

DRAFT MINUTES
CITIZENS ADVISORY COUNCIL
April 19, 2011

CALL TO ORDER AND APPROVAL OF THE MINUTES

Chairperson Hatala called the meeting to order at 11:15 a.m. in Ballroom A of the Crowne Plaza Hotel, Second Street, Harrisburg, PA. The following were present:

Joyce Hatala, Chair	Jim Clauser	Richard Manfredi
Michael Krancer, Acting Secretary	Gail Conner	Thad Stevens
John Walliser, Vice Chair	Jan Keim	Burt Waite
Cynthia Carrow	Pat Lupo	

Richard Manfredi moved approval of the March 15, 2011, CAC meeting minutes. Jan Keim seconded the motion, which was approved by a majority of Council members.

Chairperson Hatala welcomed and introduced Mr. Terry Dayton, newly appointed by the Speaker of the House, and asked Council members to introduce themselves.

PUBLIC COMMENT

Joyce asked for public comment on agenda items. Jeff Schmidt, Director of Sierra Club, PA Chapter expressed concern about the repeated lack of advance public notice regarding changes to Marcellus related policies and protocols. Mr. Schmidt urged Council to request advance notice from DEP of their plans to rescind existing policies and notice of plans to put out new policy for rule making for public comment. He also handed out copies of a newspaper article regarding the deep mining report.

CNRAC UPDATE

Kurt Leitholf, Executive Director of the Conservation and Natural Resources Advisory Council reported that Richard Allan has been named as the Acting Secretary of DCNR.

He reported that Growing Greener monies continue to decline, but DCNR still has some Key 93 money available. Terry Dayton suggested that one way to supplement Growing Greener monies might be through ‘in lieu of’ opportunities.

Currently, CNRAC is working on its annual report; they testified before the Game Commission regarding deer management, urging them to use science based information in their decision making.

CNRAC’s March meeting was held at the Bald Eagle Nature Inn. CNRAC was very impressed with the facility. There was discussion about infrastructure in state parks, and what might happen when it starts to fail, e.g., the ski lifts at Denton Hill State Park.

Burt Waite asked if there was any update on leasing and royalty income for drilling on DCNR lands. Kurt replied that the information is public and is likely posted on the web.

DEPARTMENT REPORT

Acting Secretary Krancer arrived at the meeting and offered to answer questions.

John Walliser asked for comment on the press reports that there had been a change in policy requiring central office review of any Marcellus related activities. Mr. Krancer emphatically denied that there was any change in policy directive or guidance to that effect. He stated that he is trying to invigorate enforcement and insulate it from legal challenge. They further want to seek consistency of enforcement for ALL programs, not just gas drilling. They are looking at trends in NOV's to better address issues before environmental problems are created.

Mr. Krancer reported that last week they had shut down two operations and noted that by law, such actions require sign off by the Secretary. Thad Stevens asked about one of the incidents, which had affected the Galeton water supply. Mr. Krancer elaborated that this situation had been compounded by DOT's withdrawal of permission for the company in question to use state roads; this issue had to be addressed in order for the company to comply with DEP's order to remediate.

Pat Lupo stated that she is concerned about the lack of notification to the public and particularly to CAC when policies and protocols are changed.

Jim Clauser asked about consistency in the 102 program. Mr. Krancer responded that improving consistency is one of his priorities.

Terry Dayton asked if the problem is with their plans or with implementation of these plans? DEP needs to take a close look at E&S plans up front to prevent problems rather than rely on enforcement after the fact. He stated that the mining program's protocol is more robust than the oil and gas program. Mr. Krancer responded that DEP may need to look at all E&S plans, not just those over 5 acres; he also noted that it may be appropriate to issue NOV's to consultants that prepare inadequate plans, in addition to the company that implemented the plan.

Jim Clauser asked about the previous administration's policy to remove conservation districts from review of E&S plans for drilling; Mr. Krancer said he would look into it.

Jan Keim asked whether or not wet weather discharges are considered violations. She said a local conveyor system has been overloaded since 1980 yet they add new hookups.

Burt Waite asked if Mr. Krancer has other priorities he is pursuing; Mr. Krancer stated that he would like to see shale operators stop using wastewater treatment facilities that don't remove bromide and other TDS.

ACT 54 DISCUSSION

In addition to CAC members and staff, the following were in attendance: George Ellis, Pennsylvania Coal Association; Josie Gaskey, Pennsylvania Coal Association; Richard Fox, Senate Environmental Resources and Energy Committee; Kurt Leitholf, CNRAC; Thomas Au, Sierra Club; Raina Rippel, Center for Coalfield Justice; Jeff Schmidt, Sierra Club; James A. Schmid, Schmid and Company; Aimee Erickson, Citizens Coal Council; Jeff McNally, ARIPPA; Rod Fletcher, DEP Bureau of Abandoned Mine Reclamation.

- Schmid and Co. was retained by the Citizens Coal Council and others to assess the 5-year report, and they released their review a few days ago. Stephen Kunz, Senior Ecologist with Schmid and Co. summarized their assessment of the report. *(See Appendix A. Powerpoint presentation is posted on CAC web site under Meetings)*
- George Ellis, President of the Pennsylvania Coal Association, provided an industry perspective on the report *(see Appendix B. Testimony is posted on CAC web site under Meetings.)*
- Aimee Erickson, Executive Director, Citizens Coal Council participated in the discussion, and provided follow up comments *(see Appendix D.)*
- Tom Au, Conservation Chair, Pa. Sierra Club, raised concerns about the need to assess and address water quality impacts, especially with regard to special protection waters.
- Raina Rippel, Center for Coalfield Justice *(see Appendix C. Letter is posted on CAC web site under Meetings)*

Burt Waite asked the panel if they felt that the report met the requirements of Act 54. He opined that each report has been better than those preceding it.

- Steve Kunz said that the report collected excellent data, but provided very little in the way of conclusions or recommendations. The report's neutrality does a disservice in that it didn't distill all the information, it only presents it. It is supposed to be a report card on the effects of underground mining.
- George Ellis stated that the report shows that Act 54 is working as intended.
- Jim Schmid said the none of the 3 reports have gone very far; they should address non-enforcement of NPDES permits, monitoring reports, hydrologic monitoring reports required of industry, NOV's, fish kills, etc. Terry Dayton stated that NPDES is not included in Act 54.
- Pat Lupo stated that the report should be more than a collection of data; the data needs to be analyzed, conclusions reached, and informed recommendations made.

Aimee Erikson stated that public hearings and public input are ignored. She invited CAC to come to Greene County to see the impacts for themselves. She stated that cumulative impacts need to be addressed. Raina Rippel concurred, and added that the cumulative impacts of Marcellus also need to be studied in conjunction with the impacts of deep mining.

Steve Kunz questioned the report's statement that "600 days for resolution of damage claims is adequate." Terry Dayton stated that delays are sometimes because a company is waiting for a neighbor panel to be complete before addressing damages.

John Walliser stated that hydrologic reports were NOT reviewed; do we need more information? Jim Schmid said that the new TGD (effective 2007) has resulted in more information being provided, but he was not sure if the information had been shared with the University of Pittsburgh, and that the data would have been from just part of the reporting period. It was not clear if Pitt saw enforcement, DMR, HMR information.
FOLLOWUP

Jeff Schmidt stated that they had tried to amend Act 54 to address various concerns, but were unsuccessful.

Additional discussion items included:

- Data was collected at the end of the reporting period; this process should begin NOW for the next reporting period, which is already well underway.
- Threshold of damage?
- Who reports damage? Either the company or the homeowner can report
- If the company owns/buys affected land, do they report damage? This practice has diminished property values in the whole area.
- Adequacy of angle of draw as the measure of presumptive liability.

John Walliser thanked everyone for their participation, and suggested that CAC consider a regional meeting in southwest Pennsylvania, to follow up on the issues discussed today, the TGD that was mentioned, etc.

Burt Waite moved adjournment, and Thad Stevens seconded. The meeting was adjourned at 3:00 pm.

Notice of the April meeting was published in a newspaper of general circulation in Dauphin County and mailed to individuals and offices in compliance with the Sunshine Act (1986-84). These minutes constitute the official record of the Citizens Advisory Council meeting; no official transcript is prepared.

APPENDIX A

The Increasing Damage from Underground Coal Mining in Pennsylvania A Review and Analysis of PADEP's Third Act 54 Report

Prepared for Citizens Coal Council (CCC) by Schmid & Company, Inc., April 2011

BACKGROUND

Pennsylvania's Bituminous Mine Subsidence and Land Conservation Act (BMSLCA) became law in 1966. Homes built before April 1966, as well as public buildings, noncommercial structures customarily used by the public (such as churches, schools, and hospitals), and cemeteries were forbidden from being damaged by subsidence from underground coal mines. The protection directly afforded to those structures indirectly benefited the streams, springs, wetlands, aquifers, parkland, and farmland in the vicinity of the structures.

Act 54 amended the 1966 mining law in 1994. Act 54 changed crucial language in the 1966 law. Where previously the "*prevention of damage from mine subsidence*" was required, Act 54 required merely the "*prevention or restoration of damage from mine subsidence*". Henceforth, damage would be allowed, but the Act mandated remedies only for individual structures and water supplies damaged by underground mining. While it was clear in 1994 that some surface damage would occur, it was less clear how extensive that damage would be, how much damage would need to be repaired, or how effective any restoration might prove to be. It also was unclear how much collateral damage to local and regional water resources, which previously had been protected by the 1966 law, was going to occur with no mandated compensation or restoration.

Act 54 also removed any incentive that might have existed under the 1966 mining law to either (A) improve room-and-pillar mining technology so that a higher percentage of coal could be extracted while still providing the necessary surface support, or (B) incorporate practices such as backstowing coal waste efficiently into longwall mining. Act 54 prudently included a requirement for regular five-year follow-up assessments of the effects of underground coal mining on surface structures, features, and water resources. The third such five-year review, prepared by University of Pittsburgh researchers for the PADEP, was released in January 2011. CCC retained Schmid & Company¹ to review comprehensively this latest Act 54 Report.

WHAT THE 3RD ACT 54 REPORT REVEALS ABOUT THE IMPACTS OF UNDERGROUND MINING

1. Impacts from underground coal mining are increasing.

Between the 2nd Act 54 Review Period (1998-2003) and the 3rd Review Period (2003-2008):

Acres undermined** +12% (34,051 → 38,256)

Properties undermined +18% (3,033 → 3,587)

Structures undermined +2% (3,656 → 3,735)

Total Reported Effects +14.4% (structures, land, water supplies) 1,090 → 1,247

¹ Schmid and Company, Inc., Consulting Ecologist, Media, PA; 610-356-1416; www.schmidco.com

Structures +31% (348 → 456)
 Land +86% (58 → 108)
 Water Supplies N/C (684 → 683)

** Although total underground mine acreage increased 12%, acreage of LW mines *decreased* by 10.5%, while acreage of R&P mines more than doubled (+108.6%). The area actually *undermined* by LW methods during the 3rd Review Period was just under 50%, *although there was no explanation in the report as to why this occurred.*

LWM = 17,605 ac.(46%) R&P=20,375 ac.(53%) Retreat = 276 ac.(<1%)
 (because every underground coal mine uses the R&P method in gates/entries)

2. LWM accounts for a hugely disproportionate number of impacts.

LW mines and R&P mines undermined approximately equal numbers of properties and structures (**during the latest 5-year review period**):

	R&P	LW
# Structures	1,879	1,856
# Properties	1,738	1,572

Nevertheless, longwall mining was responsible for:

- 100% of impacts to STREAMS**
- 95% of impacts to LAND**
- 94% of impacts to STRUCTURES**

Although the total number of structures undermined increased by only 2% from 2nd to 3rd Review Period, the number of *impacted* structures increased by 31%, and 94% of those structure impacts were due to LWM.

3. Resolution of impacts is taking very long, and is longer for LWM than R&P effects.

For reported effects to structures, water supplies, and land, 80% of the cases were resolved in 600 days or less. Conversely, 1 in 5 cases required more than 600 days to resolve.

The *average* time to resolve reported impacts for which underground mining was determined to be responsible was:

- 688 days (1.9 years) for streams,**
- 321 days for water supplies (reported on pg EX-3; inconsistent w/Sect. VI)**
- 206 days for land, and**
- 207 days for structures**

234 cases (34%) of water supply impacts reported during the 3rd Review Period remained unresolved at the end of the period. 32 separate water supply incidents which occurred during and were unresolved at the end of the 2nd review period remained unresolved 5 years later at the end of the 3rd review period; those 32 cases were *averaging* 6.8 years since originally reported.

The average time to final resolution: LWM R&P R&P Retreat

for water supply impacts	274 days	143 days	115 days
for structure impacts	238 days	107 days	n/a

One highly-publicized structure impact that occurred during the 3rd Review Period (and which is still unresolved) was the damage to the dam at Duke Lake in Ryerson Station State Park. That incident received only 2 brief mentions in the Act 54 Report (on pages V-8 and X-13), whereas the less damaging effects on interstate highways received an entire 26-page section.

WHAT THE 3RD ACT 54 REPORT DOESN'T REVEAL ABOUT THE IMPACTS OF UNDERGROUND MINING

1. Regional and cumulative hydrologic impacts of underground mining are still unknown.

The Act 54 Report regards wells as “water supplies”. But groundwater **aquifers** are the actual water supply, whereas wells are just individual receptacles in it serving individual homes. When mining disrupts the subsurface geology and alters the groundwater, it can cause wells to go dry or become polluted. A water supply effect is defined by PADEP and in the Report as “resolved” in many different ways, most of which have nothing to do with fixing the impacted aquifer. In less than 10% of the cases did the impacted well recover or get repaired *in situ*. In more than half the cases there was either an agreement reached between the mine company and the landowner (36%), or the company bought the property (13%), or public water was provided (7%), or the landowner was compensated monetarily (3%), none of which resolved the loss of local or regional groundwater. In 24% of the cases a new well or spring was developed, but even digging a deeper well to tap a deeper aquifer does nothing to repair the shallow aquifer that was affected. Act 54 removed widespread protections, but mandated restoration or compensation only for individuals’ homes and water supplies, leaving unaddressed and unresolved the collateral damage to public and community resources.

2. No attention is paid in this Act 54 Report to water quality impacts from mining.

Water quality impacts occur due to: A) subsidence-induced changes in streamflow, B) direct discharges to streams of pollutants from surface facilities of underground mines, and C) hydrogeological disruptions from subsidence that cause migration of methane, radon, and other pollutants into surface and subsurface waters. Marcellus Shale gas industry officials assert that some homes near gas well drill sites had methane in their well water *before* their drilling began, but a lack of pre-drilling (like pre-mining) baseline data precludes any definitive determinations. No monitoring data are being collected or analyzed to determine how often underground coal mine subsidence is causing methane pollution of groundwater.

3. Impacts to streams are not fully evaluated.

Stream impacts are tallied by PADEP and in the Report by “incident”, not length. This Act 54 Report notes that 114 miles of streams were undermined during the 3rd Review Period (77% by LWM), and that “all” of the impacts were a result of LWM. But no data are provided about how many miles of streams were impacted by underground mining or even the nature of those impacts --- how many suffered pooling, how many suffered flow loss, etc. In addition, there is no information about, or evaluation of, impacts to “Special

Protection” waters (the very best waterways in the State which are designated either “Exceptional Value” or “High Quality”).

4. There is no analysis or evaluation of the “predictability” of mining impacts.

Proponents of longwall mining contend that it is planned, controlled, and predictable. According to the CONSOL Energy website²: “*Subsidence caused by longwall mining is largely predictable which allows for better planning and accountability*”. Yet there are no statistics in the Act 54 Report on how *many* of its tallied impacts were *predicted*, so there is no evaluation of how closely *predicted* impacts align with *actual* impacts in terms of their frequency, location, or severity.

The accuracy and adequacy of models used to predict certain impacts (such as stream pooling) are not addressed in this Report, nor is the lack of predictive models for most other impacts (such as aquifer, surface water, and wetland losses). The Duke Lake dam impact in Ryerson Station State Park was not expected or predicted --- longwall mining was conducted the “proper” distance away from the dam, yet the dam was damaged nevertheless, and the public’s lake remains dry more than 5 years later. PADEP concluded that both that impact and “[p]revious documented incidents show that longwall mining has the potential to cause mining induced movements and damage at distances beyond the areas where customary subsidence theory would predict such impacts”³. This third Act 54 Report provides a brief discussion of the RPZ (rebuttable presumption zone) and the 35 degree angle of presumed influence [noting that 22% of LWM company-liable impacts to water supplies were beyond the RPZ], but it fails to offer appropriate conclusions.

5. Many relevant sources of information were not reviewed.

In its mandate for 5-year reviews, Act 54 specifically mentions “*the information contained in deep mine permit applications, in monitoring reports and other data submitted by operators, from enforcement actions and from any other appropriate source*”. Important monitoring data contained in PADEP mine permit files, such as HMRS (hydrologic monitoring reports) and DMRs (discharge monitoring reports), are not mentioned or evaluated in this Report. Likewise, there are no tabulations or analyses of permit violations or other enforcement issues. Consequently, the mandated Act 54 assessment process is being deprived of crucial information that should be used to evaluate impacts to water resources from underground coal mining.

6. There is no analysis of the economic costs of underground mining impacts.

In response to the 1st Act 54 report, the CAC had asked “*whether the department would be able to quantify how much effort has been made to prevent property damage and water loss compared to how much money has been spent to make repairs and replace water supplies. However, no cost information is included in the report*”. There continues to be no analysis of the costs of mining impacts, or comparison of underground mining methods in terms of economics or employment levels.

² <http://www.consolenergy.com/Powering/MiningProcess.aspx>

³ PADEP (Feb. 2010) Ryerson Station State Park, Damage Claim # SA1736, Interim Report (173 pages)

WHAT DOES THIS ALL MEAN IN TERMS OF ACT 54?

1. Act 54 is fundamentally flawed because it allows certain impacts to occur without any compensation or restoration.

When Act 54 removed the protections formerly afforded to structures, it removed the protections that indirectly had been provided to streams, springs, wetlands, aquifers, and other local and regional resources. Since there are no Act 54-mandated remedies for these collateral damages, the full scope of mining impacts is not being adequately tallied and analyzed by PADEP. Headwater streams, aquifers, and other water resources are being adversely affected by underground mining, but regional and cumulative hydrologic impacts are not being inventoried or addressed. Impacts are occurring to public and community resources, but restoration or compensation is being provided only for certain damages to some individual landowners.

2. Act 54 is fundamentally flawed because, where it requires compensation or restoration, those

remedies are incomplete and taking unacceptably long times to be realized.

“Resolution” of impacts often is partial or incomplete (as when metered public water is brought in to replace previously unlimited well water). Instead of being repaired, properties with damages to structures, land, or wells often are purchased by a mine company, causing neighborhood and community disruption. Resolution of impacts can take many years to be finalized.

3. Act 54, as presently administered by PADEP, appears to be in direct conflict with Article 1, Section 27 of the Pennsylvania Constitution.

When Act 54 was passed, it may have been unclear how extensive the impacts would be, or that the mandated remedies would not cover many significant collateral effects. The accumulated knowledge and experience gained over the last 16+ years, and especially in this latest Act 54 Report, demonstrate that damages from longwall mining are increasing, and that there exist practical alternatives which make those impacts unnecessary. In light of these facts, the residents of the coalfields and the public resources of the Commonwealth are being inequitably affected.

4. Act 54 needs to be revised.

The PADEP’s Act 54 Report highlights that underground mines using the R&P method are not causing significant impacts, while those using the LW method not only are causing significant impacts that generally require longer resolution times, but also are disproportionately responsible for causing those impacts. Valid concerns that were raised by CAC and others many years ago still are unaddressed nearly 17 years after passage of Act 54. Those concerns should be ignored no longer. False hopes and hollow promises that things are going to improve in the coming years without fundamental changes are not acceptable. Longwall mining has its advantages, and we are not suggesting that longwall mining necessarily should be prohibited. Yet changes to Act 54 clearly are warranted. The basic objective should be to allow underground coal mining, using any method, but only where surface resources will be protected and impacts will be avoided and minimized.

APPENDIX B:
**TESTIMONY Of George Ellis
President, Pennsylvania Coal Association⁴**

**Before the
PENNSYLVANIA CITIZENS ADVISORY COUNCIL
April 19, 2011**

Regarding The Effects of Subsidence Resulting From Underground Bituminous Coal Mining on Surface Structures and Features and on Water Resources: Third Act 54 Five-Year Report (2003-2008)

Introduction

Good afternoon. My name is George Ellis and I am President of the Pennsylvania Coal Association (PCA).

PCA is a trade association organization representing bituminous coal operators – both underground and surface – as well as other associated companies whose businesses rely on a thriving coal economy. PCA member companies produce over 80 percent of the bituminous coal annually mined in Pennsylvania (over 60 million tons in 2009), and all of the coal produced by the longwall mining method (almost 40 million tons).

We thank the Council for this opportunity to provide our perspective on the third five-year report on Act 54, which studied the effects of underground bituminous coal mining on surface structures, features and water resources for the period August 2003 to August 2008.

PCA's Perspective on the Report

Before one can analyze and comment on the report, one must fully understand the genesis and objectives of Act 54.

Act 54 was intended to reconcile the interests of mineral rights owners and surface owners. These were primarily issues of competing private property interests where mine operators acquired sub-surface rights to minerals, and surface owners acquired surface rights to their land. Both of these interests can be regulated and limited by the legislature in the public interest, but neither interest is compellingly superior to the other.

The legislature, in unanimously enacting Act 54, made a conscious public policy decision to balance these competing ownership interests more than they had been in the past.

⁴ **Pennsylvania Coal Association, 212 North Third Street, Suite 102, Harrisburg, PA 17102. P: 717-233-7900. F: 717-231-7610. Pacoal1@aol.com**

It gave more rights and protection to the surface owners than they previously had under the 1966 law that, at the time, governed mine subsidence. Essentially, the 1966 Act required operators to mine so as not to cause damage to the following limited class of structures in place as of April 27, 1966:

- Dwellings,
- Public buildings or noncommercial structures customarily used by the public,
- Cemeteries.

DEP implemented this provision by requiring that 50 percent of the coal had to be left in “support pillars” beneath this list of structures and if structural damage occurred, the operator was liable.”

This protection did not apply to water loss. Indeed, the 1966 law provided no protection or remedy to any surface owner whose source of water was affected by underground mining regardless of the date the structure was in place.

The law also offered no protection or remedy from subsidence damage to owners of structures built after 1966 (while the 1966 law did allow owners of post-1966 structures the right to purchase coal pillar support from the operator, this right was rarely exercised because it was too costly).

In recognizing that full extraction mining is more efficient, safe, and less environmentally damaging in the long run than other forms of coal mining, Act 54 also removed the statutory impediments to this mining technology.

The purpose of the Act was to allow operators to extract a higher ratio of coal in a responsible manner after receiving a permit from DEP, while being liable for any damage that the activity caused to overlying structures and any water supplies regardless of when they were built. It also expanded the class of structures afforded these protections to include commercial, industrial and agricultural structures and water supplies.

Essentially, the law created a replacement and repair remedy for damage caused by subsidence; it did not create a subsidence prevention standard. This was the legislative solution for balancing the rights of the landowner and coal operator.

Therefore, in determining whether implementation of the Act is meeting legislative intent, as is the purpose of the five-year report, one must evaluate the industry’s response to subsidence damage and water loss claims to see if those claims have been adequately resolved under the remedies provided in the law.

It should also be noted that the remedies in Act 54 provide more for the property owner and for the farming community, in terms of structural repairs or compensation and water replacement, than the corresponding federal standard or the standard imposed in other coal producing states where longwall mining operations are conducted.

Based on data collected and studies conducted to date, including this five-year report, it is clear that Act 54 is working as it was intended, operators are meeting their repair/restoration obligations in accordance with the law the mandates required by Act 54 are being met and the magnitude of damage caused by underground mining is limited and manageable.

Specific Comments

First, the authors of the report specifically cited representatives from three coal companies – CONSOL, Alpha and Rosebud – whose total underground mine production in 2009 amounted to about 90 percent of Pennsylvania’s total underground production – for willingly and fully cooperating with the University in making their data available, saving considerable time and effort in data gathering.

This responsiveness is indicative of industry’s attitude that the more public policy officials focus on accurate data, the more convinced they will become of Act 54’s effectiveness in balancing the property owner and coal owner’s rights.

Second, we need to put in perspective the limited scope of underground mining’s footprint on total land mass.

During the third assessment period, 50 underground mines were active undermining a total of 38,256 acres of land. Pennsylvania’s total land area is 44,820 square miles so underground mining has the **maximum** potential to affect about 1 percent of Pennsylvania’s total land mass.

In addition, the use of longwall mining technology to extract coal is employed in only two of Pennsylvania’s 67 counties – Washington and Greene.

Water Supplies

The report supports the contention that mining’s effect on water supply is limited in scope and not permanent.

According to the report, about 75 percent of water supplies undermined during the third assessment period had no reported impacts (2,106 wells, springs and ponds out of a total of 2,789).

Of the 683 cases with reported effects, 449 (66 percent) were resolved and the remaining 234 were pending a resolution (the status of which mainly ranges from currently implementing an agreed-to water replacement plan, waiting to install public water or reaching an agreement on operation and maintenance costs).

The average number of days to resolve water supplies’ reported effects was 321, although operators are required to provide temporary water to the landowner from the time the source is reported to be affected until a permanent supply is installed and useable.

Resolution strategies for recovering water supplies are often multi-step, especially when wells and springs are being replaced. For example, longwall mining subsidence takes approximately seven months to stabilize before meaningful repair can begin.

Among the other major factors leading to delays in resolving water replacement issues involve extending public water to a property and protracted private disputes over a final payment for operation and maintenance costs (O&M costs) of the replacement water source.

According to the report, public water is used as a replacement source by longwall operators about 20 percent of the time. If a public water source is the preferred option, the company must wait until mining is completed to avoid subsequent subsidence before the hook-up can occur. In addition, it takes time to physically extend the public water line to the property.

These water lines are installed at the company's expense and, as a result of using public water as a replacement source, the area of Washington and Greene Counties served by public water have increased more rapidly than it would have without mining.

Agreements over long-term O&M costs can also extend the resolution date. Operators are required to compensate the landowner for O&M costs attendant with a permanent water source. In some cases, the amount of that payment becomes an issue necessitating a negotiated settlement with DEP's assistance, which also adds time. However, the permanent supply is in place and usable until the payment dispute is resolved.

Other factors contributing to delays in final resolution of water loss claims include:

- Location of the water supply in relation to future mining,
- A determination of whether a groundwater supply needs to be reestablished,
- Allowing a period for the original supply to recover,
- Requiring a period for the ground to stabilize so the replacement supply is not transient,
- Private disputes where a homeowner may, for various reasons, deny an operator access to the property after mining and resist attempts to repair the damage.

It is significant to note that Act 54 allows the property owner, at any time during the water restoration process, to file a claim with DEP if he or she feels that the operator is not complying with the law. At that point, DEP must render a decision within 90 days.

We recognize that this is of little consolation to the property owners whose claims have not been fully resolved. Yet, the facts indicate that there is no trend or pattern of claims being neglected or ignored by operators.

Structures and Land

The report also confirms that the majority of undermined structures do not appear to have sustained damage due to subsidence and those that were damaged are being repaired.

During the assessment period, 456 structures with reported effects were found to have occurred out of a total of 3,735 structures undermined or just 12 percent.

Of the 456 cases, 441 (or 97 percent) have either been resolved or pending an interim resolution.

Also, there were 108 incidents of land impacted by underground mining out of 3,587 properties undermined, or just three percent.

Of these, 105 properties (98 percent) have either been resolved or pending an interim resolution.

Streams

During the assessment period, of the 55 streams or stream segments reported to have been impacted by mining, 20 have been resolved and 35 cases are either in some stage of the investigation process or a state of interim resolution, including:

- Monitoring flow,
- Measuring biological diversity,
- Granting open fractures,
- Altering stream gradients,
- Deregulating stream bonds,
- Augmenting flow,
- Promoting aquatic diversity, or health, or
- Repairing obstacles within the streams that impair flow.

The authors make it a point under this section to explain certain challenges that impeded their ability to make definitive judgments on stream impacts from underground mining because of the lack of permitting information collected during most of this assessment period. Due to this dearth of information, the authors go on to say that, "...many of the questions concerning what streams are impaired and, after mitigation actions, which have attained pre-mining stream flow and biological diversity standards are yet to be answered."

The authors also maintain that because of a technical guidance document that DEP recently began to implement, this data collection situation has been corrected. Under the document, protocols have been established for:

- Increasing the amount of technical information on streams required to be submitted by the permit applicant,

- Increasing the stream monitoring requirements,
- Assessing the biological health of streams, and
- Determining when a stream was impaired for low flow or degraded diversity and when it attained a resolution of the reported impact.

The authors also note that stream mitigation actions have increased dramatically through the three assessment periods while in other cases, "...**natural** processes have been successful since no impacts were observed in more than **half** of the streams undermined by **longwall** panels."

Finally, it is interesting to note that DEP routinely issues Water Obstruction and Encroachment Permits to other non-mining activities (e.g. land developers and highway builders) authorizing the enclosure or "fill" of streams. Why is the mining program held to a zero tolerance standard for unmitigated mining impairment to streams while other programs allow permanent impacts by water obstructions or encroachments?

Wetlands

A total of 93.9 acres of wetlands were identified as having been undermined during the assessment period.

According to the report, mining permits reviewed prior to 2007 contained very uneven reporting data so the authors had difficulties in trying to gauge mining's impact, if any.

As with streams, however, DEP instituted a policy guidance that took effect in 2007 that establishes a sound and precise protocol for delineating wetlands. As a result, the authors concluded that, "Thus all permit applications submitted after October, 2007 contained excellent pre-mining data that inventoried all wetlands down to sizes of a few hundredths of an acre."

179

According to the report, nine longwall panels undermined Interstate 79 during the 2003-2008 timeframe.

The authors noted that the damage associated with mining under the interstate was within the range of commonly observed distress concrete documented by the Federal Highway Administration. It went on to say that the vast majority of highway deformations were transient.

More importantly, no accidents were attributed to mine subsidence and driving restrictions were limited to reduced speeds and single lane traffic during times of active mining or repairs.

The study also found that it has been more cost effective to allow longwall mining to proceed than for the Commonwealth to condemn the amount of coal needed to provide support for the highway.

Conclusion

PCA and its member companies recognize that there are fundamental and legitimate property owner concerns about the impacts of mining. My testimony should not in any way be construed as industry's indifference towards these concerns or an attempt to marginalize them. We fully understand the apprehensions that people may have when they learn that their home will be undermined and we make every effort to work with them to return their home and lifestyle to normal after subsidence. While mining impacts are temporary and not a permanent disturbance, there still can be a significant impact on people's lives during the mining and post-mining process. As such, we are both mindful of and sensitive to these concerns.

Finally, when reviewing the background of Act 54, the Council should keep in mind the intent of the law, which was to provide a replacement or restoration remedy for damage caused by subsidence. This was the legislature's solution for balancing the rights of the landowner and coal operator. The intent was to balance the disparate rights of surface owners under the antiquated 1966 Subsidence Law, allow the use of modern mining technology and correct surface impacts from subsidence, not to prevent subsidence.

Within this context, PCA believes that the third five-year assessment report on Act 54 confirms that this law is working as it was intended and its damage repair and water restoration strategies are being carried out as intended.

Thank you for this opportunity to provide our perspective on the report.

APPENDIX C
Center for Coalfield Justice
Comments to Citizens Advisory Council
April 19, 2011

Introduction

On behalf of the Center for Coalfield Justice, we respectfully submit the following comments on the Third Act 54 Five-Year Report (August 2003 – August 2008). Thanks to Steve Kunz of Schmid and Company and the Citizens Coal Council for compiling a thorough review of the Act 54 Report. Rather than duplicate these comments, we primarily want to draw attention to the following additional concerns:

- The Third Act 54 Report inadequately addresses impacts to Ryerson Station State Park and Duke Lake Dam;
- Damage to Duke Lake Dam indicates a significant regulatory flaw, due to anomalous movements outside of the DEP-defined angle of influence;
- This damage was nonetheless conclusively determined by the Gannett Fleming field research and by DiGioia, Gray and Associates' concluding remarks to be attributed to longwall mining;
- Interstate 70 was also impacted by such anomalous ground movements;
- I-70 and Ryerson Station State Park represent two major infrastructure investments by the State of Pennsylvania;
- Citizens of the Commonwealth are being adversely impacted and not adequately compensated by coal mining companies, including damage to both public and private resources;
- Improved regulations and compensatory action needs to be taken to address the above concerns and adequately protect, restore and preserve public and private property in SWPA.

Respectfully submitted,



Raina Rippel, Executive Director
Center for Coalfield Justice

APPENDIX D



Citizens Coal Council - Working Together for Justice in the Coalfields

605 Taylor Way · Bridgeville, PA 15017 · P) 412.257.2223 · C) 724.470.3982 · ccc@citizenscoalcouncil.org

April 27, 2011

Citizens Advisory Council
PO Box 8459
Harrisburg, PA 17105-8459

Dear Council members,

Thank you for allowing us an opportunity to present the findings of our review of the PADEP's Third Act 54 Report at the CAC meeting last week.

On April 27, 1966, exactly 45 years ago today, Pennsylvania enacted its first law dealing specifically with underground coal mining. The *Bituminous Mine Subsidence and Land Conservation Act of 1966* prohibited damage from underground mining to homes and other structures such as churches and schools. For nearly 30 years the protection afforded to those structures indirectly benefited the streams, springs, wetlands, aquifers, parks, and farmland in the vicinity of those structures.

In 1994, Act 54 amended the 1966 Mining Law to allow damage to structures provided the mine companies agreed to repair, replace, or otherwise compensate homeowners for damage to their structures or water supplies. By removing the protection for structures, however, Act 54 unwittingly removed the indirect protection that had been provided to streams, aquifers, and other resources and features near those structures. Recognizing that some damage would occur, the General Assembly in 1994 inserted a requirement in Act 54 for PADEP to prepare follow-up assessment reports every five years. The third such "Five-Year Act 54 Report" provides important information and raises serious questions, which we discussed in our presentation and which I summarize below.

Conclusions of the PADEP's Act 54 Report and CCC's review of the Act 54 Report:

- Impacts from underground coal mining are increasing (on *average* 14.4%). From the 2nd to the 3rd Act 54 review period, impacts to structures increased 31%; land impacts increased 86%.
- Longwall mines are disproportionately responsible for all reported impacts. Longwall mines accounted for 100% of stream impacts, 95% of land impacts, and 94% of structure impacts.
- At the same time that impacts increased (impacts primarily due to longwall mining), the *acreage* of longwall mines actually decreased (by 10.5%).
- Reported impacts are taking very long to resolve: 20% of all cases require more than 600 days to reach final resolution (stream impacts are *averaging* nearly 2 full years to be resolved).
- Structures and water supplies damaged by longwall mines take more than twice as long to achieve final resolution as damages from room-and-pillar mines.
- "Resolution" seldom results in repair of the damage --- agreements with a mine company or purchase of a damaged property by a mine company are the most common types of resolution for impacted structures and water supplies, which disrupts communities and fails to restore damaged aquifers.