PO Box 4023 184 South Main Street Washington, PA 15301



P) 724.229.3550 F) 724.229.3551 www.coalfieldjustice.org info@coalfieldjustice.org

Center for Coalfield Justice Submission to the Citizen's Advisory Council on Act 54

Thank you for the opportunity to provide comments on the 4th Act 54 Report covering the time period from 2008-13 to the Citizens Advisory Council. My name is Patrick Grenter and I am an environmental attorney and the Executive Director of the Center for Coalfield Justice, which is located in Washington, Pennsylvania. The Center for Coalfield Justice was founded in 1994 by individuals organizing against the harm and destruction of longwall coal mining. We have since expanded our mission to work on issues related to extractive industries generally, primarily in Washington and Greene counties. CCJ has nearly two thousand members and supporters, most of who live here in the crosshairs of the fossil fuel extractive industry, Washington and Greene counties. These comments will serve as an abbreviated version of our more detailed technical comments that will be later submitted in writing.

It is critical to note immediately that any discussion of the fourth Act 54 Report, covering 2008-2013, will fail to take into account data that was either not submitted to DEP at all, was not submitted in a format that could be analyzed meaningfully, and/or data that DEP lacks the capacity to store, manage and organize in a way that allows for evaluation. The report contains multiple references to the need for DEP to address organizational and management issues with all of the data they collect. We ask the CAC to consider recommending that DEP implement an information system and standards for data that are enforced to facilitate meaningful evaluation of information, as well as accessibility, and transparency for citizens of the Commonwealth who wish to review DEP files. DEP's failures in information technology and management have rendered any attempt to comprehensively review this information impossible.

The effects of underground mining in the Commonwealth are staggering: the 46 mines operating between 2008 and 2013 undermined a total of 31,343 surface acres. Approximately 40% of the acreage undermined by bituminous coal mining in Pennsylvania is within Greene County, and 19% in Washington County. The mining in Washington and Greene Counties is performed with both longwall and room-and pillar-methods.

A total of 96.05 miles of streams were undermined between 2008-2013. Of these, 50.59 miles of streams were undermined by longwall mining methods, while 45.04 miles were undermined by room-and-pillar methods. (VII-15). About 77% of the total miles of streams undermined by longwall techniques, 39.2 of the 50.59 miles, experienced flow loss, pooling or both. Thus, according to the report, only 23% of

the total miles of streams undermined by longwall techniques did not experience mining-induced flow-loss or pooling. (VII-20).

This data paints a picture, showing that DEP is flagrantly failing in its duties to protect and preserve Pennsylvania's streams. Under applicable Pennsylvania law, the Department is precluded from issuing a permit for full extraction longwall mining where the applicant predicts that the flow of a stream will be diminished or eliminated, either temporarily or permanently. 25 Pa. Code § 86.37(a)(3). Yet, the Department continues to expose Pennsylvania streams to an activity that is shown to destroy or impair streams 77% of the time it occurs, whether it is predicted or not.

Now, a reasonable thinker may assume that given how willing DEP is to issue longwall mining permits, there must be some assurances that the streams will be restored or somehow returned to their prior condition. However, the report shows that "while mining companies are generally either able to repair, replace, or financially compensate for damages to structures, the ability to repair damage to streams remains largely unknown." (I-7) This is very troubling considering that DEP operates according to a model which allows longwall mining to seriously impact streams, even to the point of destruction, and then relies on stream mitigation procedures to try to remediate and reconstruct the streams after mining and subsidence have occurred.

Now let's look into some details about stream impacts and restoration efforts that were detailed in the report. Two of the five stream investigations conducted by DEP during the assessment period were found to have relied on inadequate data and observations before reaching determinations that impacts were "Not due to underground mining." For two more investigations currently underway, the flow data available to DEP is inadequate. (VII-28).

Following up on stream investigations that were still pending during the last assessment period, the University found that an investigation of reported flow loss in a tributary to North Fork of Dunkard Fork, a stream that was the focus of three other stream investigations during the last assessment period, had been withdrawn from consideration by DEP. The investigation was withdrawn without explanation the day after the mining company requested an extension for development of a mitigation plan. (VIII-3).

Seven stream investigations had a final resolution status of "Not recoverable: compensatory mitigation required" meaning that all other mitigation efforts have failed and the company will have to compensate the state monetarily for the loss of these streams. In total, eight cases represent stream impacts that have not recovered from mining-induced flow loss. (VIII-5).

Four stream investigations from the 3rd Act 54 assessment remain unresolved and have been open for 7-8 years.

The University also re-sampled the biological communities for five streams that were impacted and studied during the 3rd Act 54 assessment. Of these five streams, two showed improvements in TBS from the 3rd assessment while three experienced declines.

The Department has an obligation to demand more, both from the industry and from themselves. The public trusts the DEP to advocate on their behalf; to have the strength and will to only issue permits that do not pose a grave threat to the environment or public health. The report shows that the DEP is not meeting that obligation to Pennsylvania residents; past, present and future.

The CAC should recommend that DEP establish a technical committee or workgroup, either composed of staff or independent experts, tasked with studying the success of stream restoration activities undertaken in the Commonwealth to determine whether it is actually possible to restore a stream to its pre-mining condition once it has been damaged by underground coal mining. DEP and this potential group should also consider also the potential for weathered stream grouting material to cause or contribute to increases in conductivity and pH in streams.

A major theme that runs through the report is the way that one effect can result in a variety of impacts which in turn affect the surrounding ecosystem. Specifically, disturbances in stream flow and chemistry result in a variety of adverse effects on the entire stream ecosystem, including excessive stream vegetation growth, increases in undesirable insect species, reduced aquatic insect diversity, reductions in fish populations, habitat space reduction, higher water temperatures, and lower oxygen. (I-15-16). Flow loss or disruption in streams can have far-reaching and long effects. The Department is responsible for performing a Cumulative Hydrologic Impact Analysis (CHIA) and the Applicant is responsible for including a Prediction of Hydrologic Consequences (PHC) in its application. The Department should have all of the information required to make regulatory decision that protect ecosystems at their disposal. This seems to be a matter of enforcement.

For this reason, we propose that DEP adopt an ecosystem view that more effectively considers cumulative impacts in its approach to approving and issuing mining permits. The current piecemeal revision system in place allows environmental impacts that evade meaningful review by failing to account for changes over time and the extensive, lasting consequences of mining. For example, the report found that as permit revisions are submitted, baseline hydrological information becomes more concise, less detailed and fails to reflect hydrological changes that have occurred over the life of the project, or since the last revision. Rather than accounting for the changes to baseline hydrology, applicants assume that the baseline is the same as the original permit submission or last revision. This practice is against Pennsylvania law and regulations and needs to be changed. In light of the significant negative impacts of operating in this manner, it flies in the face of logic

and established principles of environmental science to allow the permitting process to continue this way.

The CAC should consider recommending that DEP require collection and reporting of more frequent hydrologic data (i.e., at 15 or 30 minute intervals) rather than once daily. Frequent readings will help provide more comprehensive data sets which are necessary to evaluate the impacts of underground mining because they allow DEP to take into account natural variability of streams, springs and other water supplies. The collection of this data should be formalized and communicated to DEP in a standardized format on a regular schedule. Finally, Hydrologic Monitoring Report (HMR) points need to be increased and located closer to impacted and at risk water sources. HMR data needs to be reported more frequently than quarterly in order to effectively provide insight into affected water supplies.

The effects of underground mining in the Commonwealth are staggering: the forty-six mines operating between 2008 and 2013, undermined portions of 6,744 surface properties, totaling 31,343 surface acres. (III-29, III-12). This resulted in a total of 389 reported effects during the assessment period with 19 occurring at non-active mining operations." (IV-2). Two-hundred-and-thirty or 96.6% of the "Company Liable" effects occurred in association with longwall mining. (IV-6). Despite a reduction in the amount of surface acres undermined by longwall mining, which causes highest numbers of subsidence related impacts, over the last 5 years; the number of reported structural and water supply effects did not decrease. (III-29).

Act 54 does require that all structures impacted by underground coal mining be repaired or that the owner compensated. However, there is no recognition of the greater community impacts of underground mining. "In the 4th assessment, most structure impacts were mitigated through unspecified agreements, pre-mining agreements, or by the company purchasing the property" (IV-6). This seemingly straightforward sentence in the report reveals some of the deep community impacts of underground mining. Underground mining is systematically depopulating portions of the Commonwealth. As subsidence related impacts increase and coal companies seek to remedy those impacts by purchasing property, more and more people take the money and move out of the area or even out of state. After facing the insidious impacts of having your home undermined, it is logical to leave the area rather than buying another home in the region where you may face similar or more severe impacts from another mine, whether new or legacy. When these buyouts are combined with the buyouts that often occur in the areas where Coal Refuse Disposal Areas exist and are proposed, the scope of the problem can begin to be understood.

The information I've discussed here has been at the Department's disposal, and they have chosen to continue to permit and facilitate the wholesale destruction of southwestern Pennsylvania streams. The CAC must demand more from the Department. Specifically, the CAC should:

-Address data organizational and management issues by implementing an information system and standards for data that are enforced to facilitate

meaningful evaluation of information, accessibility, and transparency.

-Overhaul the permitting and enforcement process, which in practice allows mining companies to simply revise existing permits continuously without meaningfully updating the baseline hydrologic information.

-More effectively implement an ecosystem view of permitting, which considers cumulative impacts in its approach to approving and issuing mining permits.

-Full extraction mining should not be permitted under streams.

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