly to ensure water quality is stable and reports those water quality findings to the PADEP. The SEJ sets forth in detail the benefits to the area and state of the operation of the quarry. While SGI is headquartered in nearby Hagerstown, MD, its five plants are located throughout the country with two located in Pennsylvania. Each of these facilities offer gainful employment at rates higher than the average household income in their respective locations and impact their respective regional economies significantly in the form of jobs, indirect jobs, purchases from suppliers, taxes, and charitable contributions. SGI's Charmian plant employs approximately 160 people. Most employees live within 30 miles of the facility, including towns in Pennsylvania and in neighboring Maryland. The Charmian facility is a supporter of the local economy through its wages, taxes, and hiring of local contractors to complete most work on the site, among other considerations. The Charmian plant in Blue Ridge Summit, PA, is the company's oldest and largest facility, started in 1923 by R.J. Funkhouser & Co. Inc., which also was headquartered in Hagerstown, MD. The SGI quarry mines certain types of volcanic rock and relies on very specific geologies suitable for surface mining. This location has the availability of this unique reserve and the necessary supporting infrastructure.
28	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.	13	Written	Northern Tract	According to SGI and as understood by DEP, SGI has supported and partnered with a number of environmentally minded organizations, including The Institute at Renfrew and Strawberry Hill Foundation, and regularly contributes to charitable causes in the communities that surround the Charmian facility. While SGI does regularly provide monetary donations to charitable organizations, it does not pay groups or individuals to speak on behalf of or show support for it or its operations. SGI has taken many steps to eliminate pollution from its operations, employing many environmental controls and operations that go above regulatory standards as detailed in its application. SGI is also installing a new road to decrease local traffic. SGI's blasting impacts are consistently well below regulatory limits. SGI takes many steps to safely and responsibly conduct operations, adhering to and in many cases surpassing industry standards, DEP requirements, and with safeguards in place to protect people and the environment. The Charmian facility, which opened in 1923, has a very specific geology that makes it appropriate for surface-mining activity. The quarry mines metabasalt rock that is processed to manufacture roofing granules for shingles; construction aggregates that help keep roadways safe, and rock fines used to remineralize nutrient-depleted farmland and help increase crop yield in agriculture. Early results from a study at University of California, Davis, indicate that these metabasalt rock fines help capture carbon from the atmosphere when used in agriculture. These products require daily activity at the mine, as well as regular transportation of products to and from the site. Despite the high level of activity required to support daily operations at the site, SGI strives to be respectful to its neighbors.
29	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?	13	Written	Surface Water Quality & Existing Use	SGI is required by its permit to conduct surface and groundwater monitoring in the vicinity of the Pitts Quarry and report those results to the Cambria District Office on a quarterly basis. In addition, the NPDES permit mandates self monitoring and reporting of each NPDES outfall on a monthly basis with the results submitted to the Department on quarterly basis. The Department also periodically collects its own samples for compliance purposes. For situations where there may be a discrepancy between Department samples and operator samples, split sampling may be conducted. The Department also conducts independent testing when evaluating streams for impairment, attainment or reclassification. Those evaluations are completed by the Bureau of Clean Water.
30	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.	13	Written	NPDES	State and federal regulations require an NPDES permit if a point source discharge will occur. While SGI does employ nondischarge alternatives by directing the water via pumping to the Charmian Plant NPDES permit No. PA0009059, 100% of the water cannot be controlled onsite. Therefore, an NPDES permit is required for any discharge that may occur from the emergency spillways when the pond and/or pumping capacity is exceeded. The basis of original permit issuance remains current. Storm and pit water is to be pumped to the Charmian Plant for discharge and a point source discharge to Unnamed Tributary to Toms Creek will only occur when there is a mechanical failure, the pumping capacity is exceeded, or during a storm event that exceeds the pond design specifications.

31	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.	13	Written	Reclamation & Bonding	Please see response to comment 25 (Reclamation).
32	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.	15	Written	General	The Department duly notes this comment.
33	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 consequence 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.	12	Written	Surface Water Quality	NPDES Individual Permit Condition number 4 of the NPDES permit imposes additional monitoring requirements for point source discharges to Unnamed Tributary to Toms Creek and prohibits degradation above background conditions.
34	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 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	3	Written	Surface Water Quality & NPDES	Please see response to comment 33 (Surface Water Quality). As part of the monitoring program for the recently issued Northern Tract permit, SGI will be completing annual macroinvertebrate surveys of Toms Creek upstream and downstream of the permit area. This data will be utilized by the Department to evaluate potential impacts to Toms Creek from SGI's mining activities.
35	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.	3	Written	NPDES	Please see response to comment 30 (NPDES).
36	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.	3	Written	NPDES	Please see response to comments 1 (NPDES) and 30 (NPDES).
37	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.	3	Written	Surface Water Quality & NPDES	Please see response to comment 4 (DEP Regulation).
38	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. 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.	10	Written	Surface Water Quality	SS-5 is a downstream monitoring point on the Unnamed Tributary to Toms Creek located downstream of Pitts Pond 1-outfall 001 and Pitts Pond 2 outfall-002. SS-5 is sampled by SGI on a quarterly basis for both quality and flow. A review of the past four (4) years of monitoring data collected from SS-5 show that the pH ranged from 7.05 to 8.08 Standard Units (S.U.), iron concentrations from Non Detect (ND) to 3.2 milligrams per liter (mg/L), manganese concentrations from ND to 0.10 mg/L, aluminum concentrations from ND to 1.3 mg/L, Total Suspended Solids from ND to 93 mg/L and Sulfates from 6.8 to 31 mg/L. This data was compared to the last four (4) years of monitoring at upstream monitoring point SS-9 located on the Unnamed Tributary to Toms Creek. SS-9 is the upstream monitoring point above outfall 001 and 002. The analysis for SS-9 show that pH ranged from 6.20 to 8.36 S.U., iron concentrations from ND to 2.20 mg/L, manganese from ND to 0.14 mg/L, aluminum from ND to 1.10 mg/L, Total Suspended Solids from ND to 107 mg/L and sulfates from 14.8 to 50.7 mg/L. A review of the samples with elevated metal and total suspended solids correlate with high flow events; however, during these sampling events outfalls 001 and 002 were reported to not be discharging. In addition, it should be noted that upstream monitoring point SS-9 had higher concentrations than the downstream monitoring point SS-5. SGI has not reported a discharge from Pitts Pond 1-Outfall 001 or Pitts Pond 2-Outfall 002 in the last four years since that last NPDES renewal date of July 11, 2016.

39	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)	10	Written	PNDI (Bog Turtle)	This permit application does not contain any expansions or modifications and is not subject to the PNDI review requirements. However, issuance of a permit cannot affect the continued existence of an endangered or threatened species or result in the destruction or adverse modification of their known critical habitats (25 Pa. Code §77.126(a)(10)). DEP has adequate staff and funding to satisfy its obligations. The presence of the bog turtle was addressed in the comment and response document prepared for the issuance of the Northern Tract Quarry which is available for public review on the Department's website, and which was a consideration in this review of the NPDES permit renewal. No adverse impacts to the bog turtle or its critical habitat are anticipated with the renewal of the Pitts Quarry NPDES permit.
40	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.	10	Written	PNDI (Bog Turtle)	Please see response to comment 39 (PNDI - Bog Turtle).
41	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.	10	Written	Blasting	Pennsylvania regulations require that blasting be monitored for ground vibration and air blast. Those regulations set limits for airblast and ground vibration and prohibit damage. 25 Pa. Code § 211.151(c) states that all blasts shall be conducted in a manner that meets the maximum allowable peak particle velocity as indicated by the U.S.B.M. Z-Curve at the closest building or other structure designated by the Department. 25 Pa. Code § 211.151(d) states that blasts shall be conducted to control air blast so that it does not exceed the maximum allowable air blast of 133 dB. The Department's stringent limits for ground vibration and airblast are set so that levels below the limits will not cause damage to buildings or other structures. It is required under the regulations that blasting be monitored for ground vibration and air blast. The seismograph reports of the site blast records indicate the air blast levels generated by the blasting. If the air blast levels from the blasting exceed 133 dB at a building it is a violation of the regulations and an enforcement action will be taken. So far, ground vibrations and air blast generated from the blasting at the SGI quarry have not exceeded the Department's stringent regulatory limits.
42	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.	10	Written	Surface Water Quality	There are no fungicides in use or stored at the Pitts Quarry. Chemicals in use and/or stored at the Pitts Quarry include diesel fuel and lubricating oil for equipment and vehicles. As required by the NPDES permit, SGI has a Preparedness, Prevention, and Contingency (PPC) Plan and a Spill, Prevention, Control, and Countermeasure (SPCC) Plan to address the accidental discharge of products which could adversely impact the environment. There have been no reported spills at the Pitts Quarry.
43	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—in 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.	10	Written	Bog Turtle	Please see response to comment 39 (PNDI - Bog Turtle).
44	"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 mühlenbergii. 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.	10	Written	Wetlands/Bog Turtle	Please see response to comment 39 (PNDI - Bog Turtle).

45	<p>A minimum of four (4) surveys per wetland site are needed to adequately assess the site for presence of bog turtles.</p> <ul style="list-style-type: none"> • 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. <p>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.”</p> <p>(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)</p>	10	Written	Wetlands/Bog Turtle	Wetland impacts are not anticipated with the renewal of the NPDES permit. Please see response to comment 39 (PNDI - Bog Turtle).
46	<p>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.</p>	10	Written	Wetlands/Bog Turtle	Please see response to comment 39 (PNDI - Bog Turtle).
47	<p>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.</p>	10	Written	Asbestos	The Department duly notes this comment. Further, the results of ambient air quality testing and hundreds of industrial hygiene tests submitted to DEP show no threat to public or worker health. The presence of naturally occurring asbestos was addressed in the comment and response document prepared for the issuance of the Northern Tract Quarry which is available for public review on the Department's website.
48	<p>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 (See Appendix 1)</p>	10	Written	Historical	This permit application does not contain any expansions or modifications and is not subject to the Cultural or Historic Resource review requirements. The presence of the 1863 Confederate Army Retreat Path was addressed in the comment and response document prepared for the issuance of the Northern Tract Quarry which is available for public review on the Department's website. No adverse impacts to the 1863 Confederate Army Retreat Path are anticipated with the renewal of the Pitts Quarry NPDES permit.
49	<p>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?</p>	5	Written	NPDES	Please see response to comment 30 (NPDES).

50	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.	5	Written	Stream Classification & Bog Turtle	Please see response to comments 16 (Surface Water Quality & Existing Use), 17 (Endangered Species - Bog Turtle), 18 (Surface Water Quality & Existing Use), and 43 (Bog Turtle).
51	What does the inspector test for? Does he look for pollution when collecting samples? Why don't they do macroinvertebrate testing?	9	Oral	Testing / Water Quality	The Mine Conservation Inspector (MCI) collects water samples that are typically analyzed for pH, alkalinity, acidity, total iron and total suspended solids that are sent to the Department laboratory for analysis. The common field measurements collected by the MCI include flow, field pH, and specific conductance. Additional field and laboratory parameters may be analyzed at the discretion of the Department. Pollution is not always readily visible in the field and in most instances requires laboratory analysis for confirmation. When pollution is suspected by the inspector, laboratory samples are collected and compliance action is taken if necessary depending on the laboratory results. The MCI does not complete macroinvertebrate studies as this is typically done by the Bureau of Clean Water which has qualified professionals for completing macroinvertebrate studies.
52	Why does SGI have ponds because there is a big pit right next to the ponds? Why can't SGI make a connection between the stormwater runoff from the road and the pit?	9	Oral	Erosion & Sedimentation / NDA	The Pitts Ponds 1 and Pitts Pond 2 collect stormwater runoff from mining affected areas located outside of the pit. The sediment ponds are designed to allow sufficient settling of suspended solids prior to discharge. SGI has employed a nondischarge alternative (NDA) at the Pitts Quarry and can, when necessary, divert surface runoff to the active pit for additional storage. Also, please see response to comment 30 (NPDES).
53	One concern raised about this permit is the frequency of flooding and the ability of SGI to prevent stormwater overflows into Toms Creek. As Governor Wolf's office has recognized in a press release two days ago, and I quote, a flood event can take place at any time. And the effects of climate change will continue to make storms more frequent and more intense, making flood preparation and prevention efforts even more critical. SGI has not offered a no discharge alternative for this permit, but has stated that it will not discharge to Toms Creek except in extreme events. Extreme events can be very common. Heavy rainfall events have been much more common with every passing year due to climate change. Indeed, last Saturday's Harrisburg Patriot News reported that the past four years have been the wettest on record in the Pennsylvania.	1	Oral	Flooding	Please see response to comment 2 (NPDES).
54	SGI bases what they call it the improbability of discharges into Toms Creek based on calculations of capacities of holding ponds to contain stormwater in the event of 500 and 1,000 year rain events and pumping of holding ponds away from Toms Creek into Pitts Quarry and the Lower Mill Ponds system, as well as a reduction in the drainage area. If a permit to discharge is to be granted by DEP, these kinds of commitments need to be included as conditions in a permit that can be enforced. A permitted discharge based on a ten year, 24-hour rainfall event is totally inadequate. In conclusion, we ask DEP to take a hard look at the information submitted to be sure that the company has offered real solutions to the problems identified.	1	Oral	Pond Design	Please see response to comment 2 (NPDES). Any discharge to the Unnamed Tributary to Toms Creek that may occur must be nondegrading in accordance with NPDES Individual Permit Condition number 4 of the NPDES permit.
55	Today the focus is on water, specifically the renewal of the NPDES permit. That permitting process has been delegated by 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 rubberstamped, with little regard for changing demographics, exponential expansion of SGI operations, and including the advent of dyeing to create colorful roofs, and changing weather patterns and the degradation of surface waters. And more importantly, the impact on groundwater, the primary source of drinking water in Fairfield and surrounding communities. PADEP may be poised to rubberstamp this pending application. I hope not. 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 wastewater from the Pitts Quarry and the proposed expansion onto Pine Hill, all the way to southern sediment ponds. History and current conditions show that southern Miney Branch Creek is a degraded mess. Will PADEP now permit northern pristine waters to be degraded?	2	Oral	NPDES	Miney Branch is currently listed as an attaining stream that supports aquatic life. The Pennsylvania Fish & Boat Commission completed an aquatic biology investigation of Miney Branch on October 15, 2019. Four benthic macroinvertebrate sample sites were chosen for the investigation, based on their proximity to the location of SGI's discharge as well as previous sample locations for a similar investigation conducted in 1995. While results for the 2019 investigation were similar to that of the 1995 investigation, it was noted that water quality in the Unnamed Tributary to Miney Branch has likely improved since 1995. Additionally, no observations of obvious siltation problems associated with SGI's discharge were noted at any of the sampling locations. The investigation concluded that an approximate 200 yard reach between SGI's discharge and the mouth of the Unnamed Tributary to Miney Branch should be considered impaired for aquatic life use. However, this conclusion is qualified in that the timing of the investigation may have played a role in the results since benthic macroinvertebrates are best sampled during spring timeframes. Recommendations of the investigation are to conduct a similar investigation during more favorable conditions to confirm the results. Due to restrictions related to the COVID-19 pandemic, a stream assessment was not possible in 2020. An assessment will be completed in 2021 to confirm the results of the 2019 assessment.
56	SGI operates on 800 acres, maybe more. 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 flood wastewater and direct its stormwaters within its interior. Is there 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 groundwater, the source of drinking water, is protected from harmful mining contaminants.	2	Oral	NPDES	Please see response to comment 30 (NPDES).
57	Elaborate engineering goes only so far. What happens when elaborate engineering fails or when the pumping stops? Presumably, the groundwater will leach back into the pits and combine with the waste tailings. We know with certainty that long term, large scale mining like SGI's modifies the circulation of air and water and may damage or destroy streamside habitats and groundwater resources many miles from the actual mine site.	2	Oral	Engineering	Pitts Quarry has existing collection ditches to contain stormwater runoff which is conveyed to stormwater management ponds (Pitts Pond 1 and Pitts Pond 2). All pit water is pumped to the Charmian Plant Lower Mill Pond system prior to being discharged. Pitts Quarry has seven perimeter groundwater monitoring wells to monitor the groundwater quality and quantity. These monitoring wells, in addition to the stream monitoring points (please see response to comment 3 - Surface Water Quality), are used to evaluate the surface and groundwater conditions both during and after mining at the Pitts Quarry.
58	Protecting pristine surface waters of Toms Creek, its tributaries, wetlands and fragile ecosystems are all important. 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 groundwater 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's high quality classification. Many believe it satisfies all the requirements of EV status. And if the surface waters are not elevated to EV status, we need an updated social and economic justification.	2	Oral	Independent Study	The Department is currently evaluating a petition to upgrade the status of Toms Creek to Exceptional Value. Please see response to comment 16 (Surface Water Quality & Existing Use).

59	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 U.S. Department of Interior indicates that the Blue Ridge Aquifer is recharged in part by surface waters of Toms Creek and its multiple tributaries. The recharge happens apparently over many, many years. Notably, the Fairfield municipal well identified as Well Number AD-754 of the study, appears to be less than five miles away from the point at which SGI seeks a permit to discharge pollutants. It is sheer folly to risk the purity of our drinking water to mining discharges.	2	Oral	Source Water Protection	DEP's Cambria District Mining Office contacted DEP's Southcentral Regional Office regarding the draft source water protection plan for the Fairfield Municipal Authority. The Northern Tract Quarry and Pitts Quarry are located within the proposed wellhead protection Zone III and approximately 2,500 feet east of the wellhead protection Zone II boundary as shown in the proposed Figure 3-2 Source Water Protection Zones from the draft plan currently under review. Therefore, since both the Pitts Quarry and Northern Tract Quarry are located outside the proposed wellhead protection Zone II for the Fairfield Municipal Authority, there are no restrictions that prohibit surface mining activities.
60	The Adams County water plan describes four important 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, quote, specially protected, closed quote. The lines are very clear. This permit renewal must be denied to prevent pollution migration into our groundwater. 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 special protection watershed.	2	Oral	Anti-Degradation Analysis	The Department has fully considered the environmental effects of its action to approve the NPDES renewal application and has determined that the NPDES renewal will not result in the unreasonable degradation, diminution, depletion or deterioration of the environment.
61	Specialty Granules employs about 150 people. Liberty Mountain employs about 1,500 people in the winter season. They also employ about 400 people in the golf season. So the direct economic impact in our community that's fed and nurtured by Toms Creek is far greater than SGI's. So for the spiritual reasons, for recreational reasons, for economic reasons, we call upon the state to stiffen their spine, to deny the renewal of the permit pending review that would call upon the company to reconsider the way that they discharge their poisoned waters. Based on what Thomas and Hazel said, if they have 800 acres on a beautiful piece of property, let's have them, I know they can do it. I used to work in the natural gas industry. There's a right way to do fracking. There's a wrong way to do fracking. This company is a very bright and capable company. There are ways that they can contain that wastewater so that it not poison Toms Creek. I know they can do it, and we call upon the state to make it happen.	4	Oral	SEJ	Please see response to comments 12 and 60 (Anti-Degradation Analysis). The use of nondischarge alternatives will limit the frequency of discharges to Unnamed Tributary to Toms Creek. Any point source discharge that does occur must be nondegrading. The Charmian facility has been in operation for almost 100 years at its current location. SGI currently employs about 160 full-time employees, many of whom are second and third-generation employees at the Charmian facility. NSSGA estimates that for every direct job in the mining industry, there are 5 additional indirect jobs created for a total estimated job impact of 960 direct and indirect jobs. SGI pays over \$15 million annually in wages and benefits to employees at the Charmian Facility. Greater than 90% of employees live within 30 miles of the facility. SGI has been operating quarries in the Toms Creek watershed since the mid-1960s. During that time, Toms Creek was evaluated and listed as a High Quality-HQ, Cold Water Fishes-CWF, Migratory Fishes-MF. Additionally, the facilities that capture stormwater runoff at the Pitts Quarry have not discharged into Toms Creek since 2011, despite very large stormwater runoff events during the last 10 years. During the discharge event in 2011, there were no ill effects to aquatic life in Toms Creek. SGI has instituted measures well beyond regulatory obligations to reduce the likelihood of a discharge from the Pitts Ponds. The 60-year history of mining in the watershed, as well as a nearly 10 year period without a discharge, combined with the well-documented High Quality status of Toms Creek are all examples of the success of the measures implemented by SGI.
62	My Husband and I live in Fairfield and a portion of Miney Branch runs through our property, which is part of our landscape. And currently, with Toms Creek, it has a lot of aquatic nature. It has fish. It has special places. It still has clean water. Ours does not. Ours has been trashed. The grit mill has blatantly dumped into Miney Branch. So who is to say that Toms Creek is not going to turn out the same way? The last 25 years, it has just really gone downhill. We've lost four feet of depth in the creek. It has shifted behind the house nine feet, to the other side nine feet. We have boulders in the bank that are exposed. We're losing the rest of the trees there. We have no fish. We have no aquatic nature in those waters. We used to have a muskrat. We have no clue where he went to, but we know it's probably to better water. We have seen schools of goldfish. We've seen all kinds of different fish in Miney Branch, but it's been a long time since that's happened. I know for a fact that there was a major issue on our property in 2008. January 2nd, I contacted DEP. And one would think that they would hold themselves to a higher quality and a higher standard, but that doesn't happen. It took three months for someone to finally make contact with me. And the only reason they showed up on my property was to check the flocculent level in the water. And that is a chemical that is put into what they're pumping so that the particles connect. The chemical connects to the particles, it weights it down so that it settles to the bottom of the creek. We have four foot of that in our creek. We don't even let our dogs in that water. We don't know if it is even fit for animals to drink. How do we know what flocculent is something that can be ingested and not cause issues down the way? Nobody's ever done any testing on that. You shouldn't have to go to the level that you have to fill the water with flocculent so that you can empty a sediment pond blatantly into a creek. That should never happen.	6	Oral	Water Quality	Since the last NPDES renewal for Pitts Quarry issued on July 11, 2016, there have been no reported discharges from Pitts Pond 1 or Pitts Pond 2. All of the water from Pitts Quarry (active pit, Pitts Pond 1 and Pitts Pond 2) is pumped to the Charmian Plant Lower Mill Ponds and discharged under the NPDES permit PA0009059. SGI is required by its NPDES permit to submit bi-monthly (2) samples per month for each permitted outfall. The Charmian Plant Discharge Monitoring Reports (DMR) for outfall 001 for the Lower Mill Ponds are submitted by SGI on a quarterly basis. A review of the sample analyses submitted by SGI over the last five years show that the highest reported Total Suspended Solids (TSS) was 38.0 milligrams per liter (mg/L) on December 20, 2018. The TSS of outfall 001 ranged from non-detect (ND or less than the laboratory detection limit) to 38.0 mg/L with an average TSS of 10.6 mg/L. In addition to the DMRs submitted by SGI, the Department collects samples from outfall 001 during inspections. Over the past five years, the Department has collected 18 samples. A review of the 18 samples collected by the Department show that the highest TSS was 178 mg/L collected on July 23, 2018. The TSS of outfall 001 of samples collected by the Department ranged from < 5 to 178 mg/L with an average of 19.8 mg/L. The Department wrote a compliance order for the sample collected on July 23, 2018. Since the compliance order issued on July 23, 2018, SGI has taken measures to upgrade the Lower Mill Ponds by: 1. Grouting an abandoned discharge point (P-29) to eliminate a leak that was identified in the Fall of 2018; 2. Added the use of filtration to outfall 001; 3. Upgraded an existing sediment basin to allow for additional retention of surface water runoff prior to entering the Lower Mill Ponds. Recent discharge samples from outfall 001 collected by SGI and the Department show compliance with the effluent limitations with TSS ranging from ND to 21.0 mg/L. Also, please see response to comment 55 (NPDES).
63	They're telling us that they have a filtration system they're putting in place in order to protect Toms Creek. That's just to appease people. It takes more than just one facility to purify water of that magnitude before you can let it drizzle into a stream. You don't need to blatantly pump it into a stream. There are other ways to maneuver and shift and transport water away than to just take it and turn it right into a stream. I was quite unhappy with the service that I had gotten from DEP. So then again I started calling again. And the following month a supervisor showed up at my house. And so I wanted to go over the pictures that I had from all the damage from a lot of the runoff, a lot of the heavy rain and from the pumping into the creek. And he informed me he was not there to look at my pictures. He was just there to humor me. So that's not a very high standard coming from the Department of Environmental Protection. We should be able to depend on them. That grit mill, SGI, they pay their fines whenever they receive written notice for infractions on the property. They pay those fines. That's okay. But nobody ever follows through to make sure that the problems and the situations are taken care of. They just continually go on. And now we still have that continual problem on our property, so how do we know Toms Creek is not going to turn into the very same thing? My money is on Toms Creek being trashed because we've never really been shown and there's never really been any testing to say, hey, it's going to be protected. It's going to take more than one facility. So my money is denying the renewal of the permit until we have ample proof that you can purify, filter water, before it even makes it to the point of Toms Creek or Toms Creek will be another lower Miney Branch.	6	Oral	Engineering / Treatment	Please see response to comment 21 (SEJ/Violations).

64	As president of Adams County Trout Unlimited for four terms, currently the treasurer and I are involved with Pennsylvania Fish and Boat Commission for 43 years in their stocking program. I'm also the cooperative nursery manager behind the Fairfield High School and McSherrstown Fish and Game. We raise 4,600 trout annually. We started in 1975, and since 1976 we've been stocking Toms Creek. Toms Creek annually from the Fish and Boat Commission gets 2,000 trout and they're mostly brook trout. Brook trout is the most susceptible fish to disease, pollution and something you may not know, warm water. If the temperature in the water reaches 70 degrees the fish starts suffocating. Then the Fish and Boat Commission is called in to figure out why the fish are dying. It's very important to keep cold water in Toms Creek the way it is now. Those tributaries are cold water tributaries that enter Toms Creek. Once they hit a warm temperature that's facing 70 degrees they will suffocate.	7	Oral	Water Quality / Water Temperature	Discharges to Unnamed Tributary to Toms Creek will only occur during a precipitation event in excess of a 10 year/24 hour storm and/or a 100 year/24 hour storm event. Therefore, water will only be held in the ponds for a short duration prior to discharge limiting the ability for thermal impacts.
65	At the last hearing, I raised some objections to the bog turtle survey that's been and I was kind of surprised to find online irregularities that have occurred in this process. I've got letters obtained, just putting in the record now, so the public can actually see them now, an important bog turtle sighting in the record by the Pennsylvania Fish and Boat Commission. And this - it appears - here's the letter. It's the February 21st, 2019 referring back to SGI. In 2017 you submitted your project review request. The 2016 bog turtle record was not yet included in the state's PNDI system. In addition, the wetland in question was not included in the December 16, 2015 phase one survey report conducted by Skelly and Loy, therefore, the service's conclusion in the January 2000 correspondence regarding bog turtles may not be accurate. It goes down further to say, in order to determine if your project may affect bog turtles, more information regarding the project and hydrological connection to the wetland is necessary. In light of the new information, the 2016 bog turtle occurrence record, the service would like to request a field visit of the site in order to better understand possible impacts of the wetland's hydrology. This was apparently not just put into the record. February 21st, 2019 is the date on that the objection previously filed was I don't know. A written objection into the record was based on the bog turtle survey with Skelly and Loy that was performed back in December 8, 2015. And at the time was then over two years old. And on its face states that it's invalid if it's more than two years old. And yet it's still permitted to be filed into the record. We've actually had an occurrence in the upper Toms Creek Watershed. And why bother with the survey now because the survey only indicates the presence of potential habitat. It's not to determine presence. You've had a sighting up above the quarry, the proposed tract, and this current permit also because I understand this to be a stormwater discharge permit into Toms Creek. You've had a sighting down below reported. I reported that at the last hearing. A lot of the more recent research into bog turtle habitat has shown we should be looking along undercut streams, as well as stream banks, as well as adjacent areas, because they're being found in surprising areas because of the loss of habitat, substantial loss of habitat previously. And I'll submit the sites for the research and the statements also. I want to submit a written record on that following this.	10	Oral	Bog Turtle	Please see response to comment 39 (PNDI - Bog Turtle).
66	I wanted to raise another objection because we did a site visit last weekend up to where the outfalls from the Pitts Quarry, which I understand this is that permit. There's a lot of sedimentation washing down from the hillside there. The roadside is almost right next to their property. There's very little berm there. And actually there's a drainage shield and that is it between the fence and roadway. On the other side, there's a culvert coming off I think it's the upper outfall because I can't fix them precisely that because I checked through the GPS coordinates. They both looked to be on site in the middle of the tract. But the one there's a small tributary coming off their property from that one of the outfalls comes down through the culvert. It passes under the Springs Road. On the left side of the culvert, there's a lot of sedimentation that's been washed down through and coating the rocks, there's a good layer of muck coating the rocks coming off site from that. And this is the same outfalls we're talking about, you know, going into Toms Creek where it goes up above Mount Hope Road and Michaux State Forest. Because if you follow the branch, it'll take a little south along Springs Road along the quarry, you see the signs and metal markers on the trees the whole way down through that way. If you go up through down Mount Hope Road along Springs Road to the north side, there's part of the forest in there and then Toms Creek is over 50 to 100 feet within the forest.	10	Oral	Sediment	Please see response to comment 38 (Surface Water Protection).
67	And the other note I wanted to make -and again, I want to file a written comment into this but it's high quality. It's classed as high quality water now. And why isn't this being considered for exceptional waters with the occurrence of the bog turtle. It has exceptional ecological value as one of the criteria under exceptional water because of the presence of an endangered species, the bog turtle.	10	Oral	Stream Classification	Please see response to comment 58 (Independent Study) and comment 16 (Surface Water Quality & Existing Use).
68	And the other note I wanted to make, I saw they did a test for fibers in the water. And of course, you know, they didn't find -but this has been a lot of emerging paradigm in the testing of non asbestos form fibers from dust as being just as hazardous to human health as the asbestos form fibers. Asbestos is not a rock substance itself. It's not a specific rock itself. There's like six different types of rocks that are actually considered the it's the shape and size of the fiber. And a non-asbestos form fibers, some of them are smaller than what they consider to be asbestos. So and it's the size of the fiber. There's been a lot of research shown out there the crushing of rock and what they call cracker dust, is extremely toxic. And the long-term health hazard, OSHA currently has an exception for that. But that regulation they're under right now they're doing whether to add that to the potential. Again, meanwhile, when you see the dust going and it's not really considered toxic, but it can be just as deadly as asbestos, which is a very serious concern both occupationally and to the public.	10	Oral	Asbestos	SGI collected asbestos water samples from the Charmian Plant Lower Mill Pond 3. The sampling consisted of three 24-hour composite samples from Outfall 001 on May 20-21, June 4-5, and June 12-13 of 2019 that were analyzed using EPA Method 100.2. In addition to collecting three 24-hour composite samples for Charmian Plant Lower Mill Pond 3, SGI also collected a dip sample from Pitts Quarry Pond 1 outfall 001 on September 18, 2019. The asbestos results are as follows: Charmian Plant Lower Mill Pond 3 < 3.2 Million Fibers per liter (MFL) on May 20-21, 2019, < 0.2 MFL on June 4-5, 2019, and < 0.2 MFL on June 12-13, 2019. Pitts Pond 1 - Outfall 001- 0.2 MFL. The Department collected split water samples with SGI on February 11, 2020 from the upper and lower J-stand for analysis for asbestos using EPA Method 100.1. The results for the upper J-stand were < 1.0 MFL while the results for the lower J-stand were < 0.52 MFL. The maximum contaminant level (MCL) for asbestos in drinking water is 7 MFL longer than 10 µm. Although drinking water standards are not applicable or enforceable in Miney Branch or Toms Creek, the asbestos results of the samples collected from Charmian Plant Lower Mill Pond 3 and Pitts Pond 1-Outfall 001 for asbestos show concentrations of asbestos less than the drinking water standard of 7 MFL. Samples collected from Toms Creek show asbestos concentrations at < 0.2 MFL. Therefore, there is no reasonable potential for discharges from the Pitts Quarry to contribute to a violation of the drinking water standard for asbestos at the closest downstream public water supply. The renewal application is for the NPDES permit and does not involve the SGI air quality permit. An air quality review and monitoring plan associated with the mining and processing of metabasalt was addressed in the comment and response document prepared for the issuance of the Northern Tract Quarry which is available for public review on the Department's website.

69	<p>I heard the comment earlier about DEP - DEP losing personnel and everything. And I want to submit something also concerning U.S. Fish and Wildlife Service, because I'm doing some research. I ran across their annual conference down in Norfolk, Virginia - because they had one of the workshops on the bog turtle, on some of the latest research and stuff. And some of the comments they made was that because of staff reductions and budgets cuts they had been prioritized. What bog turtle sites and areas they would be - have to protect, I think they were going to be up to about 150 in the one statement. I mean, there's a transcript. And for the record, want to submit that also, just because of the irregularities and how they sign off on the one letter for the PNDI and the failure to register the bog turtle survey time. Again you've had the study. Again, site one is not that's only habitat, potential habitat. That's not present. We have presence. We actually have a record stating we have a presence, the Fish and Boat Commission. Their action plan, I think, requires them to do more than they have done here.</p>	10	Oral	Bog Turtle / Staffing	Please see response to comment 39 (PNDI - Bog Turtle).
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