

ACT 54 - Program Implementation Information Packet

- Water Replacement/Subsidence damage pamphlet
- Sample letter – permit application notice
- California office Mining seminar topics
- Informal Conference regulations
- Methane gas venting procedure
- Public Conference – open house format
- Environmental Justice Handout
- Surface Subsidence Agent duties
- Water Supply and Subsidence Damage information
- Contact



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Water Supply and Subsidence Claims details

Water Supplies:

The application requires two background samples, usually sampled at least a month apart, for all water supplies that are within 1000 feet of the Subsidence Control Plan (SCP) permit area.

For the underground permit area that is not included in the Subsidence Control Plan, the application requires selected background information on water supplies that will help to characterize the hydrology and water uses within the proposed permit area.

The application does not require the coal operator to provide data for private water supplies that are greater than 1000 feet outside the SCP.

The application requires a minimum of 6-months of background data for those locations that are proposed monitoring points for surface or groundwater conditions in a permit application or revision.

Structures

A pre-mining survey shall be completed prior to the time a structure falls within a 30° angle of draw of underground mining or a larger area determined by the Department. The Department generally requires a survey before underground mining is within 1000 feet.

Complaints Received by CDMO

	<u>Water Supply Claims</u>	<u>Structure Claims</u>
<u>2010</u>	152 [50 outside RPZ]*	63** [11 required DEP investigation]
<u>2011</u>	85 [36 Outside RPZ]*	56** [11 required DEP investigation]

* Water Supply Claims outside the **Rebuttable Presumptive Zone** must be investigated by CDMO Technical Section to determine liability.

RPZ: the area in which an operator is presumed responsible for diminishing, contaminating or interrupting a water supply. The area is defined by projecting a 35° angle from the vertical from outside of any area where the operator has extracted coal from an underground mine.

$$35^\circ = 0.7 \times [\text{depth of cover}]$$

For a well of 300 feet in depth, mining would need to be within (.7 x 300) 210 feet to be in the RPZ.

** **Structure Claims** – If the coal operator and homeowner are unable to agree on a cause for the damage or the amount of damage an Engineer from the CDMO Subsidence Section is then assigned to investigate and determine a cause or amount. CDMO will issue an Order to the operator to pay for those costs that are determined to be subsidence related.



Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

What is Environmental Justice?

The Pennsylvania Department of Environmental Protection's (DEP) definition of environmental justice was created by the Environmental Justice Working Group and accepted by DEP as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies.

Environmental Justice: The Big Picture

The Environmental Justice (EJ) movement began in 1982. The combination of movements that drives EJ is environmentalism and civil rights. The EJ movement is a broad movement aimed at improving the environmental conditions and lives of those affected by environmental racism.

The first known case that highlighted attention to EJ took place in Warren County, North Carolina, when community residents fought against plans for contaminants being disposed of in a hazardous waste landfill in their community, a community that happened to be predominantly African-American. Following this fight, an independent study completed by the United Church of Christ found that this was not merely a regional issue but a pattern that could be found throughout the nation. In fact, the report findings indicated that one of the best predictors of the locations of hazardous waste facilities was race.

Since this study, numerous studies have been completed, many of which also state that communities of color are more likely to be impacted disproportionately by environmental pollution. In response to a growing concern, President Clinton signed Executive Order 12898 on February 11, 1994. This Executive Order required that Federal agencies achieve environmental justice by identifying and addressing

disproportionately high and adverse human health and environmental effects on minority and low-income populations to the maximum extent practical and as permitted by law.

Environmental justice continues to be a concern nationally. Since the signing of the Executive Order, the Office of Environmental Justice was created within the US Environmental Protection Agency (EPA). The National Environmental Justice Advisory Council (NEJAC) was also created and has met numerous times, drafting papers and working on issues relating to environmental justice. Some of the topics the NEJAC has tackled include cumulative risk, public participation and fish consumption as it relates to EJ communities.

In addition to the federal government taking steps to address EJ, many states have also created programs to address the issue. Several states have also created legislation aimed at addressing environmental justice issues.

History of EJ in PA

The Office of Environmental Advocate, which is charged with implementing Pennsylvania's Environmental Justice program, has been in existence since 2001. The Office was created as part of a set of consensus recommendations from the Environmental Justice Working Group.

This group was established in 1999 in response to a growing concern from both citizens and government regarding environmental justice in PA. It was at that time a local citizen's group filed a lawsuit alleging inequities in permitting decisions, but the Supreme Court dismissed the case. As a result of that filing, a working group was established to ensure that environmental decision-making was in fact equal. After two years, the working group published its findings in the "Environmental Justice Work Group Report of June 2001." This report recommendation outlined steps that the Department could take to address environmental justice in Pennsylvania as well as defining which communities should be considered to merit special consideration.

Since the publishing of the report, the Pennsylvania DEP has worked to implement as many of the suggestions as possible. It has created and staffed the Office of Environmental Advocate, published a public participation policy aimed at increasing outreach to EJ communities, and created the Environmental Justice Advisory Board (EJAB).

The EJAB was created in 2001 and is comprised of 17 members representing all of the geographic regions of Pennsylvania. Members of the group represent industry, academia, local governments, grassroots organizations and community members. The EJAB meets quarterly and reviews a variety of information pertaining to environmental justice issues.

What can I do?

To address environmental justice, the Pennsylvania DEP has enhanced public

participation in environmental justice communities through the creation and implementation of the Environmental Justice Public Participation Policy. This policy outlines steps the Department will take to ensure that those traditionally underserved communities are provided with ample opportunities to be informed and involved in environmental decisions within the community. To encourage informed communities, the Department and the Office of Environmental Advocate have stressed that those with access to a computer sign up for eNOTICE, the Department's electronic permit application tracking software. Community members are also encouraged to take advantage of other resources, such as eFACTS, which allows users to track inspections and compliance of facilities regulated by the Department.

Where can I get more information?

For more information on the environmental justice program, please visit the Office of Environmental Advocate's Web page, at www.depweb.state.pa.us, Keyword: "Environmental Justice." Information on the Department's public participation can also be found on the Web. You can also get more information and become more involved by attending and participating in Environmental Justice Advisory Board meetings. These meetings are held four times a year in Harrisburg and cover a variety of topics. Each meeting also provides an opportunity for public comment.

For more information, visit DEP's Web site at www.depweb.state.pa.us, Keyword: "Environmental Justice."

CALIFORNIA DISTRICT MINING OFFICE TOPICS AVAILABLE FOR MINING SEMINARS

- **INTRO TO DEP**
 - General overview of the Dept. of Environmental Protection and the people in charge at the various levels.
- **UNDERGROUND MINING**
 - An overview of the types of underground coal mines found in western PA.
- **MINE SUBSIDENCE**
 - A discussion of what mine subsidence is and the types of subsidence.
- **MINE SUBSIDENCE INSURANCE**
 - An introduction to Pennsylvania's mine subsidence insurance program and the types of structures covered.
- **COMMON CAUSES OF STRUCTURAL DAMAGE**
 - Possible causes of structural damages other than mine subsidence
- **MINING INFORMATION**
 - Where to go to get information on underground mining in your area.
- **PENNSYLVANIA'S MINING LAWS**
 - An overview of the regulations that apply to coal mining operations in PA.
- **PROPERTY OWNER SUGGESTIONS**
 - Suggestions for property owners that have or will have an underground mine beneath their property.
- **COAL PREPARATION**
 - Discussion of what coal preparation plants are and what laws and regulations apply to them.
- **COAL REFUSE**
 - An explanation of what coal refuse is and how it is disposed.
- **PERMITTING PROCESS**
 - The review steps that a permit has to go through before it is issued.
- **ENFORCEMENT**
 - An explanation of who inspects coal mines and how DEP handles complaints.



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
CALIFORNIA DISTRICT MINING OFFICE

Dear Property Owner:

(Applicant, Mine Name, Permit #) has recently applied for a permit for underground mining activity in your area. Because you may have an interest in this activity, I am writing to give you some general information about the proposed mining operation, and provide you with information about Pennsylvania law governing coal mining. Also, I want to let you know how you can get additional information and answers to any questions you may have.

The mining company is required to publish a legal notice in a local newspaper about this application. The notice will appear once a week for four consecutive weeks. You may submit written comments to us about the proposed application within thirty (30) days after the last date of the newspaper publication. Your comments will be reviewed and considered by my staff before making a decision on the application. If you want to review the application, complete copies are available in the County Office of the Recorder of Deeds and the California District Mining Office. For your convenience, the local municipality may also request a free copy of the application for public review.

You may also request that an informal public conference (IPC) be held in your area. The purpose of this conference is to give citizens an opportunity to provide relevant information about the application for us to consider during our review. If an IPC is requested, we will publish the date, time and location of the conference in a local newspaper. I have included a copy of the regulation that governs IPC's.

Included with this letter is a Fact Sheet regarding methane gas that is commonly associated with coal mining. This information explains the proper procedure for venting a water well.

If you have any questions that have not been addressed, staff members from the California District Mining Office are available to assist you by calling 724.769.1100. If enough people are interested, we are also willing to sponsor a seminar tailored to your specific concerns. A list of general seminar topics is enclosed.

The information enclosed with this letter includes the following:

- An explanation of your rights and responsibilities under the Bituminous Mine Subsidence and Land Conservation Act.
- General information about the proposed mining operation including a location map of the proposed site.
- The regulation about Informal Public Conferences.
- The list of available seminar topics.
- A Fact Sheet regarding methane gas associated with coal mining.

In addition, you should be aware of the following information:

- You do not have to sign anything in order to qualify for your rights to water replacement or damage repair under the Bituminous Mine Subsidence and Land Conservation Act.
- You can contact DEP at anytime to ask questions.
- If you experience any incidents of water loss or structure damage you feel are the result of a mining operation, they should be reported to DEP and the mine operator as they occur.

Thank you for your time and consideration.

Sincerely,



William S. Plassio
District Mining Manager
District Mining Operations

Surface Subsidence Agent Program

The **Surface Subsidence Agent (SSA)** monitors and documents conditions in areas impacted by longwall mining prior to, during, and after mining has occurred. If you are going to be undermined, you can expect a visit from a Surface Subsidence Agent at your home; they will explain your rights and responsibilities provided in The Bituminous Mine Subsidence and Land Conservation Act, commonly known as Act 54, and the regulations enacted pursuant to the act.

Some specific examples of the duties of a Surface Subsidence Agent are:

- Provide property owners with information about the department's mining regulatory programs and to assist them with inquiries and concerns. The SSA will normally contact homeowners at least 6-months prior to undermining to discuss Act 54 and answer any questions the homeowner has. The SSA is a phone call away and will follow-up as needed to help the homeowner through the process.
- Facilitate discussions and serve as a mediator between landowners and mine operators with the goal of resolving issues at the earliest possible stage.
- Assist with settlement of claims filed under the Bituminous Mine Subsidence and Land Conservation Act dealing with water, structure or land issues.
- Verify the accuracy of 6-month mining maps with field conditions to ensure required structures, water supplies, ponds, roads and other surface features are depicted accurately.
- Monitor the impacts of longwall mining on surface lands, streams, structures, and water supplies before, during, and after the completion of mining.
- Monitor the efforts by the coal operator to promptly replace water supplies affected by underground mining whether it is by the longwall or room & pillar extraction method. The SSA assists the CDMO Technical Staff in investigating water supplies when the operator submits a rebuttal of responsibility or the supply is located outside the Presumptive Zone.
- Notify the Technical Section of structures with unique construction which may require special mitigation efforts and monitor the effects to these structures during mining.
- Investigate issues concerning methane in response to incidents or a citizen complaint involving possible methane gas venting. The agents will submit reports and recommendations for mitigating and eliminating a public safety hazard associated with methane gas.
- Monitor streams in areas of longwall mining. The SSA's walk all streams prior to undermining and video tape the pre-mining conditions. The agents walk the streams during and after undermining to document the effects of undermining. The effects to the stream channel may include cracks and heaves that contribute to dewatering or subsidence that causes pooling. The agents notify the coal operator of their observations and require corrective actions as necessary. The corrective actions could include any of the following or a combination of all:
 - Flow augmentation to maintain a normal range of flow conditions
 - Heave removal to promote flow
 - Shallow grouting to seal near surface fractures that are causing dewatering.
 - Submittal of a detailed remediation plan to the CDMO for review including any additional permits.

Approximately 35 streams are currently being monitored for effects from undermining, from temporary dewatering, to pooling, to active mitigation.

INFORMAL PUBLIC CONFERENCES

OPEN HOUSE FORMAT

- **Please use the Department attendance sheet to sign in.**
- **There is no group discussion session.**
- **Handouts are available regarding the specific permit and general Department information.**
- **Department staff members are wearing name tags and are available to answer questions or discuss regulatory requirements.**
- **The permit application is available to discuss specific structures or water supply information.**
- **Written or oral testimony may be placed in the public record. Testimony signs and suggested format are posted or ask any Department employee.**
- **A written findings document that explains how the concerns raised in the public record have been addressed and a copy of the final decision on the permit application will be mailed to the names on the sign-in sheet.**
- **A copy of the recorded testimony is available by written request to:**

**Deborah Ferenci
Department of Environmental Protection
District Mining Operations
25 Technology Drive
California Technology Park
Coal Center, PA 15423**



Methane Gas and Your Water Well

Residents of the coal and natural gas producing regions of Pennsylvania need to be aware of the potential dangers from the accumulation of coal bed methane, or natural gas, in their water wells.

High concentrations of methane in water wells, water well enclosures and other confined spaces could cause an explosion.

What Is Methane?

Methane (CH₄) is a naturally occurring hydrocarbon gas found underground. It is formed by microbial and thermogenic processes and is present in shallow and deep coal beds and other rock units. It is the main compound found in natural gas. Methane can occur dissolved in the groundwater or as a gas in the soil and rock zones below the surface.

Methane migrates from areas of high pressure to areas of low pressure. Mining and well drilling operations can affect the pressure in the subsurface and cause the migration of methane to areas of lower pressure, such as areas with shallow groundwater and water wells that are used as water supplies. Gas migration in the subsurface can also be influenced by an increase or decrease in the water level of an aquifer.

Active underground mining operations can lower groundwater levels, reducing pressure in aquifers occurring above and adjacent to the area of coal extraction. This reduction in pressure can allow gases within the overlying rock layers to migrate into nearby water wells. Methane can also be released from abandoned deep mines, and from abandoned gas wells that are prone to leakage. These releases can also migrate into nearby water wells.

Methane can migrate into water wells in a gaseous phase or dissolved in the ground water. At atmospheric pressure, methane is soluble in water between 26-32 mg/l. It is some times recognizable as effervescent gas bubbles in water drawn from a faucet. In some cases, the release of methane in a water well may be recognized by a sound similar to that of boiling water. However, methane is a colorless and odorless gas, and may accumulate undetected in water well bores and water well enclosures that are not properly vented. Methane may also move into basements of homes and other structures through plumbing and piping containing electrical connections. These conditions could lead to an explosion.

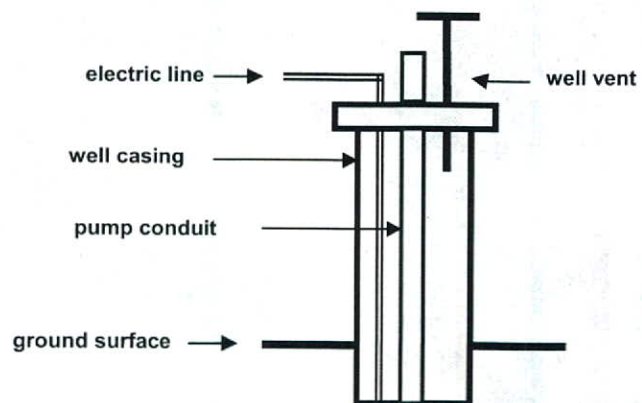
What Can You Do?

Methane is lighter than air with a specific gravity of .555. As such, methane will not accumulate in the water well bore if the water well is properly vented to the atmosphere. Venting is an inexpensive and effective way to prevent methane accumulation in water wells, water well enclosures and other confined spaces, such as basements. Proper venting eliminates the potential for methane gas to seep into homes or structures from water wells.

Recommended Venting Procedures

Well vents provide an exit for methane trapped in water well bores or water well enclosures. Proper design is extremely important.

The vent should extend above any possible flood level, potential ignition sources, and areas of exposure, and should have watertight connections to prevent surface water from entering. The well vent should be at least one (1) inch diameter or larger to facilitate gas flow. The end of the vent pipe should have a down-turned "gooseneck" or "T" and be capped with corrosion-resistant screening. If the vent is not screened, it can become a potential entry point for debris and small animals. In addition, conduits from the water well that carry electrical lines or waterlines into the building should be



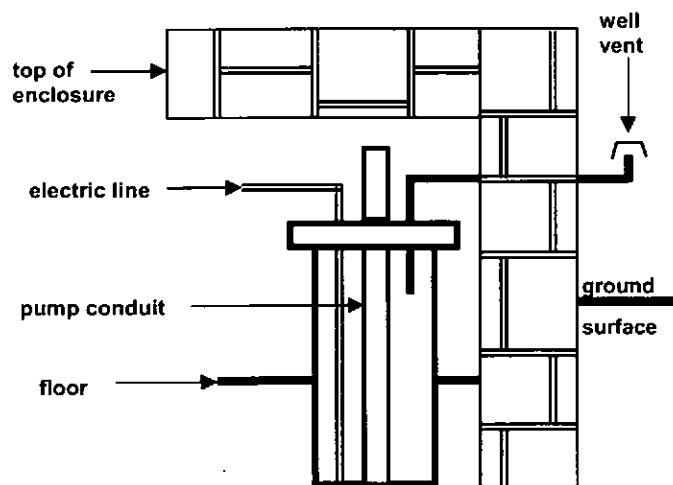
sealed so that the air in the conduit does not vent into the building. Well venting will not appreciably remove methane dissolved in the groundwater, however, properly designed water aeration systems are an effective way to lower the concentration levels of methane dissolved in the water.

Enclosed Wells

When the top of the water well is buried in a covered pit or enclosed in a basement, the vent pipe must vent gas to the outside air, as shown in the diagram below.

The vent pipe should be screened, and extend above any possible flood level, potential ignition sources, and areas of exposure.

In cases where the water well is located in an enclosure, it should have a tight-fitting well cap, and all openings through the cap should be properly sealed to prevent methane from escaping into the water well enclosure.



Play It Safe

When a water well is no longer in service, the plumbing connections should be disconnected and sealed to prevent methane from entering the home or building.

NOTE: Your water well may differ considerably from the wells depicted in the diagrams. Also, well venting requirements may vary from place to place due to differences in local plumbing codes. Therefore, water well owners are encouraged to contact a professional water well specialist or a local building code enforcement officer to determine the proper venting procedures required under the local plumbing code.

For more information on methane and water wells, please contact the DEP Office in your area.

Southwest Regional Office

400 Waterfront Dr.
Pittsburgh, PA 15222
Telephone: 412-442-4000
Counties Served: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland.

Southcentral Regional Office

909 Elmerton Avenue
Harrisburg, PA 17110
Telephone: 877-333-1904
Counties Served: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York.

Southeast Regional Office

2 East Main Street
Norristown, PA 19401
Telephone: 484-250-5900
Counties Served: Bucks, Chester, Delaware, Montgomery, and Philadelphia

Northeast Regional Office

2 Public Square
Wilkes-Barre, PA 18711-0790
Telephone: 570-826-2511
Counties Served: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming

Northcentral Regional Office

208 West Third Street, Suite 101
Williamsport, PA 17701-6448
Telephone: 570-327-3636
Counties Served: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union

Northwest Regional Office

230 Chestnut Street
Meadville, PA 16335
Telephone: (814) 332-6945
Counties Served: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, Mckean, Mercer, Venango, and Warren.

For more information, visit www.depweb.state.pa.us, keyword: Mining Offices.

§ 86.34. Informal conferences.

(a) A person or the officer or head of a Federal, State or local government agency or authority or the owner or operator of an oil and gas well who receives a notice required by § 86.31(e) (relating to public notices of filing of permit applications) may, in writing, request that the Department hold an informal conference on an application for a permit. The request shall:

- (1) Briefly summarize the issues or objections to be raised by the requestor at the conference.
- (2) State whether the requestor desires to have the conference conducted in the locality of the proposed coal mining activities.
- (3) Be filed with the Department within 30 days after the last publication of the newspaper advertisement placed by the applicant under § 86.31(a) or within 30 days of receipt of notice by the public entities to whom notification is provided under § 86.31(c).

(b) Except as provided in subsection (c), if an informal conference is requested in accordance with subsection (a), the Department will hold an informal conference within 60 days of the close of the public comment period. The informal conference will be conducted according to the following:

- (1) The conference will be held in the locality of the proposed mining, if requested under subsection (a)(2).
- (2) The date, time and location of the informal conference will be advertised by the Department in a newspaper of general circulation in the locality of the proposed mine at least 2 weeks prior to the scheduled conference.
- (3) If requested, in writing, by a conference requestor in a reasonable time prior to the conference, the Department may arrange with the applicant to grant parties to the conference access to the permit area for the purpose of gathering information relevant to the conference.
- (4) The conference will be conducted by a representative of the Department who may accept oral or written statements and other relevant information from a party to the conference. An electronic or stenographic record will be made of the conference proceeding, unless waived by all parties. The record will be maintained and will be accessible to the parties of the conference until final release of the applicant's performance bond under Subchapter F (relating to bonding and insurance requirements).

(c) If all parties requesting the informal conference stipulate agreement before the requested informal conference and withdraw their request, the informal conference need not be held.

(d) Informal conferences held in accordance with § 86.103(c) (relating to procedures) may be used by the Department as the public hearing required under proposed uses or relocation of public roads.

(e) The Department will give its findings of the conference to the permit applicant and to each person who is a party to the conference within 60 days of the conference.

(f) Within 60 days of the informal conference, the Department will notify the applicant of its decision to approve, disapprove or of its intent to disapprove the application subject to the submission of additional information to resolve deficiencies.

cables. Examples of "improvements" are structures that are not permanently affixed, such as aboveground swimming pools, and items that are not structures, such as shrubbery and landscaping.

After structure damage occurs, a mine operator has six months to resolve the damage through private negotiations with the landowner. Landowners should also file timely reports of damage with DEP to preserve their right to repair or compensation in the event of a breakdown in negotiations with the mine operator. (The law requires that claims for many types of structures be filed within two years of the date of damage).

Irrespective of the six-month period set aside for settlement negotiations, a landowner may request DEP assistance at any time to address problems affecting health or safety.

Limits of Liability -- When repairing or compensating for damage, a mine operator is not liable to pay more than the cost of replacing the structure that was damaged. If a damaged agricultural structure was being used for a purpose other than the purpose for which it was built, a mine operator may replace the structure with one that suffices for the most recent use. For example, a barn used solely to store a tractor could be replaced with a tractor shed.

Additional Compensation -- Occupants of damaged structures may be entitled to payment for the costs of temporary relocation and other reasonable incidental expenses actually incurred.

Land Damage -- Mine operators must repair sinkholes, ground cracks and flooding problems resulting from subsidence if it is technologically and economically feasible to do so.

Pre-Mining and Post-Mining Surveys

General Requirements -- Mine operators are required to conduct pre-mining surveys of structures and water supplies that may be susceptible to the effects of underground mining. Pre-mining surveys must be completed prior to the time a structure or water supply is susceptible to mining related effects. A pre-mining structure survey usually involves documenting the condition of the structure through a written inspection report, video or still photographs. A pre-mining water supply survey usually involves taking water samples and measuring flows or performing pump tests to document the quality and quantity of water

delivered by the supply and obtaining information about the existing and proposed uses of the water supply.

Mine operators must provide landowners with the results of pre-mining surveys within 30 days of obtaining them. Mine operators are required to keep structure survey results confidential because the results may include sensitive information about the contents of dwellings or other structures. Access to structure survey information is limited to the landowner, appropriate mining company representatives and DEP investigators, unless the landowner consents to allowing others to view this information.

Arranging Access for Surveys -- Pre-mining and post-mining surveys of water supplies and structures ensure fair settlement of claims. Mine operators and property owners are mutually responsible for timely and properly conducted surveys.

- **Mine operators** must request the landowner's permission to conduct the survey. If the landowner denies access or does not respond, the mine operator must provide a written notice to the landowner by certified mail or personal service. The written notice must describe the landowner's rights under the law.

- **Property owners** must grant mine operators timely access for the purpose of performing pre-mining and post-mining surveys. After receiving the second notice, a landowner has 10 days to provide or authorize access.

Caution! A landowner may forfeit important protections if he or she denies an operator access to perform a pre-mining or post-mining survey of a structure or water supply within the allotted time frame. The effects of denying access are:

- In the case of a noncommercial building, dwelling, or a structure or improvement appurtenant to a dwelling, the owner incurs responsibility for proving that damage was caused by subsidence.
- In the case of a structure other than those listed in the preceding item, the owner forfeits the right to repair or compensation for damages.
- In the case of a water supply, the owner loses the benefit of the rebuttable presumption and

incurs responsibility for establishing the pre-mining quality and quantity of the water supply.

Minimization of Subsidence Damage

If mining is likely to result in subsidence damage to a dwelling, structure appurtenant to a dwelling, or a noncommercial building, a mine operator is expected to take measures to minimize the level of resultant damage. A mine operator may be relieved of the obligation to perform these measures if the company obtains a written waiver from the structure owner or can demonstrate to DEP that the cost of the measures would exceed the cost of repairing the anticipated damage, provided the anticipated damage will not create a threat to health or safety.

Property owners are expected to allow mine operators access to perform damage minimization measures. The operator may be relieved of liability to repair or compensate for damages that would have been prevented through the use of the proposed minimization measures.

DEP's Role in Resolving Damages

Mine operators are required to notify DEP of all reported water supply impacts and structure damage claims. Landowners should also report impacts immediately so that DEP can provide assistance and promote timely resolution of claims. Additionally, early involvement enables DEP to collect information that may be difficult to recover at a later time. Claims should be filed with DEP at:

California District Mining Office
25 Technology Drive
California Technology Park
Coal Center, PA 15423
Telephone: 724-769-1100 or 800-922-1678

Surface Subsidence Agents. DEP employs a staff of Surface Subsidence Agents to assist landowners before, during and after mining. The agents serve as liaisons between landowners and mine operators to facilitate resolution of damages. They ensure that landowners are aware of their rights and protections under the law -- often meeting with landowners. Landowners can contact the surface subsidence agent responsible for their area by calling DEP's California District Mining Office or by visiting www.depweb.state.pa.us. Keyword: Subsidence Agents.



WATER SUPPLY REPLACEMENT AND SUBSIDENCE DAMAGE REPAIR

UNDERGROUND BITUMINOUS COAL MINING OPERATIONS

Commonwealth of Pennsylvania
Department of Environmental Protection

5600-BO-DEP4054 Rev. 9/2008

Overview

Underground mine operators have an obligation under the law to ensure the health and safety of residents affected by mining. The Bituminous Mine Subsidence and Land Conservation Act, as amended in 1994, requires mine operators to restore or replace water supplies contaminated, diminished or interrupted by underground mining and to repair or compensate for subsidence damage to certain structures.

The Department of Environmental Protection (DEP) is responsible for administering Pennsylvania's mining laws and created this fact sheet to help landowners understand their rights. The law allows damages to be resolved through private negotiations between landowners and mine operators. However, if both parties are unable to resolve damage claims in the specified time periods, DEP will assist landowners in resolution of disputes.

Why is Mining Allowed Under Your Property?

Pennsylvania law recognizes separate and distinct property estates between the surface and minerals. The owner of the mineral estate (most commonly coal) has a right to this property, the same as you have rights to the surface property. In most cases, mine operators own the mineral estate for the sole purpose of recovering the coal.

Prior to the current law, homeowners who built their houses after 1966 were not protected from or compensated for damages from underground mining. Today, mining companies that own the mineral under your property are allowed by law to recover the coal, but they must repair, replace or compensate for any damages to water supplies and certain structures.

Water Supply Restoration/Replacement

General Requirements -- If underground mining causes contamination, diminution or interruption of a water supply, the mine operator must restore the water supply or provide a permanent replacement water supply that satisfies the landowner's pre-mining and reasonably foreseeable uses. Permanent restoration or replacement must be accomplished as promptly as possible. If the mine operator fails to promptly restore or replace the affected water supply, the landowner may notify DEP and request that DEP conduct an

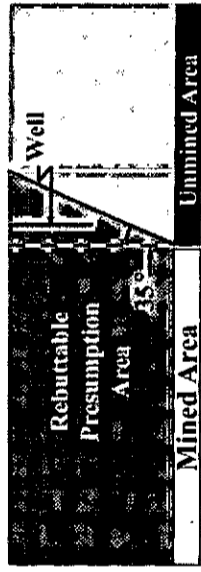
investigation. Within 45 days of receiving notification DEP will conduct an investigation and determine whether the effects on the water supply were caused by underground mining. If DEP determines that the negative impact on the water supply was caused by mining, DEP will issue any orders necessary to assure that the mine operator complies with his legal obligations.

In the event that it is impossible for the mine operator to restore or replace an affected water supply within 3 years of the date of effect, the law provides the landowner the option to choose one of the following:

- Having the mine operator buy the property at its fair market value before the loss of the water supply.
- Having the mine operator pay for the reduction in the fair market value of the property resulting from the water loss.
- Entering a written agreement providing compensation acceptable to the landowner.

Special Provisions -- If a mine operator reports that it is impossible to provide the landowner with an adequate restored or replacement water supply, the landowner may seek a DEP determination as to the likelihood of successful restoration or replacement. DEP will issue a determination within 60 days. A determination by DEP that a water supply could be restored or replaced is only advisory, except in cases involving drinking, domestic and residential water supplies in place prior to the date of permit application, in which cases DEP has authority to order the operator to restore or replace the affected water supply.

"Rebuttable Presumption" Area -- A mine operator is presumed responsible for affecting a water supply if the water supply is within a 35-degree angle of influence of underground mining. The area is illustrated in the drawing below.



(It is important to note that the entire well does not need to be in the rebuttal presumption area -- only the wellhead.)

Temporary Water -- A mine operator must provide a landowner with a temporary water supply under the following circumstances:

- When a water supply located within the rebuttable presumption area becomes contaminated, diminished or interrupted and the landowner is without a readily available alternate source of water.
- When an operator or DEP determines that the operator's underground mining has caused contamination, diminution or interruption of a water supply and the landowner is without a readily available alternate source of water.

The temporary water supply must be sufficient in quality and quantity to serve the landowner's needs and must be maintained until a permanent water supply is developed, the claim is resolved by an agreement between the operator and the landowner, or DEP dismisses the claim of liability against the operator. If an affected water supply lies within the rebuttable presumption area, an operator must provide temporary water within 24 hours of being notified of the existence of a problem by the landowner or DEP. If an affected water supply lies outside the rebuttable presumption area, DEP will investigate the claim and, if appropriate, issue an order requiring the operator to make prompt provision of temporary water.

Adequacy -- A restored or replacement water supply must provide enough water to satisfy a landowner's pre-mining and reasonably foreseeable water uses. (Reasonably foreseeable uses are those that were within the capacity of the original water supply and can be substantiated based on the attributes of the property (e.g., number of bedrooms, size of barn or pasture area, presence of buildings used for agricultural, commercial or industrial purposes) or on plans for development or expansion that were backed by a financial commitment at the time the original water supply was affected.) A restored or replacement water supply must provide water that meets the quality standards in DEP's safe drinking water regulations, unless the original water supply did not meet those standards. If the original supply did not meet safe drinking water standards, the restored or replacement water supply must be at least similar in quality to the original supply.

Increased Costs -- If a restored or replacement water supply has operation and maintenance costs

that exceed the original costs, the operator is responsible to provide for the permanent payment of the increased costs. If the mine operator and property owner agree, this obligation may be satisfied by a one-time payment equal to the present worth of the cost increase for a period agreed upon by both parties. A property owner who enters into such an agreement and thereby releases the operator of its obligation to permanently pay the increased costs, must, by law, include in any deed conveying the property a recital of the agreement and release, in order to put subsequent purchasers on notice.

Caution! It is important that a landowner report water supply impacts to the mine operator or DEP within two years of their occurrence. Failure to do so may relieve the mine operator of liability for impacts, depending on the type of supply and its date of installation.

Subsidence Damage Repair/Compensation

General Requirements -- If mining causes damage to any of the following structures, the mine operator must promptly repair the damage or compensate the structure owner for the reasonable cost of repairs. (This provision applies to initial damage from mining and any subsequent damage caused by subsidence.)

- Buildings that are accessible to the public, including commercial, industrial and recreational buildings, and permanently affixed appurtenant structures associated with those buildings.
- Noncommercial buildings (e.g., churches, schools, hospitals, public buildings, museums, correctional facilities, water and sewage treatment facilities, buildings used by the YMCA, YWCA, or Kiwanis Club; firehouses, health care facilities, etc.)
- Barns, silos and certain other permanently affixed agricultural structures of 500 square feet or more in area.
- Dwellings and appurtenant structures and improvements.

Examples of "appurtenant structures" include storage sheds, barns, greenhouses, decks, fences, retaining walls, paved or improved patios, walks, driveways, septic treatment facilities, in-ground swimming pools, lot drainage systems, lawn/garden irrigation systems, and customer-owned utilities and