THE KILBUCK TOWNSHIP LANDSLIDE: FINDINGS AND RECOMMENDATIONS

REPORT OF THE TASK FORCE AND ADVISORY COMMITTEE ON THE KILBUCK TOWNSHIP LANDSLIDE

JUNE 2008



General Assembly of the Commonwealth of Pennsylvania JOINT STATE GOVERNMENT COMMISSION 108 Finance Building Harrisburg, Pennsylvania 17120 The release of this report should not be interpreted as an endorsement by the members of the Executive Committee of the Joint State Government Commission of all the findings, recommendations and conclusions contained in this report.

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The Joint State Government Commission was created by the act of July 1, 1937 (P.L.2460, No.459) as amended, as a continuing agency for the development of facts and recommendations on all phases of government for the use of the General Assembly.

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June 2008

TO THE MEMBERS OF THE GENERAL ASSEMBLY:

The Joint State Government Commission is pleased to present this report of the Task Force and Advisory Committee on the Kilbuck Township Landslide. This report contains background information on the massive landslide that occurred in Allegheny County on September 19, 2006, including the possible causes and effects of the landslide; governmental actions taken before and after the landslide; community involvement; and efforts to stabilize the development site. In addition, this report provides relevant statutory and regulatory provisions, a discussion of standing and jurisdiction principles and proposed legislation regarding geologically hazardous areas. The recommendations contained in this report represent the consensus of the task force and advisory committee gained after extensive analysis and deliberation.

On behalf of the General Assembly, I thank the members of the task force and advisory committee for contributing their valuable time and expertise in the considerable effort to assemble information regarding the Kilbuck Township landslide and to improve the law in Pennsylvania. I commend the task force and advisory committee for its commitment to develop legislation and assist in the legislative process.

Respectfully submitted,

Røger A. Madigan

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On September 19, 2006, a massive landslide occurred at a commercial development site in Kilbuck Township, Allegheny County. Between 500,000 and 600,000 cubic yards of earth and stone cascaded down the hillside, across the four-lane Ohio River Boulevard and onto three adjacent railway tracks, stopping short of the Ohio River. As a result, roadway commerce and railroad commerce were greatly affected, as Ohio River Boulevard carries approximately 22,000 vehicles each day, and Norfolk Southern Railways operates the three railroad tracks as part of a major commercial rail link between Chicago and New York City carrying approximately 100 trains each day. The landslide also negatively impacted neighboring communities, which needed to contend with increased traffic congestion and traffic hazards. In January 2007, it was reported that remediation costs totaled \$2 million and monitoring costs totaled \$75,000 per month. In the end, the commercial development project was halted, and the site will be returned to a pre-development, natural slope that includes trees and vegetation.

Although the specific causes of the September 2006 landslide cannot be definitively ascertained, the disturbance of the soils and topography of the site are leading factors. The existence of steep slopes and the unstable land composition (whether due to the soils occurring naturally at the site or the placement of fill over the years), coupled with blasting operations that occurred the day before the landslide, facilitated such substantial movement of earth. In addition, the site has a long history of significantly smaller landslides, dating back to the mid-1800s.

Prior to the landslide and throughout the commercial development process, the Pennsylvania Department of Transportation reviewed the revised traffic impact study of the developers and issued a highway occupancy permit for the development site. The Pennsylvania Department of Environmental Protection reviewed storm water runoff management plans, issued a National Pollutant Discharge Elimination System (NPDES) permit and issued a blasting permit for the development site.

On October 24, 2006, the House of Representatives adopted House Resolution No. 897, directing the Joint State Government Commission to conduct an in-depth investigation into the landslide, including a thorough review of the applicable State and local permit and approval processes. A four-member legislative task force was created, consisting of Representatives Thomas C. Petrone (Chair), T. Mark Mustio, Sean M. Ramaley and Randy Vulakovich. An advisory committee was also appointed, consisting of attorneys, geologists, engineers, land use planners, representatives of local and county governments, representatives from community development organizations, environmental advocates, representatives from Communities First! (a group of individuals, public officials and small business owners from approximately

20 communities along the Ohio River corridor), the Executive Director of the Joint Legislative Air and Water Pollution Control and Conservation Committee, and representatives from the Departments of Conservation and Natural Resources, Environmental Protection and Transportation.

The task force and advisory committee reviewed the circumstances leading up to the landslide, as well as the actions taken following the landslide, and visited the site to learn about soil and rock stabilization plans. The task force and advisory committee recognized the need to statutorily address the identification and delineation of geologically hazardous areas in Pennsylvania, which are susceptible to mass earth movements, such as soil and rock slides, acid formation or sinkhole development. The task force and advisory committee also emphasized the importance of statewide review and oversight, thereby providing local governments with additional expertise and guidance as to how developers must identify proposed courses of action, and their sequence, to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition that could result from proposed earth disturbance activity.

This report describes the task force and advisory committee process and provides information regarding the commercial development site where the September 2006 landslide occurred, governmental actions taken before and after the landslide, the involvement of Communities First!, statutory and regulatory authority, and standing and jurisdiction. This report also contains the proposed Geologically Hazardous Areas Act. The recommendations and findings contained in this report reflect the consensus of the task force and advisory committee, gained after numerous subcommittee meetings and six group meetings.

The Kilbuck Township Landslide and House Resolution No. 897 of 2006

House Resolution No. 897 of 2006 (Printer's No. 4824)¹ described the scope and effect of the landslide ("Kilbuck landslide") that occurred in September 2006:

WHEREAS, On September 19, 2006, a massive landslide occurred at the commercial construction project at the Kilbuck Properties, L.P. site in Kilbuck Township, Allegheny County; and

WHEREAS, Between 500,000 and 600,000 cubic yards of earth and stone from the site cascaded down onto the four-lane Pennsylvania State Route 65, a vital roadway for 22,000 vehicles a day, and three Norfolk Southern Railways tracks, a major commercial rail link between Chicago and New York City, which carry close to 100 trains a day, forcing their closure; and

WHEREAS, The closure of these major transportation arteries completely disrupted the lives of thousands of people daily and negatively impacted the quality of life of the residents and the economy of Allegheny County and a large portion of southwestern Pennsylvania, resulting in untold costs for cleanup, wages, damages and lost revenue; ²

The resolution also stated that advance notice of potential safety concerns were given regarding the development:

WHEREAS, Officials of the Allegheny County Office of Economic Development cautioned Kilbuck Township officials prior to the incident that the site, formerly the location of the Dixmont State Hospital, was well-known to be prone to landslides; and

WHEREAS, Local residents expressed numerous concerns about the safety and viability of the proposed construction project at that site; ³

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¹ Appendix, *infra* pp. 125-128. The res. was adopted on Oct. 24, 2006.

² Pa. H.R. Res. 897 (2006), 1-2.

³ *Id.* at 2.

However, as noted in House Resolution No. 897, the project proceeded after the Pennsylvania Department of Environmental Protection (DEP), the Pennsylvania Department of Transportation (PennDOT) and Kilbuck Township ultimately granted the necessary permits and approvals for development.⁴

The Task Force and Advisory Committee Process

House Resolution No. 897 directed the Joint State Government Commission to conduct an in-depth investigation into the Kilbuck landslide, including a thorough review of the applicable State and local permit and approval processes.⁵ The Joint State Government Commission was authorized to create a legislative task force and advisory committee and compile a report based on the findings and recommendations from the study.⁶

On October 24, 2006, the House of Representatives adopted the resolution. Four legislators were appointed as members of the task force: Representative T. Mark Mustio, Representative Thomas C. Petrone, Representative Sean M. Ramaley and Representative Randy Vulakovich. On March 12, 2007, the task force held its organizational meeting, and Representative Thomas C. Petrone, the prime sponsor of House Resolution No. 897, was selected as the chair of the task force.

On April 17, 2007, the members of the advisory committee were officially appointed. The advisory committee consists of attorneys, geologists, engineers, land use planners, representatives of local and county governments, representatives from community development organizations, environmental advocates, representatives from Communities First!, the Executive Director of the Joint Legislative Air and Water Pollution Control and Conservation Committee, and representatives from the Departments of Conservation and Natural Resources, Environmental Protection and Transportation.

The advisory committee met as a group on May 16, 2007; July 25, 2007; August 23, 2007; October 26, 2007; January 11, 2008; and March 26, 2008.

On May 16, 2007, the advisory committee held its organizational meeting. The members agreed that several issues should be addressed in greater detail at subsequent meetings:

 5 Id

⁴ *Id*.

⁶ *Id.* Pa. H.R. Res. 897 also directed that additional assistance be provided by the J. Legis. Air & Water Pollution Control & Conservation Comm., which held a hearing on Nov. 2, 2006 in Sewickley, Pa.

- (1) Revisions to the Pennsylvania Municipalities Planning Code.⁷
- (2) Regional planning and review.
- (3) Resources to local governments.
- (4) The permitting and inspection process.
- (5) Coordination of agencies' actions.
- (6) Standing and jurisdiction.
- (7) Disclosure of geologic concerns.

At the May 16, 2007 meeting, the members also agreed that a statutory framework should be developed regarding the designation and regulation of geologically sensitive areas throughout Pennsylvania. Subsequently, a subcommittee was appointed to discuss this statutory framework and report back to the advisory committee.

On July 25, 2007, through the cooperation of Wal-Mart Stores, Inc., the advisory committee visited the Kilbuck landslide site. Following the site visit, the advisory committee met with representatives of Wal-Mart Stores, Inc. in Sewickley, Pennsylvania for an informational session and question and answer period. Wal-Mart representatives provided background information regarding the Kilbuck landslide and site stabilization plans.

The advisory committee met again on August 23, 2007. At the meeting, a subcommittee was appointed to discuss the issue of standing and jurisdiction and report back to the advisory committee. ¹⁰ The members of the advisory committee discussed a draft of the proposed statute regarding geologically sensitive areas and focused specifically on several topics:

- (1) The identification of geologically sensitive areas.
- (2) The need for geological review.
- (3) Communication and cooperation.
- (4) Costs.

(5) The burdens placed on municipalities.

- (6) Specific criteria regarding geologically sensitive areas.
- (7) Who should have ultimate decision-making authority.
- (8) Oversight and enforcement.
- (9) Restrictions on development.
- (10) Models for and placement of the proposed statutory language.

⁷ Act of July 31, 1968 (P.L.805, No.247).

⁸ The advisory comm. subsequently changed the terminology from "geologically sensitive areas" to "geologically hazardous areas." In this introduction, references are made to "geologically sensitive areas" until the discussion of the deliberations at the Jan. 11, 2007 advisory comm. meeting.

⁹ The subcomm. originally consisted of Thomas H. Anderson, Eric R. Conrad, Helen L. Delano & Percy H. Dougherty. Roy Kraynyk later joined the subcomm. The subcomm. met via teleconf. on June 28, Sept. 14 and Sept. 28, 2007. A meeting was subsequently held on Feb. 5, 2008, at which reps. from the Pa. Dep'ts of Envtl. Prot. & Transp. also participated.

¹⁰ The subcomm. originally consisted of Ronald M. Agulnick, Andrea Geraghty, Thomas R. Haist, Joan Miles, J. Edmund Mullin, Glenn Rowe & Davitt Woodwell. The subcomm. met via teleconf. on Sept. 21, 2007.

On August 23, 2007, the advisory committee also discussed the resources available to local governments. The members acknowledged the availability of technical assistance, training sessions and workshops for municipal officials. However, it was noted that more municipal officials should take advantage of the available resources and that perhaps more incentives should be offered to increase participation in the training sessions and workshops.

On October 26, 2007, the advisory committee discussed a revised draft of the proposed statute regarding geologically sensitive areas. The members discussed the importance of peer review, where an independent professional licensed under the Engineer, Land Surveyor and Geologist Registration Law¹¹ would review the geological report prepared by the licensed professional hired by the person proposing a land development, and its associated grading, within a geologically sensitive area. members also specifically discussed the roles that DEP, the Pennsylvania Department of Conservation and Natural Resources (DCNR) and municipalities should play in identifying geologically sensitive areas and in the regulatory, approval and oversight processes.

On January 11, 2008, the advisory committee continued its review of the proposed statute. The discussions focused on refining the provisions concerning definitions, mapping and regulating geologically hazardous areas, promulgating regulations, providing notice to municipalities, developing and using geologic reports, and providing oversight, such as through the permitting process, review by licensed professionals and inspections. The members began to discuss liability and enforcement provisions.

At the January 11, 2008 meeting, the members also discussed the issue of developments of regional significance and impact, defined under the Pennsylvania Municipalities Planning Code as "any land development that, because of its character, magnitude or location, will have substantial effect upon the health, safety or welfare of citizens in more than one municipality."¹² The issue has gained importance in light of the Kilbuck landslide:

It took only a year after a massive landslide on Ohio River Boulevard for the world's largest retailer to decide that the project, still stymied by unstable terrain, was a loser.

For Wal-Mart opponents, there never was any doubt that the \$28 million retail development was bad news. But beyond their stated concerns about traffic, runoff and aesthetics, the superstore's super foes also sent a clear message that this was not their kind of retailer. . . .

Act of May 23, 1945 (P.L.913, No.367).
 Supra note 7, § 107. To implement multimunicipal comprehensive plans, counties & municipalities are authorized to enter into intergovernmental cooperative agreements that establish a process for review and approval of devs. of reg'l significance & impact that are proposed within any participating municipality. Id., § 1104(b).

For us the issue was always about whether a traffic plan could handle the extra cars, whether drainage and excavation could manage rainfall, whether parking-lot lights and other development trappings would compromise adjacent neighborhoods. More broadly, the Post-Gazette also saw the River Pointe Plaza proposal as Exhibit A in the case for regionally based planning.

As it stands, even with Wal-Mart's decision to return the 75-acre Kilbuck tract to a sloped version of its former natural self, Allegheny County residents still are vulnerable to mega projects of any sort that can be approved by a single, small municipality with uncertain consequences for a host of neighboring communities.

The best response to Wal-Mart's withdrawal then is . . . changes in state law that will deliver countywide planning. That's the only way to protect a community's natural assets and spare it from development run amok.¹³

A subcommittee was then formed to research the issue of developments of regional significance and impact and make recommendations for consideration by the advisory committee.¹⁴

On March 26, 2008, the advisory committee met to discuss the proposed Geologically Hazardous Areas Act and the findings and recommendations concerning developments of regional significance and impact. The members reached consensus on the provisions of the proposed act, which contains the following basic structure:

Section 101. Short title.

Section 102. Purpose.

Section 103. Definitions.

Section 301. Duties of Department of Conservation and Natural Resources.

Section 302. Geologic reports.

Section 303. Duties of department [Department of Environmental Protection].

Section 304. Inspections.

Section 305. Liability.

Section 306. Conditioned approval by municipality.

Section 501. Enforcement and remedies.

¹³ "After Wal-Mart: Counties need tools to control development," *Pittsburgh Post-Gazette* (Sept. 30, 2007), http://www.post-gazette.com/pg/07273/821439-35.stm (last accessed Mar. 28, 2008).

¹⁴ The subcomm. consisted of Tobias M. Cordek, Brian K. Jensen, Roy Kraynyk, Joan Miles, Kay Pierce, Raymond L. Reaves, Carolyn Smith & Davitt Woodwell. The subcomm. met on several occasions, and the members reported their progress to the J. State Gov't Comm'n on Mar. 12, 2008, in anticipation of the Mar. 26, 2008 advisory comm. meeting.

Section 2101. Administration.

Section 2102. Effect on other law.

Section 2103. Repealer.

Section 2104. Savings clause.

Section 2105. Effective date.

At the March 26, 2008 advisory committee meeting, the members discussed how several other states have addressed the issue of developments of regional significance and impact, as well as background information on the issue. The subcommittee charged with reviewing the issue presented a proposed procedural framework to incorporate into the Pennsylvania Municipalities Planning Code, which included thresholds, consideration of proposed urban and rural developments, impact analyses, agency review and appeals. Because of the complexity of the issue and the preference to develop more concrete recommendations and proposed legislation, the members agreed that further review and analysis of the issue are warranted. A new resolution specifically authorizing consideration of the issue of developments of regional significance and impact will be introduced. It is anticipated that findings, recommendations and proposed legislation on the issue will be the subject of a subsequent report.

General Recommendations

Throughout its deliberations, the advisory committee resolved the issues raised at the May 16, 2007 meeting. Three of the seven issues -- the permitting and inspection process; coordination of agencies' actions and disclosure of geologic concerns -- were settled with the recommendation to pass the proposed Geologically Hazardous Areas Act.

Under the proposed legislation, DEP will review geologic reports from persons proposing to undertake earth disturbance activity within a geologically hazardous area. These reports will accompany applications to discharge pollutants or storm water, plans to control erosion and sediment, and plans to manage post-construction storm water, all of which are currently required to be submitted to DEP. The reports will be prepared and sealed by a licensed professional and must adequately identify the proposed course of action, and their sequence, to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity. DEP, in turn, will determine whether to authorize or refuse to authorize earth disturbance activity, based on the content of each report.

In terms of inspections, an agent or employee of a municipality or DEP will be authorized to (1) enter a property to survey a geologically hazardous area or ascertain the location of a structure and (2) enter a property or structure to ascertain compliance or noncompliance with the Geologically Hazardous Areas Act or other law, regulation, approval or order.

DEP and DCNR will coordinate efforts regarding geologically hazardous areas. DCNR will first identify and delineate geologically hazardous areas in Pennsylvania and analyze the type and nature of rock and soil susceptible to conditions that may result in a hazardous condition. DCNR will also create an inventory of data that will be made available to the public and will notify the municipalities identified as falling within a geologically hazardous area or having within their borders a geologically hazardous area.

The members of the advisory committee decided that the Geologically Hazardous Areas Act should not become part of the Pennsylvania Municipalities Planning Code, but should instead be a separate, unconsolidated act. This decision resolved a fourth issue raised at the May 16, 2007 meeting, and no other revisions to the Pennsylvania Municipalities Planning Code were proposed.

Another issue raised concerned resources to local governments. As noted previously, the members of the advisory committee discussed the issue at the August 23, 2007 meeting and concluded that adequate resources are currently available. However, greater efforts should be made to raise awareness of the resources and provide more incentives to increase the use of the resources.

Also noted previously is how the members of the advisory committee addressed the issue of regional planning and review through consideration of developments of regional significance and impact. At the March 26, 2008 meeting, the members acknowledged that the subject deserves further consideration.

Finally, the members of the advisory committee addressed the seventh issue raised at the May 16, 2007 meeting -- standing and jurisdiction. A subcommittee was formed to discuss standing and jurisdiction in the context of Community First!'s litigation concerning PennDOT and the Kilbuck Township Board of Supervisors. However, the subcommittee did not reach consensus on changing the requirements under the law regarding standing and jurisdiction. As a result, the issue in that context did not advance to the advisory committee for consideration. Instead, the issue was deferred after it was agreed that the advisory committee should review the subject of developments of regional significance and impact. Although the issue of standing and jurisdiction was discussed briefly in the context of improving the law regarding developments of regional significance and impact, the members of the advisory committee did not resolve how the law should be changed at the time of publication of this report.

The Kilbuck Township Landslide Report

This report summarizes the findings and recommendations of the advisory committee. It provides a general timeline, ¹⁵ information regarding the ownership and development of the Kilbuck landslide site, ¹⁶ possible causes of the Kilbuck landslide, ¹⁷ effects of the Kilbuck landslide, 18 site stabilization efforts, 19 statutory and regulatory authority, 20 actions taken by Kilbuck Township, 21 actions taken by PennDOT, 22 actions taken by DEP, ²³ DEP orders, ²⁴ community involvement by the Communities First! group, 25 and information regarding standing and jurisdiction. 26 This report also contains background information on geologic hazards such as landslides and sinkholes.²⁷

As a result of the consensus reached by the members of the task force and advisory committee, this report contains a discussion of the need for the proposed Geologically Hazardous Areas Act²⁸ and a summary of the proposed statutory recommendations.²⁹ A discussion of the role of DCNR is located on pages 109-111.

The proposed legislation is set forth on pages 111-124 of this report. Notes and comments follow the proposed statutory provisions. Official comments may be used to construe a statute and determine the intent of the General Assembly.³⁰

While this report represents the consensus of the advisory committee, it does not necessarily reflect unanimity among the members. In addition, any observation made in this report, or any conclusion that may be drawn directly or indirectly from such observation, is not intended to impute liability to any individual or entity.

On June 9, 2008, the task force authorized both the publication of this report and the introduction of the legislation contained in this report. The inclusion of any finding. recommendation or conclusion in this report does not necessarily reflect the endorsement of the task force or its members.

¹⁵ *Infra* pp. 11-16. ¹⁶ *Infra* pp. 17-18.

¹⁷ *Infra* pp. 19-22.

¹⁸ *Infra* pp. 23-28.

¹⁹ *Infra* pp. 29-35.

²⁰ *Infra* pp. 37-51.

²¹ *Infra* pp. 53-54.

²² *Infra* pp. 55-56.

²³ *Infra* pp. 57-67.

²⁴ *Infra* pp. 69-74.

²⁵ *Infra* pp. 75-81.

²⁶ *Infra* pp. 83-93.

²⁷ *Infra* pp. 95-101.

²⁸ *Infra* p. 103.

²⁹ *Infra* pp. 104-109.

³⁰ 1 Pa.C.S. § 1939.

The following is a general timeline of events surrounding the Kilbuck landslide of September 19, 2006. More details regarding the procedural history of events concerning the Kilbuck landslide and actions of Kilbuck Township, PennDOT, DEP and Communities First! are provided throughout this report.³¹ Note that Kilbuck Properties, L.P., which is affiliated with ASC Development, Inc., owns 35 acres of the 75-acre commercial development site, and the Wal-Mart Real Estate Business Trust owns 37.5 acres.³²

- **February 7, 2002.** Site plans for the proposed development at the site of the former Dixmont State Hospital were presented to the Kilbuck Township Planning Commission.
- **March 7, 2002.** The Kilbuck Township Planning Commission voted 5-1 to recommend approval of the site plans, conditioned on satisfaction of the concerns raised by the township engineer.
- **March 20, 2002.** A Notice of Intent for coverage under a National Pollutant Discharge Elimination System (NPDES) general permit application was received by the Allegheny County Conservation District for the proposed development.
- **April 16, 2002.** The Kilbuck Township Board of Supervisors amended the township ordinance to give the administrator discretion when reviewing commercial and other large scale grading and filling applications. The board then conditionally approved the development project. Subsequently, the board appointed the township engineer as the administrator.
- **May 14, 2002.** Communities First! appealed the approval of the development plans by the Kilbuck Township Board of Supervisors and its amendment of the township grading ordinance.

January 6, 2003. An NPDES general permit was granted for the outfall.

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³¹ *Infra* pp. 17-35 & 53-93.

³² See infra pp. 17-18 for more details regarding the ownership and dev. of the commercial dev. site.

- **April 8, 2003.** The Planning Project Manager of the Allegheny County Department of Economic Development wrote to Kilbuck Township commenting on the proposed development.
- **May 2003.** ASC Development, Inc., submitted a second set of site plans to Kilbuck Township, which the Board of Supervisors approved.
- **June 2003.** Communities First! appealed the approval of the site plans by the Kilbuck Township Board of Supervisors. Shortly thereafter, ASC Development, Inc., withdrew its plans from consideration, thereby rendering this appeal moot.
- **August 2003.** Widmer Engineering, Inc., prepared a traffic impact study for the developer.
- **September 2003.** The Allegheny County Court of Common Pleas nullified the Kilbuck Township Board of Supervisors' 2002 approval of the development plans.
- **December 17, 2003.** Kilbuck Township wrote PennDOT that the review of the traffic impact study by the Kilbuck Township Traffic Engineer was complete and that Kilbuck Township supported the proposed development.
- **January 2004.** The developers submitted a third set of site plans for the development. The Kilbuck Township Board of Supervisors further amended the township ordinances, voting to eliminate the specific provisions that would have prohibited the building of a gas station on the development site.
- **March 16, 2004.** PennDOT District 11 received an application for a highway occupancy permit for the development, containing detailed highway construction plans that reflected improvements recommended by the traffic impact study.
- **June 1, 2004.** Widmer Engineering, Inc., forwarded a revised traffic impact study, dated May 2004, to the Kilbuck Township Traffic Engineer.
- **July 15, 2004.** Kilbuck Township wrote to PennDOT indicating that the comments and concerns regarding the traffic impact study had been satisfactorily addressed. It requested that PennDOT approve the revised traffic impact study.
- **July 2004.** The Kilbuck Township Board of Supervisors approved the final set of site plans for the development.
- October 12, 2004. Communities First! successfully petitioned to intervene in PennDOT's highway occupancy permit application process.
- October 18, 2004. DEP held a public hearing regarding the storm water runoff management plans for the development site.

- **December 2004.** DEP approved an authorization to proceed under an NPDES general permit, which authorized storm water discharges associated with construction activities at the site.
- **January 24, 2005.** PennDOT issued a highway occupancy permit for the development.
- **February 22, 2005.** Communities First! filed an administrative appeal from PennDOT's decision to issue a highway occupancy permit for the development.
- **May 17, 2005.** An administrative hearing was held to determine whether Communities First! had standing to appeal PennDOT's issuance of a highway occupancy permit for the development.
- **June 17, 2005.** Based on a lack of standing, the PennDOT Hearing Officer dismissed Communities First!'s challenge to the issuance of the highway occupancy permit to Kilbuck Township. Communities First! then appealed to the Secretary of Transportation.
- **August 10, 2005.** The Secretary of Transportation denied the appeal of Communities First! to the June 17, 2005 Order of the PennDOT Hearing Officer and dismissed the challenge to the highway occupancy permit.
- **September 2005.** Communities First! appealed the decision of the Secretary of Transportation to the Commonwealth Court.
- October 18, 2005. Kilbuck Township issued a grading permit for the development site.
- **October 27, 2005.** The Allegheny County Conservation District inspected the site and noted the demolition of buildings and the erosion and sediment controls in place.
- **November 2005.** DEP issued a blasting activity permit to the Penn Development.
- **April 12, 2006.** The Commonwealth Court affirmed the decision of the Secretary of Transportation of August 10, 2005.
- **April 2006.** The first rock slide occurred at the site when the contractor blasted to loosen the rock for excavation and construction of a right turn lane into the development and within the highway right-of-way.
- **July 11, 2006.** The Allegheny County Conservation District inspected the site in light of a July landslide that month.
- **September 18, 2006.** Multiple explosions were heard coming from the development site.
- September 19, 2006. The Kilbuck landslide occurred.

- **September 19, 2006.** PennDOT implemented the emergency detour and roadway closure plan and immediately suspended work under the highway occupancy permit, except to restore the highway to a safe condition. PennDOT also suspended blasting activities within its right-of-way, demanding that rock be removed manually.
- **September 20, 2006.** Landslide material covered all of Ohio River Boulevard (Pennsylvania State Route 65) and one adjacent Norfolk Southern Corporation railroad track.
- **September 21, 2006.** A second and third Norfolk Southern Corporation railroad track became blocked with landslide material. Work began to remove the landslide material.
- **September 21 and 22, 2006.** Representatives of the Allegheny County Conservation District visited the site.
- **September 22, 2006.** DEP suspended portions of the erosion and sedimentation control permit of Kilbuck Properties, L.P., which effectively halted all earth disturbance activities except for those related to the cleanup and stabilization of the site. DEP received from the developer Emergency Plan Phase I and II for erosion and sediment controls for the removal of the landslide material. The third Norfolk Southern Corporation railroad track was cleared and opened.
- **September 23, 2006.** The second Norfolk Southern Corporation railroad track was cleared and opened.
- **September 25 and 26, 2006.** DEP inspected the site.
- **September 30, 2006.** Both southbound lanes of Ohio River Boulevard were opened.
- October 2, 2006. One northbound lane of Ohio River Boulevard was opened.
- **October 4, 2006**. DEP issued an order requiring monitoring and drilling and submission of a geotechnical plan and emergency plan to permanently stabilize the development site.
- **October 5, 2006.** Kilbuck Township suspended the grading permit for the development site.
- **October 6, 2006.** A large section of the east end of the landslide area began to move again. DEP received an emergency erosion and sediment control plan and narrative.
- October 18, 2006. A drilling rig began drilling shallow holes on the site.

- **November 15, 2006.** The drilling on the site finished and included eight holes in the stockpile area.
- **December 1, 2006.** DEP received the requested geotechnical report. A supplement to the highway occupancy permit included roadway repairs to Ohio River Boulevard, due to the Kilbuck landslide.
- **December 15, 2006.** DEP approved changes to the monitoring requirements.
- **January 10, 2007.** DEP received a revised erosion and sediment control plan for the waste area based on aerial mapping.
- **January 16, 2007.** DEP visited the site to view the slide that occurred in the cut section above the upper bench and observe material in the safety area.
- **January 17, 2007.** DEP ordered additional drilling, data gathering and soil stockpile evaluation and set deadlines for permanent stabilization and completion of construction (October 31, 2007). DEP also filed a complaint seeking civil penalties totaling \$470,000 from the developer.
- **January 19, 22 and 24, 2007.** DEP received correspondence from Kilbuck Properties, L.P., regarding design requirements for the slope stability analysis, the proposed drilling plan, the biweekly report and an analysis of the stockpile area.
- **January 26, 2007.** DEP approved the plan for additional drilling. In addition, DEP sent a notice of violation, requiring parameters to be used in the model for the slope stability analysis.
- **January 29, 2007.** DEP received information required by its notice of violation.
- **January 30, 2007.** Kilbuck Properties, L.P., contacted DEP concerning the proposed drilling and design criteria for the site slope stability analysis.
- March 22, 2007. The Wal-Mart Real Estate Business Trust notified Kilbuck Properties, L.P., of Wal-Mart's intent to assume operational control of the development site immediately to complete the stabilization of the site in an appropriate manner and determine what, if any, future development of the site would be appropriate.
- **July 23, 2007.** The Wal-Mart Real Estate Business Trust submitted a site stabilization plan to DEP.
- **July 31, 2007.** A public hearing was held at the Avonworth High School in Ohio Township, Allegheny County, hosted by representatives of DEP and regarded the stabilization of the development site.

- **August 21, 2007.** DEP rejected the site stabilization plan of the Wal-Mart Real Estate Business Trust but issued a permit to help the company do the work necessary to stabilize the site while waiting for a revised plan and additional information.
- **September 26, 2007.** Wal-Mart Stores, Inc., announced that it will not develop the property in Kilbuck Township and will instead return the hillside to a pre-development, natural sloping condition that includes trees and vegetation.
- **March 18, 2008.** Another public meeting was held at the Avonworth High School, during which Wal-Mart Stores, Inc., representatives outlined a stabilization plan and Kilbuck Township presented a Position Statement outlining its general goals regarding the stabilization and future use of the development site.
- **May 13, 2008.** DEP approved the first phase of the stabilization plans submitted by Wal-Mart Stores, Inc.

OWNERSHIP AND DEVELOPMENT OF THE KILBUCK LANDSLIDE SITE

The Dixmont State Hospital in Kilbuck Township, Allegheny County was the oldest mental health institution in western Pennsylvania until it closed in 1984 after 122 years of operation.³³ For the next fifteen years, the institution remained vacant, while the Commonwealth attempted unsuccessfully to secure a buyer.³⁴ In February 1999, the Stroyne Family Limited Partnership purchased the property, consisting of 407 acres, for \$757,000.³⁵ Much of the acreage consisted of "hillsides unsuitable for construction, and the ruins of about 12 buildings from the abandoned institution."³⁶ In addition, a system of tunnels existed beneath the structures on the property.³⁷

The Stroyne Family Limited Partnership subsequently sold 75 acres of the tract for commercial development, to be anchored by a Wal-Mart SuperCenter. Currently, the Wal-Mart Real Estate Business Trust owns 37.5 acres of the tract; Kilbuck Properties, L.P., which is affiliated with ASC Development, Inc., owns approximately 35 acres and Applebee's restaurant owns 2.75 acres. 38

Since December 3, 2002, a series of easement agreements was executed with respect to the development site.³⁹

³³ Jan Ackerman, "A mental hospital's breakdown," *Pittsburgh Post-Gazette* (Apr. 20, 2003), http://www.post-gazette.com/lifestyle/20030420dixmont2.asp (last accessed July 26, 2007).

³⁵ *Id.* By this time, "the state's minimum-bid price dropped so low that [Ralph] Stroyne decided to bid on the property that adjoins the small farm where his family lives." *Id.* The Commw. continues to preserve a one-acre cemetery on the prop., where 1,300 former patients of the Dixmont State Hosp. are buried. *Id.*36 *I.d.*

³⁶ *Id*.37 *Id*.

³⁸ Don Hopey, "Wal-Mart cans Kilbuck developer," *Pittsburgh Post-Gazette* (Mar. 23, 2007), http://www.post-gazette.com/pg/07082/771888-85.stm (last accessed Aug. 22, 2007).

³⁹ Kilbuck Twp. Gen. Timeline (on file with the J. State Gov't Comm'n), which details the following agreements: **Dec. 3, 2002**: 2d Amend. to Agreement of Sale and Purchase between the Stroyne Family Ltd. P'ship & ASC Dev., Inc., which provided for various easements, including a grading easement for the ne. side of the prop.; **Apr. 23, 2003**: Easements with covenants and restrictions affecting land between the Wal-Mart Real Estate Bus. Trust & Kilbuck Props., Ltd. P'ship.; **Oct. 19, 2004**: Easement Agreement between the Stroyne Family Ltd. P'ship & Kilbuck Twp. regarding prop. along Pa. State Route 65; **Oct. 19, 2004** (specific date uncertain): Easement Agreement between Kilbuck Twp. & Pa. Dep't of Transp. regarding prop. along Pa. State Route 65; **Oct. 19, 2004**: Easement Agreement between the Stroyne Family Ltd. P'ship & Kilbuck Twp. regarding a sanitary sewer line along Huntington Ave.; **2004** (**date uncertain**): Developer's Agreement between Emsworth Borough & ASC Dev., Inc.; **Jan. 18, 2005**: Developer's Agreement between Kilbuck Twp. & Kilbuck Props., Ltd. P'ship.; **Feb. 21, 2005**: Emergency Access Easement Agreement between the Stroyne Family Ltd. P'ship & Kilbuck Props., Ltd. P'ship.

Initially, Kilbuck Properties, L.P., a developer from neighboring Emsworth Borough, was the developer of the 75-acre site. However, on March 22, 2007, Wal-Mart Real Estate Business Trust notified Kilbuck Properties, L.P., of Wal-Mart's intent to immediately assume operational control of the development site "as a result of what Wal-Mart contends are a series of material breaches of the Development Agreement by [Kilbuck Properties, L.P.]"41 Therefore, Wal-Mart assumed full control of the site after "relieving' ASC Development and its subsidiary, Kilbuck Properties Inc. [sic], of 'operational responsibility at the location.', 42 As such, Wal-Mart undertook 'day-to-day operation of the monitoring and geologic testing ordered by the DEP," thereby assuming responsibility for stabilizing the development site.⁴³ The stabilization efforts have included monitoring the site for movement, geologic analysis, and developing and implementing a plan for permanent stabilization of the site. 44 Wal-Mart "assumed operational control of the site in order to (i) complete the stabilization of the site in an appropriate manner and (ii) determine what, if any, future development of the site is appropriate."45

In various documents submitted and reviewed, the proposed re-development of the former site of the Dixmont State Hospital is referred to as the "River Pointe Plaza" development.

⁴⁰ Lillian Thomas, "Kilbuck: Developer to submit landslide stabilization plan to EPA today," Pittsburgh Post-Gazette (Dec. 1, 2006), http://www.post-gazette.com/pg/06335/742688-54.stm (last accessed Apr. 11, 2008).

Letter from Donald A. Rea, att'y to Mary Martha Truschel, att'y of Pa. Dep't of Envtl. Prot. Sw. Reg'l Office (Apr. 24, 2007) (on file with the J. State Gov't Comm'n).

⁴² Hopey, *supra* note 38. ⁴³ *Id*.

⁴⁴ *Id*.

⁴⁵ Rea, *supra* note 41.

POSSIBLE CAUSES OF THE KILBUCK LANDSLIDE

The Kilbuck landside occurred at the site of the former Dixmont State Hospital. Although the exact cause of the Kilbuck landslide may be the subject of speculation, several factors may have contributed to the landslide, including unstable soils and rock, disturbances of steep slopes and blasting activities. What seems to be clear, however, is that but for the earthmoving activities on the development site, the Kilbuck landslide may not have occurred on the scale that it did.

History of Landslides on the Development Site

The site of the Dixmont State Hospital in Kilbuck Township has a long history of landslides:

Landslide after landslide plagued the former Dixmont State Hospital property for a decade in the 1800s, causing then-President John Harper to describe the location as "defective."

Harper documented 10 years spent battling landslides in the annual reports of the then-Western Pennsylvania Hospital at Pittsburgh, the same spot where a Sept. 19 landslide in Kilbuck fell onto Route 65 and halted construction of a Wal-Mart Supercenter. . . .

Hospital officials documented five slides between 1865 and 1874. . . . Hospital officials first noticed problems in 1865 while expanding buildings, and in 1866 Superintendent J.A. Reed wrote about "slips in the hill" behind the hospital.

Hospital officials found a crack spreading several hundred feet in a grassy slope in 1868 and, while building a road, evidence of a previous slide.

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⁴⁶ It was reported that "Developer Kilbuck Properties' original plans for a Wal-Mart Supercenter and retail plaza called for building on unstable soils, unstable bedrock and steep slopes" Karen Roebuck, "State was leery of Wal-Mart site," *Pittsburgh Tribune-Review* (Jan. 6, 2007), http://www.pittsburghlive.com/x/pittsburghtrib/s 487336.html (last accessed Sept. 24, 2007).

The Legislature paid the hospital an undisclosed sum to remove unstable land, and in 1869 the hospital created a horse railroad to remove the earth.

During the process, rain caused a serious slide, "and the following day, the vertical embankment facing the buildings was thrust five feet forward; the partially built sustaining wall was up heaved to the foundation; and a great part of the road way elevated fully three feet," Harper wrote.

A heavy rain in October 1873 led to "another upheaval of the pavement and road behind the buildings."

And in 1874, Harper wrote: "It is my unpleasant duty to again chronicle another landslide in the rear of the hospital, similar to that in October 1873."

Land started to sink in front of the hospital in 1878.

Finally in 1879, Harper writes the troubles are over.

"We have had trouble enough with ruptured and sliding grounds, cracked and damaged walls, and other embarrassing evils of a physical nature to contend with and overcome, and which we believe we have surmounted," he wrote.⁴⁷

It has been reported that "[1]ocal residents say Kilbuck Properties should have known about the site's landslide history." ⁴⁸

Soils and Topography

Western Pennsylvania is particularly susceptible to landslides because of two natural geologic characteristics: (1) the bedrock land composition, consisting mainly of incompetent mud rocks such as silty shales and clay stones that weather easily; and

⁴⁸ *Id*.

⁴⁷ Jim Ritchie, "Kilbuck slides date to 1865," *Pittsburgh Tribune-Review* (Nov. 28, 2006), http://www.pittsburghlive.com/x/pittsburghtrib/news/cityregion/s_481648.html (last accessed Aug. 22, 2007).

(2) the regional topography, consisting of steep slopes.⁴⁹ Although natural landslides occur, "a great many of them are encouraged by human factors including construction, grading, cutting, drilling and so forth."⁵⁰

The topography of the development site where the Kilbuck landslide occurred is relatively steep, with average slopes greater than 25 percent and some slopes as great as 50 percent.⁵¹ In addition, "both the bedrock and the soils of the [development] site are especially vulnerable to landslides in both their natural states and during construction. Where construction encounters an old landslide, or where these earth materials are used to fill, they will tend to deform often rapidly."⁵²

Therefore, the existence of steep slopes and unstable land composition (whether due to the rock and soils occurring naturally at the development site or the placement of fill by agents of the Dixmont State Hospital to remedy the problems associated with past landslides) may have contributed to the Kilbuck landslide.

Blasting Activities

In November 2005, DEP issued a blasting activity permit to the developer. 53

On September 18, 2006, the day before the Kilbuck landslide, blasting operations occurred on the development site and multiple explosions were heard coming from the development site.⁵⁴ Therefore, blasting operations may have been another contributing factor to the Kilbuck landslide.

⁴⁹ Kilbuck Twp. Landslide Hearing Before the Pa. J. Legis. Air & Water Pollution Control & Conservation Comm., 52 (Sewickley, Pa., Nov. 2, 2006) (statement of Helen Delano, Geologic Scientist, Pa. Bureau of Topographic & Geologic Survey, Dep't of Conservation & Nat. Res.). The Bureau of Topographic & Geologic Survey collects, preserves and disseminates impartial information on the Commw.'s geology, geologic res. and topography. The bureau is not a regulatory agency, except in the case of licensing water well drillers. *Id.*

⁵⁰ *Id.* at 52-53.

⁵¹ *Id.* at 53. Helen Delano added that "[t]he site of the old hospital building is on a relatively flat portion" occupying a slope of approximately 13 percent. *Id.* This information was gathered from the U.S. Geologic Topographic maps, a standard source. *Id.*

⁵² *Id.* at 55.

⁵³ *Id.* at 16 (statement of Ronald Schwartz, Assistant Reg'l Dir., Pa. Dep't of Envtl. Prot., Sw. Reg'l Office).

⁵⁴ *Id*.

Lack of Conclusive Evidence Cited by Developer

In a written statement by Kilbuck Properties, L.P., prepared in expectation of the Kilbuck Township Landslide Hearing before the Pennsylvania Joint Legislative Air and Water Pollution Control and Conservation Committee, held in Sewickley, Pennsylvania on November 2, 2006, the following was noted:

At this time, we have not established a definitive cause for the landslide. Further, while we believe it is important to ultimately determine the cause for this unforeseen event, it does not serve anyone's interest to speculate as to the cause or causes for the event. Kilbuck Properties, along with various governmental bodies and agencies, are reviewing the circumstances surrounding the landslide as well as potential variables which may have caused and/or impacted the event. We are committed to this review process and intend to see it through to the end. Once the experts have completed their review and a definitive cause has been determined, the finding will be provided to the proper governmental bodies and the public. 55

Oversight by Kilbuck Township

Although not a direct cause of the Kilbuck landslide, the actions taken -- or inaction -- by Kilbuck Township raise concerns regarding what constitutes effective and meaningful municipal oversight. For example, Kilbuck Township: (1) approved the development plans despite the concerns raised regarding grading and steepness of the slopes, ⁵⁶ (2) amended its grading ordinance to permit the administrator (who ended up being the township engineer) to modify or waive municipal requirements if peculiar conditions of the land in question make literal enforcement "impracticable" and (3) acquiesced to its township engineer serving in her capacity even though she worked for the same firm that provided the traffic impact study for the developer, thereby creating the appearance of a conflict of interest. ⁵⁸

 $^{^{55}}$ Id. at 132-133 (statement of Kilbuck Props., Ltd. P'ship, prepared for the Kilbuck Twp. Landslide Hearing).

⁵⁶ *Infra* pp. 76-78.

⁵⁷ *Infra* p. 51 for § 115-11(O) of the Kilbuck Twp. Grading Ordinance.

⁵⁸ *Infra* note 192.

EFFECTS OF THE KILBUCK LANDSLIDE

As a result of the Kilbuck landslide, railroad and roadway commerce were negatively affected, as were neighboring communities. Remediation costs skyrocketed, and ultimately commercial development on the landslide site was halted indefinitely.

Railroad Commerce

Adjacent to Ohio River Boulevard (Pennsylvania State Route 65) lie railroad tracks operated by the Norfolk Southern Corporation. When the Kilbuck landslide occurred, in which 500,000 to 600,000 cubic yards of earth cascaded down the hillside, the earth continued moving across Ohio River Boulevard and down onto the railroad tracks, stopping short of the Ohio River. As a result of the Kilbuck landslide, railroad commerce was disrupted, and massive efforts were undertaken by Norfolk Southern Corporation to remedy the disruption. Norfolk Southern Corporation operates the main East-West rail route from New York and Northern New Jersey to Chicago. This rail route traverses Pennsylvania and is one of the busiest lines in the entire United States for a railroad company. On September 20, 2006, one track became blocked at 10:00 a.m. A second track became blocked at approximately 2:00 a.m. on September 21, 2006. At approximately 8:30 p.m. that same day, traffic on a third track had to be stopped. The third track was reopened at 2:00 a.m. on September 22, 2006, while the second track opened at noon on September 23, 2006. September 23, 2006.

A disruption of services along the main East-West rail route causes significant consequences:

At the site of the derailment [caused by the Kilbuck landslide] approximately 60 to 90 trains in a 24 hour day passed this point. It is one of the busiest areas along the entire line. Given the volume of traffic on the main line across Pennsylvania when it is blocked for any reason the effects extend beyond the local areas to travel throughout the entire Norfolk Southern system. The effect of the blockage is akin to the waves that emanate from a large rock thrown into a pond. The longer the system is blocked the greater the effect. The effect is the same as if the Pennsylvania Turnpike were blocked at a given point in both directions.

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⁵⁹ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 64-65 & 68-69 (statement of Michael Fesen, Resident Vice-President for Gov't Relations, Norfolk S. Corp., for Pa. & N.Y.).

All train traffic immediately comes to a halt and must wait instructions from our Dispatch Center. Train traffic, like aviation traffic, is not autonomous but rather travels along a prescribed route and reports to a dispatch center as it moves along. Once a route is blocked the dispatch center is notified of the emergency. If the emergency is small, the dispatch center generally can handle the problem. However, when tracks in both directions are blocked along this main line and will be blocked for some time, the entire Norfolk Southern rail system will be tasked to respond to the emergency. . . . [The] rerouting and detouring of trains often send the trains to other states and can force a train to extend its journey by several hundred miles.⁶⁰

Detouring trains creates logistical problems as well. First, it requires knowledge of crew qualifications.

The two crew members, the conductor and the engineer must be qualified to drive their train along a given route. If they are not qualified to take their train along a new route, a new crew with the qualifications or that route must be found, called for duty and then delivered to that train's location. Additionally, train crews must be properly rested in accordance with the Federal Hours of Service law.⁶¹

Second, detouring trains requires knowledge of double stack clearance of detour routes. Since many intermodal trains are double stacked, where one container sits atop and is secured to the bottom container, obstructions along the rail route must be cleared to accommodate the extra height of the railroad car. Not all detour routes are capable of accommodating the extra height as is the main line route.⁶²

Third, detouring trains requires the assistance of other railroad companies, which may be too limited in their schedules to allow another company's railroad cars on their line. In addition, "using foreign lines comes with a cost." 63

As the result of the Kilbuck landslide, some westbound trains originating in Harrisburg were detoured as far east as Albany, New York before proceeding to their western destinations.⁶⁴ Approximately over 100 Norfolk Southern trains needed to be rerouted during the period that the tracks were closed, and the cost resulting from the interruption and delay in services will be in the "seven-figure" range. 65 The tracks affected were "critical infrastructure not only for the Commonwealth of Pennsylvania but for the nation."66

63 *Id.* at 67-68. 64 *Id.* at 66.

⁶⁰ *Id.* at 65-66. ⁶¹ *Id.* at 67.

⁶⁵ *Id.* at 73.

⁶⁶ *Id.* at 76.

Roadway Commerce

On September 19, 2006, William J. Lester, the District Permit Manager of PennDOT, Engineering District 11, reported to the site of the landslide at 9:00 p.m. and decided to close Ohio River Boulevard.⁶⁷ The emergency detour, which was part of the highway occupancy permit, was implemented, since at that point all four lanes of the roadway were covered with landslide debris.⁶⁸ By 7:00 a.m. the next morning, the slide was still active.⁶⁹ While the developer implemented operations to work around the clock to get the roadway reopened and expedite the removal of landslide debris. PennDOT permit and traffic units worked with the area police departments on providing assistance at intersections to implement detours.⁷⁰

By September 23, 2006, the slope appeared to be somewhat stabilized, and major erosion and sediment control diversion areas and drainage systems were installed to attempt to avoid additional water coming through the failed slope area.⁷¹

By September 27, 2006, 250 to 300 feet of the southbound lanes of Ohio River Boulevard had been cleared, with 300 to 400 feet of clearing still to be done. 72 It was noted that "[s]ome roadway repairs [to the southbound lanes] will be necessary."⁷³ At that point, the northbound lanes of the roadway, which were directly adjacent to the development site, were still covered, and there "appears to be considerable damage to the roadway.",74

By September 29, 2006, the developer had completely cleared the roadway and began cleaning it.75 Inspection of the roadway surface revealed the necessity for significant pavement slab and barrier replacement. The developer continued "24/7" grading operations for slope stabilization and will have geotechnical staff on site to identify potential problems." The slide remained "active to a light degree, but not to the point that we fear problems to the roadway," and proper risk assessment proceeded.⁷⁸

⁶⁷ William J. Lester, Pa. Dep't of Transp. Background & Update (on file with the J. State Gov't Comm'n), 3.

68 *Id.*69 *Id.*

⁷¹ Id. at 5-6. On Sept. 24 & 25, 2006, while work continued to stabilize the slope, there was "still some movement" of the slope. Id.

⁷² *Id.* at 7.

⁷³ *Id*.

⁷⁴ *Id*.

 $^{^{75}}$ *Id.* at 8.

⁷⁶ Id. It was noted that this replacement "can be performed with traffic shifts and off peak work over the next month." Id.

⁷⁷ *Id*.

⁷⁸ *Id*.

On Saturday, September 30, 2006, both southbound lanes of Ohio River Boulevard were opened.⁷⁹

By October 1, 2006, all the northbound barriers for Ohio River Boulevard were in place, and the roadway was clean. A 20-foot bench was at the top of the slope, and site stabilization continued.⁸¹ On Monday, October 2, 2006, one northbound lane was opened 82

Ohio River Boulevard has been described as "a vital roadway for 22,000 vehicles a day."83 The cost to repair the southbound lanes of Ohio River Boulevard is estimated at \$200,000 to \$300,000; the damage to the northbound lanes was more substantial, and repair costs could exceed \$500,000.84

A PennDOT spokesman indicated the following:

Work to rebuild a 500-foot section of Route 65 that was damaged by a massive landslide in September 2006 is expected to begin this summer [2008]....

But it appears the right-hand northbound lane of Route 65 in Kilbuck Township, which has been closed since the landslide, won't reopen until next year [2009] at the earliest. 85

It is anticipated that the right-hand northbound lane of Route 65 will not open until the entire stabilization project is completed and the hillside is fully stabilized.⁸⁶

⁷⁹ *Id*.

⁸⁰ *Id*.

⁸¹ *Id*.

⁸³ Pa. H.R. Res. 897, *supra* note 2, at 1.

⁸⁴ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 46 (statement of Daniel Cessna, P.E., Dist. Executive, Pa. Dep't of Transp., Eng'g Dist. 11). Daniel Cessna added that the clean-up and repair costs are currently "being paid directly by the developer and his insurance agent," and the Pa. Dep't of Trans. had a \$1.4 million Letter of Credit posted by the developer prior to the issuance of the highway occupancy permit. Id. He further stated that "[t]here is no state funding or federal funding going towards the project or the highway changes or the development itself. . . . [The Pa. Dep't of Trans. has] incurred some Department personnel costs just in monitoring the site since this incident that we are tracking. I think to date they are under \$10,000, but that will be reimbursed by the developer." Id. at 48. In addition, the developer is being billed directly for the cost of police overtime and detour costs incurred as a result of the landslide. Id.

⁸⁵ Tom Fontaine, "Route 65 section won't reopen until '09," Beaver County Times & Allegheny (May 15, 2008), http://timesonline.com/articles/2008/05/14/news/ (timesonline.com) doc482b9361d31f1471417034.txt (last accessed May 19, 2008). ⁸⁶ *Id*.

Neighboring Communities

The Kilbuck landslide adversely affected the neighboring communities, such as Emsworth Borough. ⁸⁷ Ohio River Boulevard is a main corridor through the borough, and "[t]he closing of this major corridor [as a result of the Kilbuck landslide] had an adverse effect on our borough as people used our streets as a detour. Mainly, the people who live in Kilbuck Township." In addition, "[t]he Camp Horne Road intersection which is in Emsworth was to have a turning lane because of this development [located at the former Dixmont State Hospital]. This construction was started and abandoned because Route 65 was considered more important. Now we have giant potholes that are a traffic hazard."⁸⁹

Remediation Costs

It was reported in January 2007 that since the Kilbuck Township landslide occurred, Kilbuck Properties, L.P., had spent approximately \$2 million on remediation efforts, and monitoring on the landslide site was costing \$75,000 a month. 90

Stabilization of the Landslide Site

As noted previously, in March 2007, Wal-Mart Stores, Inc., assumed responsibility for the stabilization of the development site, as the soil and rocks continued to move. In August 2007, DEP rejected the proposed site stabilization plans; new plans were submitted to DEP in March 2008. On May 13, 2008, DEP approved the first phase of the stabilization plans submitted by Wal-Mart Stores, Inc. Under the plan, Wal-Mart would reshape the development site and "strategically reinforce the soil in the area, with

⁸⁷ Emsworth Borough in Allegheny County is "a small borough of less than 3,000 people. We are basically a bedroom community with a few businesses." Kilbuck Twp. Landslide Hearing, *supra* note 49, at 121 (statement of Connie Taylor, President, Emsworth Borough Council).

⁸⁸ *Id.* According to the 2000 census, 723 people resided in Kilbuck Twp. "Profile of General Demographic Characteristics: 2000," http://pasdc.hbg.psu.edu/pasdc/PA_Stats/census_data/ census_2000/population/municipal/DP1/Allegheny/Allegheny.htm (last accessed June 2, 2008).

⁸⁹ Kilbuck Twp. Landslide Hearting, *supra* note 49, at 121-122 (statement of Connie Taylor).

On Hopey, "Kilbuck builder submits design for landslide site," *Pittsburgh Post-Gazette* (Jan. 20, 2007), http://www.post-gazette.com/pg/07020/755414-54.stm (last accessed Sept. 24, 2007); Michael Hasch, "Kilbuck developer denies it failed to stabilize slide in timely manner," *Pittsburgh Tribune-Review* (Jan. 19, 2007), http://www.pittsburghlive.com/x/tribune-review/pittsburgh/print 489294.html (last accessed Oct. 5, 2007).

a second and more comprehensive phase to be completed next year. The end result will be a green space with no future development." The site stabilization plans are detailed on pages 29-35 of this report.

Termination of the Commercial Development on the Landslide Site

On September 26, 2007, Wal-Mart Stores, Inc. announced that it will not develop the landslide site and will instead "return the hillside to a pre-development, natural sloping condition that includes trees and vegetation." The decision to cancel plans for commercial development on the landslide site came as Wal-Mart and DEP "tangled over how to stabilize the site along Route 65 and under the constant threat that a steady rainfall could trigger another large slide. The property continues to move daily in small increments"

[&]quot;State approves first phase of plan to stabilize Kilbuck site," *Pittsburgh Post-Gazette* (May 14, 2008), http://www.post-gazette.com/pg/08135/881587-100.stm (last accessed May 19, 2008); *see also* "State officials approve Wal-Mart stabilization plan," *Pittsburgh Tribune-Review* (May 14, 2008), http://www.pittsburghlive.com/x/pittsburghtrib/news/breaking/s_567434.html?source=rss&feed=7 (last accessed May 19, 2008).

⁹² Jim Ritchie, "Wal-Mart calls off Kilbuck development," *Pittsburgh Tribune-Review* (Sept. 26, 2007) (quoting the company), http://www.pittsburghlive.com/x/pittsburghtrib/business/s_529495.html (last accessed Oct. 4, 2007).

On July 31, 2007, DEP held a public hearing at the Avonworth High School in Ohio Township, Allegheny County, for Wal-Mart representatives to update the community on the stabilization of the development site. 94 Wal-Mart representatives provided posters and slides as visual aids as they explained the geotechnical stabilization plan.

Wal-Mart representatives stated that the Wal-Mart Real Estate Business Trust assumed responsibility for the stabilization of the development site in March 2007. Since that time, it aggressively worked "on site stabilization activities and has significantly increased interaction with the state and local regulatory agencies. Recent submittals have been made to DEP regarding storm water permits and final stabilization plans."95 Erosion and sediment stabilization measures were implemented and the site was extensively regraded.⁹⁶

Wal-Mart representatives reported that to facilitate the removal of soil from the main site area, an off-site area of land accessible by private road would be developed; the off-site parcel was designated as Area 6 to serve as a soil disposal and storage area. In terms of general orientation regarding the site, to the north of the main site area is the upper slope and Area 6, to the east is the eastern slope (containing the out-parcels and the ball field), to the south is Ohio River Boulevard and the location of the main slide area. and to the west are the western peak and Toms Run Road.⁹⁷

⁹⁴ Jim Ritchie, "Wal-Mart vows to stay and fix sliding Kilbuck site," *Pittsburgh Tribune-Review* (Aug. 1, 2007), http://www.pittsburghlive.com/x/pittsburghtrib/news/north/s 520045.html (last accessed Aug. 22, 2007). At that time, the Pa. Dep't of Envtl. Prot. was in the process of reviewing Wal-Mart's site stabilization proposal, which was submitted on July 23, 2007. Id. The proposal is described as follows:

The company's proposal . . . calls for removing about 850,000 cubic yards of soil from the slide area and dumping it at two locations in the rear of the property -- away from Route 65. A steep, 100-foot wall, reinforced with synthetic material, would be built in the front along the highway, and a similar 70-foot wall would be built in the back of the property. The middle area would be flattened to a more gradual slope. The work could start within weeks and is anticipated to last through 2009.

Id. A spokesman for Wal-Mart stated that it was concerned about stabilizing the site rather then the dev. plans. Id.

⁹⁵ River Pointe Plaza Site Geotechnical Stabilization Plan: Narrative Guide to Posters, slide 2 (Public Hearing, Avonworth High Sch., Pittsburgh, Pa., July 31, 2007) (on file with the J. State Gov't (Puon. Comm'n).

96 Id., slide 3.

⁹⁷ *Id.*, slide 4.

Ownership of River Pointe Plaza includes the Wal-Mart Real Estate Business Trust, Kilbuck Properties, L.P. and Apple Pennsylvania, L.L.C. (Applebee's Restaurant, which occupies an out-parcel of land in the eastern slope area). 98

Phase II of the stabilization plan primarily concerned grading to stabilize the site. The western peak, an early priority, would be re-graded to a shallower slope of 4 horizontal to 1 vertical (4H:1V), and as much as 60 feet of soil would be cut from the slopes in this area so that "[e]ventually this area will resemble the original grades at the time of the Dixmont [State] Hospital." Phase II also included the following:

The Main Slide Area will be stabilized to a 5H:1V slope and the toe of the slope in this area will be "dewatered" using well points. The area behind the original landslide "head scarp" will be excavated to "tie into" the re-graded Western Peak. A 60-foot high Reinforced Soil Slope (RSS) constructed at 1H:1V will be constructed at the Upper Slope to provide storage for the excavated soil and to stabilize the exposed rock face at the rear reaches of the existing site. The Eastern Out Parcels will be re-graded to shallow 4H:1V slopes in a transition from Phase II to Phase III. 100

The approximate storage volume of Area 6 is 500,000 cubic yards, which would contain the fill material taken from the main site area. Storage would be created by building a 75-foot high, 1H:1V RSS across the valley. Access to Area 6 is via a private road to be stabilized to minimize the impacts of traffic and erosion. ¹⁰¹

Finally, Wal-Mart representatives discussed the volumes of earthwork to be performed at the main site area, including cut and fill:

Approximately 693,000 cubic yards of material will be cut from the Western Peak and Main Slide area to improve stability.

Approximately 157,000 cubic yards of material will be cut from the Eastern Slope Out Parcels to improve stability.

Approximately 372,000 cubic yards of material will be placed as fill behind the Upper Reinforced Soil Slope at the back of the Main Site to stabilize the Upper Slopes.

Construction access on a stabilized private road will be provided to Area 6 where approximately 500,000 cubic yards of material will be placed as fill. 102

⁹⁸ *Id.*, slide 5.

⁹⁹ *Id.*, slide 6. *See also* slides 7-9.

 $^{^{100}}$ Id.

¹⁰¹ *Id.*, slides 10 & 11.

¹⁰² *Id.*, slide 12.

On August 21, 2007, DEP rejected Wal-Mart's plan to stabilize the development site. 103 The plan was "deemed substantively incomplete and inaccurate in multiple areas":104

But the DEP's comments on Wal-Mart's stabilization plan indicate not just that it is incomplete, but also that there are significant areas of disagreement in how [Wal-Mart consultant] Geosyntec [Consultants of Kennesaw, Georgia] has assessed the site.

While Wal-Mart has identified continued movement high in the embankments, the DEP said monitoring gauges show movement 90 feet below the surface and a "deep-seated failure" reaching below the fill material to where historically slippery clay soils known as the "Pittsburgh red beds" are moving along the bedrock.

The DEP also disputed Wal-Mart plan's contention that Dixmont State Hospital was built on fill material and a groundwater table does not exist on the development site. The agency also was critical about the plan's lack of detail on proposed reinforced soil slopes, settlement, seepage and gradation. 105

However, DEP issued Wal-Mart a permit to help the company do the work necessary to stabilize the development site while the company revises the stabilization plan and gathers additional information:

But because of the risk of another landslide and public safety concerns, the department has agreed to permit the company to establish a soil storage location adjacent to the northern end of the former Dixmont State Hospital site to reduce chances of a new slide along the heavily traveled commute route paralleling the Ohio River. The DEP said Wal-Mart must submit additional information in two weeks detailing its plan to stabilize the property where development has stopped but the high walls of fill dirt keep creeping. 106

DEP has noted its concerns to Wal-Mart regarding the continued movement of the surface of the development site:

¹⁰⁶ *Id*.

Jim Ritchie, "DEP rejects Wal-Mart's Kilbuck plan," Pittsburgh Tribune-Review (Aug. 21, 2007), http://www.pittsburghlive.com/x/pittsburghtrib/search/s 523319.html (last accessed Aug. 22, 2007); Don Hopey, "State says Wal-Mart's landslide fix plan incomplete," *Pittsburgh Post-Gazette* (Aug. 21, 2007), http://www.post-gazette.com/pg/07233/811032-100.stm (last accessed Aug. 22, 2007); Don Hopey, "State wants a better Kilbuck slide plan," Pittsburgh Post-Gazette (Aug. 22, 2007), http://www.post-gazette.com/pg/07234/811132-54.stm (last accessed Aug. 22, 2007).

Hopey, supra note 103 (Aug. 22, 2007). The Pa. Dep't of Envtl. Prot. Reg'l Dir. Kenneth Bowman stated that "Wal-Mart has not provided adequate information or the level of detail necessary for DEP to conduct an appropriate review of its proposed stabilization plan." *Id.*

Readings from gauges on the site, cited in DEP's response letter to Wal-Mart, show soil creep of four to six inches since October [2006] on portions of the property, and . . . other gauges in the area of the original slide show movement of almost an inch since July 18 [2007]. "The surface monitoring points and the inclinometers installed in the area of the western slope show movement indicating there is some urgency on flattening that slope," the DEP letter says. ¹⁰⁷

DEP denied Wal-Mart's request in the stabilization plan to construct a 70-foot high wall to expand the capacity of the soil storage site to accommodate 500,000 cubic yards of dirt. Instead, it permitted Wal-Mart to move only 160,000 cubic yards of dirt to reduce the downward pressure on the hillside. This limitation was intended to remain in place until the overall site stabilization plan is approved. 108

In September 2007, it was reported that the site "still creeps steadily toward the highway and likely will not be stabilized for three or four more years." DEP officials said that "[u]ntil [the land] stops moving, another massive slide is possible -- especially if heavy rain drenches the area." Nevertheless, DEP and Wal-Mart could not agree on the land's basic geography, the cause of the Kilbuck Township landslide and the remedy. For example, DEP considered it critical that Wal-Mart continue stabilization efforts through the winter, but Wal-Mart wanted to stop work in late fall; state officials believed that monitoring equipment showed the slide and continuing movement resulted from a deep-seated failure at the site (perhaps as much as 90 feet below the surface), while Wal-Mart believed the problem to be more superficial. In addition, DEP and Wal-Mart expressed differences regarding design issues, such as the use of steep walls along Ohio River Boulevard (Pennsylvania State Route 65) and the location of underground water.

William Franz, a DEP geotechnological engineer, stated that sections of the site moved at different rates, from 0.1 to 0.4 inches per week, but rain in August accelerated the pace to 0.5 to 0.9 inches per week. He noted that the most movement occurred in the middle of the main slide area; therefore, relieving the downward pressure would be

¹⁰⁷ *Id*.

¹⁰⁸ *Id.*; Ritchie, *supra* note 103.

¹⁰⁹ Karen Roebuck, "Wal-Mart, DEP aisles apart on Kilbuck slide fix," *Pittsburgh Tribune-Review* (Sept. 19, 2007), http://www.pittsburghlive.com/x/pittsburghtrib/s_528190.html (last accessed Sept. 21, 2007).

¹¹⁰ *Id*.

¹¹¹ *Id*.

¹¹² *Id*.

¹¹³ *Id*.

crucial. 114 Consequently, DEP permitted Wal-Mart to move 100,000 cubic yards of soil to an adjacent property. That was to cut the 100-foot-high plateau, which developers built before the slide, to 40 feet and halve the steepness of the slope. 115

On September 25, 2007, Wal-Mart met with DEP officials again to discuss the pending submission of a revised site stabilization plan, which includes the following:

- Making a soil-reinforced wall along Route 65 about 40 to 45 feet high rather than 100 feet, as initially proposed.
- Sloping the hillside gradually for 650 to 700 feet rather than developing a flat area.
- Creating two 25-foot walls on the back of the property rather than one 60-foot wall. 116

Wal-Mart responded to concerns expressed by DEP, elected officials and the public by revising the site stabilization plan to "return the hillside to a pre-development, natural sloping condition that includes trees and vegetation." Accordingly, on September 26, 2007, Wal-Mart announced that it will not develop the property in Kilbuck Township, which is the site of the September 19, 2006 landslide.

As part of the goal of implementing a permanent stability plan, "Wal-Mart will continue to monitor soil movement and ground-water levels and submit the data to the DEP for daily review." A spokesman for Wal-Mart indicated that "permanent site stabilization of the still-moving soil on the landslide site could be achieved by the end of 2008," 119

It was reported in March 2008 that "[a]ccording to soil monitoring reports required by the state Department of Environmental Protection, fill material in some areas continues to move downhill on the slippery underlying clays -- known as the 'Pittsburgh redbeds' -- at a rate of three-eighths of an inch a week."

¹¹⁴ Id

¹¹⁵ *Id.* Mr. Franz noted that "[w]e do think that is a valid interim solution. It will . . . quite possibly reduce the amount of movement." *Id.* Officials at the Pa. Dep't of Envtl. Prot. further said that an additional 400,000 cubic yards of dirt must be moved, but "site access is not good. . . . Part of it is an economic question -- how far can you haul it?" *Id.* (quoting Karl Hartner, civ. eng'r, Pa. Dep't of Envtl. Prot.).

¹¹⁶ Ritchie, *supra* note 92; Don Hopey, "Wal-Mart cancels Kilbuck project," *Pittsburgh Post-Gazette* (Sept. 27, 2007), http://post-gazette.com/pg/07270/820916-52.stm (last accessed Oct. 4, 2007).

¹¹⁷ Ritchie, *supra* note 92.

¹¹⁸ Hopey, supra note 116.

¹¹⁹ *Id*.

Don Hopey, "Wal-Mart proposes planting a meadow as part of Kilbuck stabilization," *Pittsburgh Post-Gazette* (Mar. 14, 2008), http://www.post-gazette.com/pg/08074/865115-85.stm (last accessed Mar. 28, 2008).

As reported, Wal-Mart's stabilization plan includes "planting a gently sloping meadow with native grasses, shrubs and trees along Route 65" and the "construction of two reinforced soil slopes or walls, a new storm water management and erosion plan, a regrading program that will move more than 840,000 cubic yards of earth around the former Dixmont State Hospital site over the next two years, and a long-term monitoring program." A spokesman for Wal-Mart noted that the plan will return the site "to a condition resembling a sloping upland meadow that likely existed naturally before the days of the Dixmont hospital." Specifically, the plan entails the following:

The latest plan includes a 35-foot-tall, 853-foot-long reinforced soil slope, or angled wall, running parallel to Route 65 and set back 100 to 200 feet from the road. A second reinforced soil slope, 27.5 feet tall and 1,679 feet long, will be built uphill from the main slide area and again running parallel to the road. 123

On March 18, 2008, Wal-Mart representatives outlined the stabilization plan during a public meeting at Avonworth High School. 124

The Board of Supervisors of Kilbuck Township also began working with its consulting engineer to review the stabilization plan. The township outlined its general goals regarding the stabilization and future use of the site, which were also presented at the March 18, 2008 public meeting, as follows:

- 1. The first priority is stabilization of the hillside to prevent further slides.
- 2. After stabilization, the hillside should be as natural in appearance as possible. The Township would hope to see work to develop a green open space begin as soon as the stabilization work permits, with installation of appropriate ground cover, trees and other plantings. There should be the potential for mature woodlands to return in time, wherever possible on the site.
- 3. The stabilization work and post-stabilization maintenance of the site should not preclude passive recreation or pedestrian access in keeping with a green open space. The Township envisions opportunities for hiking, birding, scouting and other outdoor enjoyment, or academic study, being made available, provided that issues such as property

¹²¹ *Id*.

¹²² *Id*.

 $^{^{123}}$ *Id*

Allegheny Times (timesonline.com) (Mar. 18, 2008), http://www.timesonline.com/articles/2008/03/18/news/doc47e071a32ecb7463739891.txt (last accessed Mar. 28, 2008).

ownership, safety and liability can first be addressed to the satisfaction of all interested parties. If so, the site need not become a fenced off, unusable area.

The stabilization of the site should not foreclose future limited development, scaled appropriately to the site, to the extent it can be safely done without adverse affects [sic] on stability, water runoff, etc. At a minimum, the opportunity for park and recreation related development (shelters, playing fields, etc.) should be preserved. 125

On March 25, 2008, Wal-Mart representatives presented to Kilbuck Township a description and technical justification of the proposed grading and vegetation strategy, which was discussed at the March 18, 2008 public meeting and the March 19, 2008 meeting with DEP representatives. 126 However, it was noted that such a strategy "explicitly does not preclude the eventual transition to another development project, a recreational complex, or a natural forest." The proposed strategy is intended to "assure long-term geotechnical stability and provide stormwater management controls across the site.",128

On May 13, 2008, DEP approved the first phase of Wal-Mart's plan to stabilize the development site by reshaping the area where excavation for the commercial development caused the Kilbuck landslide and by strategically reinforcing the soil in the area. 129 This phase would "involve redistributing slide material back on the hillside in 8-inch layers and compressing it to make the hill more stable. During the 2006 cleanup, workers trucked the slide material to the rear of the property and left it there." ¹³⁰

A second, more comprehensive phase would be completed in 2009, the result being green space with no future development and the abandonment of plans by Wal-Mart to develop the site of the former Dixmont State Hospital. This phase would complete the stabilization project, but "[u]ntil the work is done, the right-hand northbound lane of Route 65 [Ohio River Boulevard] won't reopen." ¹³² The plan would be to "have Wal-Mart's contractor reconstruct that northbound lane this summer [2008], but it will still need to remain closed until the front of the hillside is stabilized." ¹³³

Kilbuck Twp. Bd. of Supervisors Position Statement, http://www.kilbucktownship.com/ Kilbuck_Position_Statement.pdf (last accessed Mar. 28, 2008).

Letter from Robert C. Bachus, Ph.D., P.E., to the Kilbuck Twp. Supervisors (Mar. 25, 2008), http://www.kilbucktownship.com/Wal Mart Strategy.pdf (last accessed May 19, 2008).

¹²⁷ *Id.* at 2. ¹²⁸ *Id.*

^{129 &}quot;State approves first phase of plan to stabilize Kilbuck site," *supra* note 91.

¹³⁰ Fontaine, *supra* note 85.

^{131 &}quot;State approves first phase of plan to stabilize Kilbuck site," *supra* note 91.

¹³² Fontaine, *supra* note 85.

¹³³ *Id*.

STATUTORY AND REGULATORY AUTHORITY

This section provides a summary of the existing statutory and regulatory authority that applies to the development at the site of the former Dixmont State Hospital.

The Clean Streams Law Generally

The purpose of The Clean Streams Law¹³⁴ is to "preserve and improve the purity of the waters of the Commonwealth for the protection of public health, animal and aquatic life, and for industrial consumption, and recreation, and "not only to prevent further pollution of the waters of the Commonwealth, but also to reclaim and restore to a clean, unpolluted condition every stream in Pennsylvania that is presently polluted." ¹³⁶ Acknowledging that "[t]he prevention and elimination of water pollution is recognized as being directly related to the economic future of the Commonwealth," The Clean Streams Law states that clean, unpolluted streams and water are absolutely essential to attract industries to Pennsylvania, fully develop the tourist industry and maintain outdoor recreational facilities. 137

Under The Clean Streams Law, the Commonwealth has the power and duty to establish policies to effectively control and manage water quality, review and take appropriate action regarding permits, receive and act upon complaints, issue orders to implement the law and administrative rules and regulations, and inspect public and private property to determine compliance with the law pursuant to rules, regulations, orders or the permitting process. 138

Abatement of Nuisances

The Clean Streams Law provides for the abatement of nuisances and the restraining of violations of The Clean Streams Law:

¹³⁴ Act of June 22, 1937 (P.L.1987, No.394). ¹³⁵ *Id.*, title.

¹³⁶ *Id.*, § 4(3).

¹³⁷ *Id.*, § 4(1), (2) and (4).

¹³⁸ *Id.*, § 5(b).

Section 601. Abatement of Nuisances; Restraining Violations.

- (a) Any activity or condition declared by this act to be a nuisance or which is otherwise in violation of this act, shall be abatable in the manner provided by law or equity for the abatement of public nuisances. In addition, suits to abate such nuisances or suits to restrain or prevent any violation of this act may be instituted in equity or at law in the name of the Commonwealth upon relation of the Attorney General, or upon relation of any district attorney of any county, or upon relation of the solicitor of any municipality affected, after notice has first been served upon the Attorney General of the intention of the district attorney or solicitor to so proceed. Such proceedings may be prosecuted in the Commonwealth Court, or in the court of common pleas of the county where the activity has taken place, the condition exists, or the public is affected, and to that end jurisdiction is hereby conferred in law and equity upon such courts: Provided, however, That no action shall be brought by such district attorney or solicitor against any municipality discharging sewage under a permit of the department heretofore issued or hereafter issued under this act: And provided further, That, except in cases of emergency where, in the opinion of the court, the exigencies of the cases require immediate abatement of said nuisances, the court may, in its decree, fix a reasonable time during which the person or municipality responsible for the nuisances may make provision for the abatement of the same.
- (b) In cases where the circumstances require it or the public health is endangered, a mandatory preliminary injunction or special injunction may be issued upon the terms prescribed by the court, notice of the application therefor having been given to the defendant in accordance with the rules of equity practice, and in any such case the Attorney General, the district attorney or the solicitor of any municipality shall not be required to give bond.
- (c) Except as provided in subsection (e), any person having an interest which is or may be adversely affected may commence a civil action on his own behalf to compel compliance with this act or any rule, regulation, order or permit issued pursuant to this act against the department where there is alleged a failure of the department to perform any act which is not discretionary with the department or against any other person alleged to be in violation of any provision of this act or any rule, regulation, order or permit issued pursuant to this act. Any other provision of law to the contrary notwithstanding, the courts of common pleas shall have jurisdiction of such actions, and venue in such actions shall be as set forth in the Rules of Civil Procedure concerning actions in assumpsit.
- (d) Whenever any person presents information to the department which gives the department reason to believe that any person is in violation of any requirement of this act or any condition of any permit issued hereunder or of the acts enumerated in subsection 315(h) or any condition or any permit issued thereunder, the department shall immediately order inspection of the operation at which the alleged

violation is occurring, and the department shall notify the person presenting such information and such person shall be allowed to accompany the inspector during the inspection.

- (e) No action pursuant to this section may be commenced prior to sixty days after the plaintiff has given notice in writing of the violation to the department and to any alleged violator, nor may such action be commenced if the department has commenced and is diligently prosecuting a civil action in a court of the United States or a state to require compliance with this act or any rule, regulation, order or permit issued pursuant to this act, but in any such action in a court of the United States or of the Commonwealth any person may intervene as a matter of right.
- (f) The provisions of subsection (b) to the contrary notwithstanding, any action pursuant to this section may be initiated immediately upon written notification to the department in the case where the violation or order complained of constitutes an imminent threat to the health or safety of the plaintiff or would immediately affect a legal interest of the plaintiff.
- (g) The court, in issuing any final order in any action brought pursuant to this section, may award costs of litigation (including attorney and expert witness fees) to any party, whenever the court determines such award is The court may, if a temporary restraining order or appropriate. preliminary injunction is sought, require the filing of a bond or equivalent security in accord with the Rules of Civil Procedure. 139

The Administrative Code of 1929 provides that the Pennsylvania Department of Environmental Protection has the power and duty to abate nuisances:

Abatement of Nuisances.--The Department of Section 1917-A. Environmental Resources¹⁴⁰ shall have the power and its duty shall be:

- (1) To protect the people of this Commonwealth from unsanitary conditions and other nuisances, including any condition which is declared to be a nuisance by any law administered by the department;
- (2) To cause examination to be made of nuisances, or questions affecting the security of life and health, in any locality, and, for that purpose, without fee or hinderance, to enter, examine and survey all grounds, vehicles, apartments, buildings, and places, within the Commonwealth, and all persons, authorized by the department to enter, examine and survey such grounds, vehicles, apartments, buildings and places, shall have the powers and authority conferred by law upon constables:

 $^{^{139}}$ Id., § 601. 140 The Dep't of Envtl. Res. was abolished by the act of June 28, 1995 (P.L.89, No.18), known as the Conservation & Nat. Res. Act. The functions of the Dep't of Envtl. Res. that were not transferred to the Dep't of Conservation & Nat. Res. are vested in the Dep't of Envtl. Prot.

- (3) To order such nuisances including those detrimental to the public health to be abated and removed;
- (4) If the owner or occupant of any premises, whereon any such nuisance fails to comply with any order of the department for the abatement or removal thereof, to enter upon the premises, to which such order relates, and abate or remove such nuisance;
- (5) For the purpose of collecting or recovering the expense of the abatement or removal of a nuisance, to file a claim, or maintain an action, in such manner as may now or hereafter be provided by law, against the owner or occupant of the premises upon or from which such nuisance shall have been abated or removed by the department;
- (6) In making examinations as authorized by this section, the Department of Environmental Resources shall cooperate with the Department of Health, for the purpose of avoiding any duplication of inspection or overlapping of functions.¹⁴¹

Enforcement and Penalties under The Clean Streams Law

In addition to the foregoing provisions regarding the abatement of nuisances and restraining violations, Article VI of The Clean Streams Law¹⁴² contains other sections regarding procedure and enforcement, namely penalties; summary proceedings; complaints and investigations; civil penalties; proceedings where waters are polluted from many sources; public records and evidence; existing rules, regulations and orders; withholding of permits; enforcement orders; unlawful conduct; legislative oversight and limitation on actions.

The Clean Streams Law provides for penalties:

Section 602. Penalties.--

- (a) Any person or municipality who violates any provision of this act, any rule or regulation of the department, any order of the department, or any condition of any permit issued pursuant to this act is guilty of a summary offense and, upon conviction, such person or municipality shall be subject to a fine of not less than one hundred dollars (\$100) nor more than ten thousand dollars (\$10,000) for each separate offense, and, in default of the payment of such fine, a person shall be imprisoned for a period of ninety days.
- (b) Any person or municipality who negligently violates any provision of this act, any rule or regulation of the department, any order of the department, or any condition of any permit issued pursuant to the act is guilty of a misdemeanor of the second degree and, upon conviction, shall

¹⁴¹ Act of Apr. 9, 1929 (P.L.177, No.175), known as The Administrative Code of 1929, § 1917-A.

¹⁴² Supra note 134, §§ 601-613.

be subject to a fine of not less than two thousand five hundred dollars (\$2,500) nor more than twenty-five thousand dollars (\$25,000) for each separate offense or to imprisonment for a period of not more than two years, or both.

- (b.1) Any person or municipality who intentionally or knowingly violates any provision of this act, any rule or regulation of the department, any order of the department, or any condition of any permit issued pursuant to the act is guilty of a felony of the third degree and, upon conviction, shall be subject to a fine of not less than five thousand dollars (\$5,000) nor more than fifty thousand dollars (\$50,000) for each separate offense or to imprisonment for a period of not more than seven years, or both.
- (c) Any person or municipality who, after a conviction of a misdemeanor for any violation within two years as above provided, negligently violates any provision of this act, any rule or regulation of the department, any order of the department, or any condition of any permit issued pursuant to this act is guilty of a misdemeanor of the first degree and, upon conviction, shall be subject to a fine of not less than five thousand dollars (\$5,000) nor more than fifty thousand dollars (\$50,000) for each separate offense or to imprisonment for a period of not more than five years, or both.
- (d) Each day of continued violation of any provision of this act, any rule or regulation of the department, any order of the department, or any condition of any permit issued pursuant to this act shall constitute a separate offense.
- (e) The maximum fines specified under this section are established pursuant to requirements set forth by the United States Environmental Protection Agency in accordance with the "Federal Water Pollution Control Act" (33 U.S.C. § 1251 et seq.) and in accordance with the "Surface Mining Control and Reclamation Act of 1977" (30 U.S.C. § 1201 et seq.).
- (f) With respect to the offenses specified in this section, it is the legislative purpose to impose liability on corporations as set forth in 18 Pa.C.S. § 307 (relating to liability of organizations and certain related persons). 143

Section 605. Civil Penalties Generally .--

(a) In addition to proceeding under any other remedy available at law or in equity for a violation of a provision of this act, rule, regulation, order of the department, or a condition of any permit issued pursuant to this act, the department, after hearing, may assess a civil penalty upon a person or municipality for such violation. Such a penalty may be assessed whether or not the violation was wilful. The civil penalty so assessed shall not exceed ten thousand dollars (\$10,000) per day for each violation. In determining the amount of the civil penalty the department shall consider

¹⁴³ *Id.*, § 602.

the wilfullness of the violation, damage or injury to the waters of the Commonwealth or their uses, cost of restoration, and other relevant factors. It shall be payable to the Commonwealth of Pennsylvania and shall be collectible in any manner provided at law for the collection of debts. If any person liable to pay any such penalty neglects or refuses to pay the same after demand, the amount, together with interest and any costs that may accrue, shall constitute a judgment in favor of the Commonwealth upon the property of such person from the date it has been entered and docketed of record by the prothonotary of the county where such is situated. The department may, at any time, transmit to the prothonotaries of the respective counties certified copies of all such judgments, and it shall be the duty of each prothonotary to enter and docket them of record in his office, and to index the same as judgments are indexed, without requiring the payment of costs as a condition precedent to the entry thereof.

- (b) Civil penalties for violations of this act which are in any way connected with or relate to mining and violations of any rule, regulation, order of the department or condition of any permit issued pursuant to this act which are in any way connected with or related to mining, shall be assessed in the following manner and subject to the following requirements:
 - (1) The department may make an initial assessment of a civil penalty upon a person or municipality for such violation, whether or not the violation was wilful, by informing the person or municipality in writing within a period of time to be prescribed by rules and regulations of the amount of the penalty initially assessed. The person or municipality charged with the violation shall then have thirty days to pay the proposed penalty in full, or if the person or municipality wishes to contest either the amount or the fact of the violation, to forward the proposed amount to the department for placement in an escrow account with the State Treasurer or any Pennsylvania bank, or post an appeal bond in the amount of the proposed penalty, such bond shall be executed by a surety licensed to do business in the Commonwealth and be satisfactory to the department, and thereafter to file an appeal to the Environmental Hearing Board within the same thirty-day period. The initial assessment shall become final if the amount or the appeal bond is not forwarded to the department or if no appeal if filed with the Environmental Hearing Board within thirty days of the written notice to the person or municipality of the initial assessment and thereafter the person or municipality charged with the violation and suffering the assessment shall be considered to have waived all legal rights to contest the fact of the violation or the amount of the penalty.
 - (2) If the violation leads to the issuance of a cessation order, a civil penalty shall be assessed.

- (3) If the violation involves the failure to correct, within the period prescribed for its correction, a violation for which a cessation order, other abatement order or notice of violation has been issued, a civil penalty of not less than seven hundred fifty dollars (\$750) shall be assessed for each day the violation continues beyond the period prescribed for its correction: Provided, however, That correction of a violation within the period prescribed for its correction shall not preclude assessment of a penalty for the violation.
- (4) If through administrative or judicial review of the penalty assessed, it is determined that no violation occurred, or that the amount of the penalty should be reduced, the department shall within thirty days of such determination remit the appropriate amount to the person or municipality, with any interest accumulated by the escrow deposit.
- (c) Any other provision of law to the contrary notwithstanding, there shall be a statute of limitations of five years upon actions brought by the Commonwealth pursuant to this section. 144

Section 609 of The Clean Streams Law sets forth the circumstances where a permit may not be issued, renewed or amended, based on the action or inaction of an Such administrative actions follow a departmental investigation and an opportunity for an informal hearing.

Section 610 provides that "[t]he department may issue such orders as are necessary to aid in the enforcement of the provisions of [The Clean Streams Law]."145

Section 611 specifies what constitutes unlawful conduct:

Section 611. Unlawful Conduct.--It shall be unlawful to fail to comply with any rule or regulation of the department or to fail to comply with any order or permit or license of the department, to violate any of the provisions of this act or rules and regulations adopted hereunder, or any order or permit or license of the department, to cause air or water pollution, or to hinder, obstruct, prevent or interfere with the department or its personnel in the performance of any duty hereunder or to violate the provisions of 18 Pa.C.S. section 4903 (relating to false swearing) or 4904 (relating to unsworn falsification to authorities). Any person or municipality engaging in such conduct shall be subject to the provisions of sections 601, 602 and 605. 146

¹⁴⁴ *Id.*, § 605. ¹⁴⁵ *Id.*, § 610. ¹⁴⁶ *Id.*, § 611.

Erosion and Sediment Control

Regulations regarding environmental protection are contained in Title 25 of the Pennsylvania Code. Chapter 102 of that title governs erosion and sediment control and requires persons proposing or conducting earth disturbance activity to develop and implement best management practices to minimize the potential for accelerated erosion and sedimentation; such practices must be undertaken to protect, maintain, reclaim and restore water quality and the existing and designated uses of waters of Pennsylvania. Therefore, the best management practices control both surface soil erosion caused by precipitation and post-construction storm water runoff. 148

Generally, a person proposing an earth disturbance activity must obtain a National Pollutant Discharge Elimination System (NPDES) permit prior to commencing the activity. A permit review by DEP is directed by two considerations: (1) the interaction between precipitation and surficial soils (specifically whether accelerated soil erosion would occur and sediments would be mobilized as a result of that interaction) and (2) the efficacy of the facilities and structures that a project proponent proposes to deploy to prevent sediment pollution from leaving the site and entering local waterways. However, review is limited to what measures would be taken on site to ensure the stability of erosion and sedimentation control devices, not the development structure itself. Is a project proponent propose to deploy to prevent sediment pollution from leaving the site and entering local waterways.

Compliance and enforcement actions under Chapter 102 include one or more of the following: (1) investigations and inspections; (2) response to complaints; (3) orders, including orders to remediate or restore; (4) civil penalty proceedings; (5) summary proceedings; (6) the suspension, revocation, withholding or denial of permits or approvals; (7) notices of violation; (8) actions in a court of competent jurisdiction, including requests for injunctive relief; and (9) other administrative, civil, criminal or equitable action authorized by law.¹⁵²

It should also be noted that Chapter 92 of Title 25 of the Pennsylvania Code governs National Pollutant Discharge Elimination System permitting, monitoring and compliance.

¹⁴⁷ 25 Pa. Code § 102.2. The term "earth disturbance activity" is broadly defined as a human disturbance of the surface of land and includes "clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, timber harvesting activities, road maintenance activities, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials." *Id.*, § 102.1.

 $^{^{148}}$ Kilbuck Twp. Landslide Hearing, supra note 49, at 14 (statement of Ronald Schwartz).

^{149 25} Pa. Code § 102.5(a). The term "NPDES" is defined as "[t]he National system for the issuance of permits under section 402 of the Federal Clean Water Act (33 U.S.C.A. § 1342) including a state or interstate program which has been approved in whole or in part by the EPA." *Id.*, § 102.1.

¹⁵⁰ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 14-15 (statement of Ronald Schwartz).

¹⁵¹ *Id.* at 15. Ronald Schwartz illustrated this point by observing that "when the department is reviewing permits for a bridge structure that encroaches on a stream, we evaluate the effects of that encroachment on the environment; we do not evaluate the structural stability of the bridge itself." *Id.*

¹⁵² 25 Pa. Code § 102.32(a).

Conservation Districts in Pennsylvania

The Conservation District Law¹⁵³ was passed authorizing the creation of county conservation districts. Today there is a conservation district established in every Pennsylvania county, except Philadelphia. Sixty-six county conservation districts have been delegated responsibilities for DEP's Erosion and Sediment Control Program.

Under this program, authority is delegated to conservation districts at three different levels: Level I, Level II, and Level III. Level I delegation (four counties) includes providing information on DEP's Erosion and Sediment Control Program, the review and processing of Erosion and Sediment Control Permit applications and the review of Erosion and Sediment Control Plans. Level II delegation (fifty-two counties) includes Level I responsibilities, plus responsibilities of complaint investigation and site inspections. Level III delegation (ten counties) includes Level I and II responsibilities, plus enforcement responsibilities such as administrative hearings, equity actions, summary or misdemeanor actions and assessment of civil penalties. 154

Under the terms of agreements with DEP, the Allegheny County Conservation District administers Chapters 92 and 102 of The Clean Streams Law, which were established to prevent pollution of the waters of the Commonwealth by sediment runoff from construction sites. Erosion and sediment pollution control plans must be prepared for all earthmoving projects in the county, regardless of size, and must be available at the project site at all times. When the total area of a project exceeds five acres, an NPDES permit is required. However, a site as small as one acre will require a permit if activities on the site cause a point source discharge to the waters of the Commonwealth. The District reviews erosion and sediment pollution control plans and conducts regular site inspections to assure that erosion and sediment pollution control measures provided for in the plan are in place and are functioning properly. 155

Access to and Occupancy of Highways

The State Highway Law¹⁵⁶ empowers the Secretary of Transportation to make reasonable rules and regulations governing the use of all state highways 157 and to "issue permits for the opening of streets and driveways onto State highways and for the opening

¹⁵³ Act of May 15, 1945 (P.L.547, No.217).

¹⁵⁴ Pa. Ass'n of Conservation Dists., Conservation Dist. Programs, http://www.pacd.org/districts/ programs/control.htm (last accessed July 16, 2007).

Allegheny County Conservation Dist., http://accd.pghfree.net/?programs (last accessed

¹⁵⁶ Act of June 1, 1945 (P.L.1242, No.428). 157 *Id.*, § 420(a).

of the surface and occupancy of State highways on terms and conditions established in department regulations." In addition, "[n]o person, municipality or municipality authority shall open a driveway onto a State highway or open the surface of or occupy a State highway without a permit." ¹⁵⁹

Regulations regarding transportation are contained in Title 67 of the Pennsylvania Code. Chapter 441 of that title governs access to and occupancy of highways by driveways and local roads and is designed "to regulate the location, design, construction, maintenance and drainage of access driveways, local roads, and other property within State highway right-of-way for the purpose of security, economy of maintenance, preservation of proper drainage and safe and reasonable access." A highway occupancy permit issued by PennDOT is required to construct or alter any driveway, local road or drainage facility or structure within State highway right-of-way. ¹⁶¹

With respect to traffic impact studies, Chapter 441 specifies that "[t]he ability of a driveway to safely and efficiently function as an integral component of a highway system requires that its design and construction be based on the amount and type of traffic that it is expected to serve and the type and character of roadway which it accesses." PennDOT "may also make such investigations and require such additional information as it deems necessary." However, PennDOT has no authority over land development approvals, which are solely within the purview of municipalities.

A traffic impact study may be required based on the type, size and location of the proposed development, in which case the area roadways, levels of service, highway capacities and accident history will be reviewed with the developer. From this review, a study area will be determined, to analyze the system of state highways and local road intersections surrounding the development that are likely to be affected by traffic from the development. The purpose of the study is to develop recommendations for highway improvements in the study area needed to mitigate the traffic impact from the development. After performing traffic counts and analyzing the intersections and roadways within the study area, anticipated traffic to be generated by the development pursuant to the Institute of Traffic Engineers Trip Generation Manual is added to the existing condition of the intersections and roadways. A growth factor is then included in the study, to project traffic flow ten years into the future.

159 *Id.*, § 420(b)(2).

¹⁵⁸ *Id.*, § 420(b).

¹⁶⁰ 67 Pa. Code § 441.2(a).

¹⁶¹ *Id.*, § 441.3(a).

¹⁶² *Id.*, § 441.8(a)(1).

¹⁶³ *Id.*, § 441.3(k).

¹⁶⁴ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 34 (statement of William Lester, Dist. Permit Manager, Pa. Dep't of Transp., Eng'g Dist. 11).

A developer is required to mitigate traffic impacts. Mitigation measures may include widening the roadway, constructing auxiliary lanes to add capacity, and installing traffic signals at intersections to maintain levels of service. 166

Upon the receipt of proper notice of a regulatory violation or a permit requirement violation, further work in the permitted area must terminate, except that the area may be restored to a safe condition, and work may not resume until the violation has been remedied. PennDOT may also revoke a permit; block driveways or sever, remove or block drainage facilities constructed without a permit or in violation of regulations; pursue fines, imprisonment or other penalties; and take other necessary or proper action. In the permit of the penalties of th

Use of Explosives

The Explosives Manufacture, Storage and Possession Law¹⁶⁹ regulates the manufacture, storing and possession of explosives and requires permits for buildings or other structures used for the storage of explosives.¹⁷⁰ Any person engaged in the manufacture of explosives or in any process involving explosives or where explosives are used as a component part in the manufacture of any article or device shall report to the department before engaging in such conduct. The report must state (1) the location of the manufacture or processing and (2) the kind of explosives.¹⁷¹ Similarly, any person contemplating the storage of explosives or possessing explosives shall, before obtaining or storing the explosives, file a written report with the department stating (1) the capacity, type of construction and location of the magazine;¹⁷² (2) the kind of explosives intended to be stored or obtained, and the maximum quantity involved and (3) the distance that the magazine is located from the nearest buildings, magazines, railroads and highways.¹⁷³

¹⁶⁶ *Id.* at 36.

¹⁶⁷ 67 Pa. Code § 441.10(a)(1).

¹⁶⁸ *Id.*, § 441.10(a)(3) through (6).

¹⁶⁹ Act of July 1, 1937 (P.L.2681, No.537).

The term "explosives" is broadly defined as any substance intended to explode "or that contains oxidizing and combustible units or other ingredients in such proportions or quantities that ignition by fire, by friction, by concussion, by percussion, or by detonator, may produce an explosion capable of causing injury to persons, or damage to property." *Id.*, § 2. The term excludes manufactured articles whose "individual units contain ingredients in such limited quantities and of such nature as not ordinarily to be classified as an explosive, such as fixed ammunition for small arms, firecrackers, safety fuse, matches, and other articles which may be defined from time to time by regulations of the department." *Id.* Under Act 537 of 1937, regulating authority was vested in the Dep't of Labor & Indus. However, § 1 of Reorganization Plan No. 8 of 1981 transferred these functions, powers & duties of the Dep't of Labor & Indus. regarding the storage & possession of explosives as set forth in Act 537 of 1937 to the Dep't of Envtl. Res. The Dep't of Envtl. Res. was abolished by the act of June 28, 1995 (P.L.89, No.18), known as the Conservation & Nat. Res. Act. The functions of the Dep't of Envtl. Res. that were not transferred to the Dep't of Conservation & Nat. Res. are vested in the Dep't of Envtl. Prot.

¹⁷¹ Id., § 3.

¹⁷² The term "magazine" is defined as any structure used exclusively to store explosives. *Id.*, § 2.

¹⁷³ *Id.*, § 4.

Another statute¹⁷⁴ regulates the use of explosives in certain blasting operations and requires the examination and licensing of certain explosives' detonators.¹⁷⁵ No person may detonate explosives in any blasting operation until he or she has passed a prescribed examination testing the person's skill and knowledge of the principles and practice of blasting operations and the storage, moving, handling and detonation of explosives.¹⁷⁶ This law also sets forth criteria for blasting operations, such as maximum peak particle velocity and distance requirements.¹⁷⁷

Part I of Title 25 of the Pennsylvania Code relates to the Department of Environmental Protection. Chapter 211 of that title covers the storage, classification, handling, transportation and use of explosives; permits; records of disposition of explosives; blasting activities and monitoring.¹⁷⁸

Kilbuck Township Ordinances: Grading Requirements

Section 215-34 of the Zoning Ordinance of the Township of Kilbuck, Allegheny County provides the following with respect to steep slopes:

F. Steep slopes. When building on a slope of 25% or more, the municipality must be notified in advance. Where the Zoning Officer has determined that the on-site soils are identified as potentially landslide-prone in the Soil Survey of Allegheny County, or in other studies and maps located in the Allegheny County Office of Economic Development, or the underlying geology of the site may be unstable, it will be considered evidence of potential site instability and a geotechnical report will be required to ensure the safety of any proposed disturbance. A geotechnical report may also be required if there is visible, physical

¹⁷⁴ Act of July 10, 1957 (P.L.685, No.362).

¹⁷⁵ The term "explosives" is defined as any substance intended to explode "or that contains oxidizing and combustible units or other ingredients in such proportions or quantities that ignition by detonation may produce an explosion capable of causing injury to persons or damage to property." *Id.*, § 1. The term "blasting operation" is defined as "the use of explosives in the blasting of stone, rock, ore or any other natural formation, or in any construction or demolition work in which six or more employees are engaged," but excludes its use in agricultural operations, coal mines or strip mining operations. *Id.* Under Act 362 of 1957, regulating authority was vested in the Dep't of Labor & Indus. However, § 2 of Reorganization Plan No. 8 of 1981 transferred these functions, powers and duties of the Dep't of Labor & Indus. to the Dep't of Envtl. Res. The Dep't of Envtl. Res. was abolished by the act of June 28, 1995 (P.L.89, No.18), known as the Conservation & Nat. Res. Act. The functions of the Dep't of Envtl. Res. that were not transferred to the Dep't of Conservation & Nat. Res. are vested in the Dep't of Envtl. Prot.

176 Id., § 2.

 $^{^{177}}$ Id., § 3. For example, blasting operations are generally prohibited near streams if the effect of the blasting is liable to change the course or channel of any stream. Id., § 3(d). Blasting operations shall not be conducted within 800 feet of a public highway, unless due precautionary measures are taken to safeguard the public. Id., § 3(e).

¹⁷⁸ 25 Pa. Code Ch. 211.

evidence of site instability, such as soil creep, slumping, rock falls or landslides as determined by the municipality. Any disturbances of the land must comply with Chapter 115, Grading, of the Kilbuck Township Code ¹⁷⁹

The purpose of the Grading Ordinance of Kilbuck Township (Chapter 115) is to:

... provide minimum standards to safeguard persons and property, to protect and to promote the public welfare, by preventing excess erosion, hazardous rock and soil slippage, sediment production and other soil and water management problems, and by regulating and controlling the design, construction, quality of materials, use, location and maintenance of grading, excavation and fill. 180

Section 115-11 of the Kilbuck Township Grading Ordinance sets forth standards for grading. Subsection (F) provides that "[t]he top and bottom edges of cut or fill slopes shall be kept back from property or right-of-way lines three feet plus 1/5 the height of the cut or fill, which total distance need not exceed 10 feet." ¹⁸¹

Subsection (J) of § 115-11 provides the following regarding maximum steepness of graded slopes:

- J. Maximum steepness of graded slopes shall be no greater than two horizontal to one vertical (2:1) except under the following conditions:
 - (1) Where the height of a proposed slope will not exceed 10 feet, then a maximum slope steepness of 1:1 may be allowed where soil conditions permit and doing so will help to preserve existing vegetation or other significant natural features. The cut or fill shall be located so that a line having a slope of two horizontal to one vertical and passing through any portion of the slope face will be entirely inside the property lines of the proposed development.
 - (2) Where a retaining wall, designed and sealed by a registered professional engineer, is constructed to support the face of the slope. 182

Subsection (L) of § 115-11 provides the following regarding graded slopes and benching:

L. Graded slopes of 20 or more feet in height shall be benched every 12 feet. Benches shall have a minimum width of six feet and a maximum slope of 5%. Benches shall be planted with trees at a rate of one tree per 30 lineal feet of bench. Trees shall have a minimum caliper of 1.5 inches

¹⁷⁹ Kilbuck Twp. Zoning Ordinance, § 215-34(F).

¹⁸⁰ Kilbuck Twp. Grading Ordinance, § 115-1(B).

¹⁸¹ *Id.*, § 115-11(F).

¹⁸² *Id.*, § 115-11(J).

diameter at breast height (DBH). Species of trees may be mixed, but shall consist of hardy native species. New plantings shall be inspected yearly; and all dead, diseased, or damaged trees shall be replaced. 183

Subsections (M) and (N) of § 115-11 provide the following with respect to steep slopes and the disturbance of land:

- M. The following standards shall apply to all grading and disturbance of land with slopes of 25% or greater. If any of the delineated steep slope areas include soils or geologic features which indicate possible instability, the additional standards contained in Subsection N, below, shall apply.
 - (1) Slopes between 25% and 40%. No more than 25% of the slope areas with existing grades between 25% and 40% shall be stripped of vegetation or disturbed through grading. Grading for roads shall be limited to the cartway, and the remainder of the right-of-way shall be left undisturbed.
 - (2) Slopes exceeding 40%. No development or disturbance shall be allowed on slopes exceeding 40%. Very limited disturbance for utilities may be allowed if the applicant demonstrates that no feasible alternative location exists.
- No grading, removal of vegetation, construction, or other N. disturbance shall be permitted on soils that are classified as slide-prone or unstable in the Soil Survey of Allegheny County, on any land that is delineated as unstable on the Landslide Susceptibility Map of Allegheny County, or on any other areas of a proposed development site that exhibit signs of instability, except in accordance with the provisions of this subsection:
 - (1) Unstable areas of a site may be set aside as common or private open space.
 - (2) Limited disturbance of unstable areas may be allowed if the applicant demonstrates to the satisfaction of the administrator that the proposed disturbance will not cause sliding or movement or any unsafe condition either on the development site or on any property adjacent to it.
 - (3) Evidence of the safety of any proposed disturbance shall require site investigation and certification in writing by a registered soils engineer, engineering geologist, or professional engineer with experience in soils engineering that the proposed activity will not create or exacerbate unsafe conditions. 184

¹⁸³ *Id.*, § 115-11(L). ¹⁸⁴ *Id.*, § 115-11(M) and (N).

Subsection (O) of § 115-11 provides for modification or waiver by the township administrator:

O. Modification or waiver. The administrator may grant a modification or waiver of the requirements of one or more provisions of this chapter if, because of peculiar conditions pertaining to the land in question, literal enforcement is impracticable, provided such modification or waiver will not be contrary to the public interest and that the purpose and intent of the chapter is observed.¹⁸⁵

¹⁸⁵ *Id.* § 115-11(O) (added Apr. 16, 2006 by Ord. No. OO-02-3). The administrator is a qualified individual designated by the Board of Supervisors to act under the grading ordinance for the township. *Id.*, § 115-2(B).

ACTIONS TAKEN BY KILBUCK TOWNSHIP

In January 2002, ASC Development, Inc., presented plans to the Kilbuck Township Board of Supervisors for a 204,000 square-foot Wal-Mart SuperCenter, covering 75 acres of the lower portion of the property formerly occupied by the Dixmont State Hospital. It was indicated that site plans would be presented to the township soon thereafter. 187

On February 7, 2002, site plans were presented to the Kilbuck Township Planning Commission. The following month, the Planning Commission voted 5-1 to recommend approval of the site plans, subject to corrections sought by the township engineer. ¹⁸⁸

On March 6, 2002, the Kilbuck Township engineer sent a letter to ASC Development, Inc., describing 51 items that needed to be addressed regarding the development plans. Nine items concerned grading.¹⁸⁹

The following day, the Kilbuck Township Planning Commission met. ASC Development, Inc., stated that the geological report was being forwarded to the township engineer, and test drillings were being done. The Planning Commission voted 5-1 to recommend approval of the site plans, conditioned on satisfaction of the concerns raised in the March 6, 2002 letter of the township engineer. ¹⁹⁰

At its April 16, 2002 meeting, the Kilbuck Township Board of Supervisors amended the township ordinance to "give the administrator discretion when reviewing commercial and other large scale grading and filling applications." The Kilbuck

¹⁸⁸ *Id.* at 84-86

¹⁸⁶ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 84 (statement of Mary Louise Fowkes, Co-Chair, Communities First!).

¹⁸⁷ *Id*.

¹⁸⁹ *Id.* at 84. Mary Louise Fowkes quoted from the letter of the twp. eng'r: "All grading shall be conducted in compliance with the Kilbuck Township Grading Ordinance. The maximum steepness of graded slopes shall be no greater than 2 horizontal to 1 vertical. Graded slopes of 1 to 1 and 0.75 to one are shown on the Grading Plan. Graded slopes of 20 or more feet in height shall be benched every 12 feet. No benching is shown on the grading map." *Id.* at 85. Fowkes added that "there never *was* any benching. There couldn't be. The site was simply too small and the project too big." *Id.* (emphasis in original).

¹⁹⁰ Id. at 85-86.

¹⁹¹ *Id.* at 86.; *see supra* p. 51 for § 115-11(O) of the Kilbuck Twp. Grading Ordinance and note 185 for the definition of "administrator."

Township Board of Supervisors conditionally approved the development plans. Subsequently, the board appointed the township engineer as the administrator. 192

On March 20, 2003, the Allegheny County Department of Economic Development received proposed development plans for the site. On April 8, 2003, the department's Planning Project Manager wrote to Kilbuck Township commenting on the proposed development. 193 The comments analyzed the subdivision plat, zoning/site development, traffic/circulation, soils/environmental/site grading and utilities/storm water management. 194 Following the receipt of written comments from the Allegheny County Department of Economic Development, in May 2003, ASC Development, Inc., submitted a second set of site plans, which the Kilbuck Township Board of Supervisors approved. However, the second set of plans was subsequently withdrawn. 195

In January 2004, the developers submitted a third set of site plans for the development. That same month, the Kilbuck Township Board of Supervisors further amended the township ordinances, voting to eliminate the specific provisions that would have prohibited the building of a gas station on the development site. 196 In July 2004, the Kilbuck Township Board of Supervisors approved the final set of site plans for the development. 197

On October 18, 2005, Kilbuck Township issued a grading permit for the development site, ¹⁹⁸ but on October 5, 2006, it suspended the grading permit as a result of the landslide ¹⁹⁹

¹⁹² Kilbuck Twp. Landslide Hearing, *supra* note 49, at 86 (statement of Mary Louise Fowkes). Fowkes further testified that the twp. eng'r "works for Widmer Engineering, the very firm hired by the developer to conduct their traffic study." *Id.* She continued by stating the following:

So here is the situation: an administrator who has an established conflict of interest is given power to grant variances, at will, for any ordinance that would be, quote, "impractical" to enforce. She can do so without any public input or oversight. At this point, the overly steep grades on the site plan -- the ones that had concerned [the township engineer] in her March 6 letter to the developer were suddenly no longer a problem.

Id. at 86-87 (emphasis in original).

Letter from Kay Pierce, Planning Project Manager to James T. Pool, Sec'y of Kilbuck Twp. (Apr. 8, 2003) (on file with the J. State Gov't Comm'n).

¹⁹⁴ Id. On Feb. 16, 2004, the Allegheny County Dep't of Econ. Dev. wrote to Kilbuck Twp. concerning the proposed dev. and commented about the landslide-prone soils and proposed slopes, referring to the twp.'s grading ordinance and restrictions. Pa. Dep't of Envtl. Prot. Gen. Timeline (on file with the J. State Gov't Comm'n).

¹⁹⁵ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 88-89 (statement of Mary Louise Fowkes); Pierce, *supra* note 190.

196 *Id* at 89.

197 *Id*.

¹⁹⁸ Kilbuck Twp. Gen. Timeline, *supra* note 39. The issuance of the grading permit followed several months of correspondence from the twp. eng'r regarding waivers considered to the Kilbuck Twp. Grading Ordinance and the necessary letter of credit. On Jan. 4, 2005, Kilbuck Props., Ltd. P'ship, applied for a grading permit, and on Jan. 19, 2005, Kilbuck Twp. indicated approval of the grading permit application and set forth the value of the letter of credit. *Id.*

¹⁹⁹ *Id*.

ACTIONS TAKEN BY THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

In early 2002, PennDOT received the traffic impact study for the proposed development on the site of the former Dixmont State Hospital. After many comments and revisions, PennDOT conceptually approved the study in 2004. The study was also reviewed by PennDOT's Central Office Bureau of Highway Safety and Traffic Engineering, David E. Wooster and Associates on behalf of Kilbuck Township, and PBS&J Consulting Engineers on behalf of Emsworth Borough.²⁰⁰

In August 2003, Widmer Engineering, Inc., prepared a traffic impact study for the developer. On December 17, 2003, Kilbuck Township informed PennDOT in writing that the review of the traffic impact study by the Kilbuck Township Traffic Engineer was complete and that Kilbuck Township supported the proposed development. 202

On March 16, 2004, PennDOT District 11 received an application for a highway occupancy permit for the development, "filed by Kilbuck Township, since the main access site is from an existing local road connection to State Route 65, not a private driveway." The application contained detailed highway construction plans that reflected improvements recommended in the traffic impact study. 204

²⁰⁴ *Id*.

²⁰⁰ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 36-37 (statement of William Lester).

²⁰¹ Kilbuck Twp. Gen. Timeline, *supra* note 39. On Sept. 17, 2003, the Emsworth Borough Traffic Eng'r circulated a review letter regarding the traffic impact study. On Sept. 29, 2003, Widmer Eng'g, Inc., wrote to the Pa. Dep't of Transp. and responded to the review letter of the Emsworth Borough Traffic Eng'r. On Nov. 12, 2003, the Kilbuck Twp. Traffic Eng'r circulated a review letter regarding the traffic impact study, to which Widmer Eng'g, Inc., responded the next day. That same day, Kilbuck Twp. responded to the Nov. 12, 2003 review letter, and on Nov. 14, 2003, the Kilbuck Twp. Traffic Eng'r responded to the Kilbuck Twp. comment letter. *Id*.

²⁰² *Id.* Between Sept. 2003 and Mar. 2004, numerous correspondence occurred among Widmer Eng'g, Inc., the Pa. Dep't of Transp., the Kilbuck Twp. Traffic Eng'r, the Emsworth Borough Traffic Eng'r & the Communities First! Traffic Eng'r. *Id.* On May 12, 2004, the Emsworth Borough Traffic Eng'r distributed a review letter regarding the traffic impact study and indicated that all the issues presented in its past correspondence had been resolved. Two days later, the Communities First! Traffic Eng'r circulated a letter that opposed the traffic impact study. *Id.*

²⁰³ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 37 (statement of William Lester). Although the specific date is not included in the hearing transcript, it is included in written testimony submitted by William Lester for the hearing.

On June 1, 2004, Widmer Engineering, Inc., forwarded a revised traffic impact study, dated May 2004, to the Kilbuck Township Traffic Engineer. ²⁰⁵

On July 15, 2004, Kilbuck Township wrote to PennDOT indicating that the comments and concerns regarding the traffic impact study had been satisfactorily addressed. It requested that PennDOT approve the revised traffic impact study.²⁰⁶

On January 24, 2005, PennDOT issued a highway occupancy permit for the development. 207

After June 17, 2005, PennDOT met with the developer and required an emergency detour and roadway closure plan due to the nature of the work along Ohio River Boulevard (Pennsylvania State Route 65).²⁰⁸

On September 19, 2006, after PennDOT was notified of the landslide, it implemented the emergency detour and roadway closure plan and immediately suspended work under the highway occupancy permit, except to restore the highway to a safe condition. PennDOT also suspended blasting activities within its right-of-way, demanding that rock be removed manually. ²¹⁰

On December 1, 2006, a supplement to the highway occupancy permit included roadway repairs to Ohio River Boulevard, due to the Kilbuck landslide.²¹¹

²⁰⁷ *Id.*; Kilbuck Twp. Landslide Hearing, *supra* note 49, at 38 (statement of William Lester).

²⁰⁵ Kilbuck Twp. Gen. Timeline, *supra* note 39. On June 25, 2004, the Kilbuck Twp. Traffic Eng'r circulated a review letter regarding the revised traffic impact study. On July 7, 2004, Widmer Eng'g, Inc., responded to the review letter of June 25, 2004. That same day, the Emsworth Borough Traffic Eng'r indicated in writing that the developer had satisfactorily addressed the traffic-related issues regarding Emsworth Borough. Similarly, on July 13, 2004, the Kilbuck Twp. Traffic Eng'r distributed a letter indicating that all its concerns and comments had been satisfactorily addressed. *Id.*

²⁰⁰ Id.

²⁰⁸ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 39 (statement of William Lester).

²⁰⁹ *Id.* (statement of William Lester). William Lester added that once the roadway is restored and the hillside secured, the developer must propose to the Pa. Dep't of Transp. how it intends to proceed, and "[s]hould the developer decide to continue with or change the scope of the proposed development, the Department may require a new or revised HOP [highway occupancy permit] application for access to State Route 65." *Id.* at 40.

²¹⁰ *Id.* at 43.

²¹¹ Kilbuck Twp. Gen. Timeline, *supra* note 39.

ACTIONS TAKEN BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

This section provides background information regarding the actions taken by DEP and the Allegheny County Conservation District. In addition, this section summarizes informal responses from DEP to various questions regarding the Kilbuck landslide and the Earth Disturbance Reports from DEP.

Actions Taken by DEP and the Allegheny County Conservation District

On March 20, 2002, a Notice of Intent for coverage under an NPDES general permit was received by the Allegheny County Conservation District for the proposed development on the site of the former Dixmont State Hospital. On January 6, 2003, a general permit was granted for the outfall.

On October 18, 2004, DEP held a public hearing regarding the storm water runoff management plans for the development site. 214

In December 2004, DEP approved an authorization to proceed under an NPDES general permit, which authorized storm water discharges associated with construction activities at the site.²¹⁵ The Kilbuck Properties, L.P., NPDES permit application noted

²¹² Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194. From Apr. 1, 2002 through Dec. 6, 2004, there were numerous technical and admin. deficiency letters back and forth with the applicant, the Allegheny County Conservation Dist. & the Pa. Dep't of Envtl. Prot. regarding Phase I and Phase II issues, comments from Communities First!, permit coordination and plan revisions. *Id*.

²¹³ *Id.* The term "outfall" is defined as the "outlet of a sewer, drain, or stream, especially where it empties into a larger body of water." Encarta World English Dictionary, http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861635766 (last accessed July 18, 2007). On Jan. 6, 2003, there was a request to withdraw a permit application, which the Pa. Dep't of Envtl. Prot. received on May 1, 2002, for a 54-inch outfall to Toms Run. Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194.

²¹⁴ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 93 (statement of Mary Louise Fowkes).

²¹⁵ Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194. On Dec. 6, 2004, the Allegheny County Conservation Dist. approved the erosion and sediment control plans. On Dec. 8, 2004, the Pa. Dep't of Envtl. Prot. contacted William Lester, Dist. Permit Manager of the Pa. Dep't of Transp., Eng'g District 11, who stated that the Pa. Dep't of Transp. did not have a problem with the locations noted in the proposed dev. and that the Dep't of Envtl. Prot. could issue the requested permit. On Dec. 27, 2004, the Pa. Dep't of Envtl. Prot., Sw. Dist. Reg'l Office approved an NPDES general permit and a permit for outfall structures. *Id.*

that soil types in the development area are prone to landslides, and the developer identified several on-site resolutions to address those soil problems, including limiting the exposure of storm water erosion control devices, such as sediment ponds and diversion ditches, to daily construction and seeding the area immediately after the finished grade was established.²¹⁶

On October 27, 2005, the Allegheny County Conservation District inspected the site, noting the demolition of buildings, the erosion and sediment controls in place, and no violations.²¹⁷

In November 2005, DEP issued a blasting activity permit to Penn Development.²¹⁸

The site development included the creation of a flat surface for a proposed retail center using a cut and fill approach on the hillside.²¹⁹

In April 2006, the first rock slide occurred at the site when the contractor blasted to loosen the rock for excavation and construction of a right turn lane into the development and within the highway right-of-way.²²⁰

Ronald Schwartz further explained that "[g]eotechnical structural analyses are not part of the state's Erosion and Sedimentation Control Program. Regulation of these issues historically have been vested in local governments either through local zoning or ordinances or by the municipalities opting into the state's Uniform Building Code." He added that "DEP has no authority over local land-use decisions which similarly are the province of local government." *Id.* at 16. In addition, William Lester commented that "[w]e did review the hydraulic report because the developer did propose a connection to our culvert to evacuate the water from the site. It did meet the township's requirements for storm water management and it also met the Department's standards that our facility was capable of handling that water." *Id.* at 50 (statement of William Lester). Mary Louise Fowkes clarified that the granting of the permit on Dec. 27, 2004 followed (1) request by the Pa. Dep't of Envtl. Prot. for a response by the developers to the concerns of Communities First! raised at the Oct. 18, 2004 public hearing on the storm water runoff management plans for the dev. site, (2) a re-submittal of the storm water runoff management plans and (3) a meeting between Communities First! & the Pa. Dep't of Envtl. Prot. Reg'l Dir. & other departmental personnel on Dec. 2, 2004. *Id.* at 94-95 (statement of Mary Louise Fowkes).

²¹⁷ Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194.

Ronald Schwartz noted that the four approvals issued by the Pa. Dep't of Envtl. Prot. were for storm water runoff, a discharge pipe, blasting activity and the sewage flows. *Id.* at 18. The original blasting activity permit, listing Senex Explosives, Inc., as the blasting contractor, was approved on Nov. 22, 2005 with the comment "Blasting in areas known to have contaminated soils is prohibited. Dust from blasting may not leave the site." Pa. Dep't of Envtl. Prot. Blasting Activity Permit 02054010 (on file with the J. State Gov't Comm'n). Senex Explosives, Inc., subsequently requested that the Blasting Activity Permit be amended as a result of the Kilbuck rock slide in April, and the Pa. Dep't of Envtl. Prot. approved the amendments on May 31, 2006. Letter from Senex Explosives, Inc., to the Pa. Dep't of Envtl. Prot. (May 31, 2006), stamped "approved" by the Dep't of Envtl. Prot. (on file with the J. State Gov't Comm'n).

²¹⁹ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 13 (statement of Ronald Schwartz).

²²⁰ *Id.* at 39 & 43 (statements of William Lester and Daniel Cessna). The southbound lanes of Pa. State Route 65 were restored to traffic the morning after the rock slide, and the northbound lanes were restored to traffic the day after that. *Id.* at 39 (statement of William Lester).

On July 11, 2006, the Allegheny County Conservation District inspected the site. in light of a July landslide and its impact on the sediment basin.²²¹

On September 18, 2006, the day before the Kilbuck landslide, multiple explosions were heard coming from the development site. 222

On September 21, 2006, work began to remove the landslide material. This same day and the next, representatives of the Allegheny County Conservation District visited the site.²²³

On September 22, 2006, DEP suspended portions of the erosion and sedimentation control permit of Kilbuck Properties, L.P., which effectively halted all earth disturbance activities except for those related to the cleanup and stabilization of the site. 224 That same day, DEP received from the developer Emergency Plan Phase I and II for erosion and sediment controls for the removal of the landslide material.²²⁵

On September 25 and 26, 2006, DEP inspected the property. 226

On October 4, 2006, DEP issued an order requiring monitoring and drilling and submission of a geotechnical plan and emergency plan to permanently stabilize the development site.²²⁷

On October 6, 2006, a large section of the east end of the landslide area began to move again. That same day, DEP received an emergency erosion and sediment control plan and narrative.²²⁸

On October 18, 2006, a drilling rig began drilling shallow holes on the site. On November 15, 2006, the drilling finished and included eight holes in the stockpile area.²²⁹

Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194.
 Kilbuck Twp. Landslide Hearing, *supra* note 49, at 16 (statement of Ronald Schwartz). Ronald Schwartz added that several weeks later, the dep't found no violations of the blasting permit. *Id.*

²²³ Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194.

Kilbuck Twp. Landslide Hearing, *supra* note 49, at 13-14 (statement of Ronald Schwartz). Ronald Schwartz said if the Kilbuck Properties decided to proceed with the project, it would need to obtain new permits from the dep't. Id. at 16-17. He stated that although the Pa. Dep't of Envtl. Prot. responded to the emergent condition of the dev. site, the developer is ultimately "responsible for directing and coordinating management of the slide." Id. at 17.

²²⁵ Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194. ²²⁶ *Id*.

²²⁸ *Id.* On that day, the Pa. Dep't of Envtl. Prot. began to monitor the slope movement using GPS (global positioning system) technology and stakes at various locations. The east section was recorded as moving 12.88 feet. Id. $^{12.00}_{229}$ *Id.*

On December 1, 2006, DEP received the requested geotechnical report.²³⁰

On December 15, 2006, DEP approved changes to the monitoring requirements. ²³¹

On January 10, 2007, DEP received a revised erosion and sediment control plan for the waste area based on aerial mapping.²³²

On January 16, 2007, DEP visited the site to view the slide that occurred in the cut section above the upper bench and observe material in the safety area. ²³³

On January 17, 2007, DEP ordered additional drilling, data gathering and soil stockpile evaluation and set deadlines for permanent stabilization and completion of construction (October 31, 2007). That same day, DEP filed a complaint seeking civil penalties totaling \$470,000 from the developer of the Kilbuck landslide site. ²³⁴

On January 19, 22 and 24, 2007, DEP received correspondence from Kilbuck Properties, L.P., regarding design requirements for the slope stability analysis, the proposed drilling plan, the biweekly report and an analysis of the stockpile area.²³⁵

On January 26, 2007, DEP approved the plan for additional drilling. That same day, DEP sent a notice of violation, requiring parameters to be used in the model for the slope stability analysis. On January 29, 2007, DEP received information required by the notice of violation. The next day, Kilbuck Properties, L.P., contacted DEP concerning the proposed drilling and design criteria for the site slope stability analysis. ²³⁶

²³⁰ *Id.* In Dec. 2006 and Jan. 2007, the Pa. Dep't of Envtl. Prot. discussed deficiencies with the developer in the geotechnical rep. and its supplements. On Dec. 6, 2006, the Pa. Dep't of Envtl. Prot. met with the developer to discuss deficiencies in the geotechnical rep. On Dec. 18, 2006, the Pa. Dep't of Envtl. Prot. received a supplement to the geotechnical rep. On Dec. 21, 2006, the Pa. Dep't of Envtl. Prot. received additional information for the geotechnical rep. On Jan. 10, 2007, the Commw. Geotechnical Team met with the developer and consultants to discuss rep. deficiencies. *Id.*

²³¹ *Id*.

²³² *Id*.

²³³ *Id*.

²³⁴ *Id.* The state sought the \$470,000 amount, which represents the maximum fine calculated per day of violation, for the developer's failure to stabilize the land. Karen Roebuck, "State seeks max fine in slide," *Pittsburgh Tribune-Review* (Jan. 18, 2007), http://www.pittsburghlive.com/x/pittsburghtrib/news/cityregion/s 489102.html (last accessed Apr. 15, 2008).

Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194. The drilling plan concerned groundwater monitoring devices. The Pa. Dep't of Envtl. Prot. required that the redesign documents contain (1) a 15-foot wide, soil-free "bench" on exposed sandstone rock along the north side of Pa. State Route 65 and (2) plans "to remove or demolish all tunnels that once connected Dixmont State Hospital buildings on the property. The developer covered the tunnels with rock and dirt as it prepared the site for construction, but several weeks ago one collapsed, creating a deep sinkhole." Hopey, *supra* note 90.

²³⁶ Pa. Dep't of Envtl. Prot. Gen. Timeline, *supra* note 194.

On July 23, 2007, the Wal-Mart Real Estate Business Trust submitted a site stabilization plan to DEP.²³⁷ On August 21, 2007, DEP rejected the plan but issued a permit to help the company do the work necessary to stabilize the site while waiting for a revised plan and additional information.²³⁸ A detailed and updated discussion of site stabilization efforts is found on pages 29-35 of this report.

Informal Responses from DEP

In anticipation of the organizational meeting of the Advisory Committee on the Kilbuck Township Landslide on May 16, 2007, Representative T. Mark Mustio²³⁹ prepared a list of several questions concerning DEP oversight. On June 12, 2007, DEP responded to the questions and provided copies of Earth Disturbance Inspection Reports. The information provided by DEP is summarized as follows:²⁴⁰

Question: Did the Allegheny County Conservation District inspect and monitor the Erosion and Sedimentation Control Plan?

Answer: "The Allegheny County Conservation District (District) reviewed and approved the Erosion and Sedimentation (E&S) Control Plan with the help of the Department of Environmental Protection's (DEP) area engineer, Darl Rosenquest. DEP actually issued this authorization in order to coordinate it with other permits that Kilbuck needed for the project. The District and DEP both conducted E&S inspections at the site to determine whether the permittee was implementing the Erosion and Sedimentation Control Plan that is part of the permit. Neither the District nor the Department are [sic] obligated to follow the plan. Implementing the plan is always the obligation of the permittee, in this case, Kilbuck Properties."

Question: How was the site water runoff handled during the construction phase?

Answer: "During construction, precipitation runoff was to be directed through a series of collection and diversion channels. The collection channels were intended to capture the sediment laden

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²³⁷ Ritchie, *supra* note 94.

²³⁸ Ritchie, *supra* note 103; Hopey, *supra* note 103 (Aug. 21, 2007); Hopey, *supra* note 103 (Aug. 22, 2007).

²³⁹ Rep. Mustio is a member of the legis. task force established under Pa. H.R. Res. 897 (2006).

²⁴⁰ Copies of Rep. Mustio's correspondence, response correspondence from the Pa. Dep't of Envtl. Prot. and the Earth Disturbance Reps. are on file with the J. State Gov't Comm'n. The quoted language in the summary is the unedited response of Kenneth T. Bowman, Reg'l Dir., on behalf of Ronald A. Schwartz, Assistant Reg'l Dir., Pa. Dep't of Envtl. Prot., Sw. Reg'l Office.

water, and convey it to a sedimentation pond for treatment prior to discharge to Toms Run. The diversion channels were intended to capture clean, unpolluted runoff and, as the name implies, to divert it around the disturbed areas, preventing it from becoming contaminated with sediment."

Question: Was any of this runoff water allowed to drain through the rock fill or that section of the fill that failed?

Answer: "DEP is not aware of any evidence that would indicate that runoff was deliberately diverted through the rock fill or the specific section of the fill that failed."

Question: Did the Allegheny County Conservation District monitor this and who did not make sure the approved plan was followed?

Answer: "The Conservation District, along with Darl Rosenquest, reviewed the E&S Plan, and DEP issued the NPDES permit, which incorporates that plan by reference. Compliance with the terms and conditions of a permit is always the responsibility of the permittee, in this case, Kilbuck Properties, L.P. DEP is investigating, but at this time, has no evidence that would indicate that Kilbuck Properties failed to fully implement its E&S Control Plan."

Question: Does the Task Force have access to these monitoring reports and any recommendations?

Answer: "DEP has photocopied and forwarded to the Task Force the inspection reports that were prepared after site inspections were conducted by the District and DEP."

Questions: Was a preblast survey conducted? Was a blast plan completed? Who prepared these items and who monitored the blast?

Answer: "Both a pre-blast survey and a final blast plan were completed. The licensed blaster is responsible for conducting the pre-blast survey and for monitoring the actual blasting operations. All blasts were monitored."

Questions: Was there a seismic/slope stability analysis of the site considering seismic and/or blasting loads prepared by computer before the construction started? Was there a stability analysis prepared using saturated soils? Was there ever an analysis done combining seismic analysis with water from a heavy rain event?

Answer: "The original Geotechnical report for this project proposed "ripping" the sandstone bedrock rather than blasting, so no blasting analysis was conducted prior to the start of construction. When the decision was made by the developer to blast rather than "rip" the sandstone bedrock, they submitted a blasting activity permit application, which was issued on November 22, 2005. There is no requirement under the blasting regulations to do a stability analysis with or without saturated soils or from a heavy rain event as part of the blasting activity permit. To our knowledge, no such analysis was done. There are requirements, however, to conduct seismic monitoring during blasting events at any structure within a certain distance of the blast area. In this case, this included one residence and the nearby school. Seismographs were placed at the Gallagher Residence for the first several shots and at the Montessori School for all shots."

Earth Disturbance Reports

The following summarizes the Earth Disturbance Inspection Reports forwarded by DEP with the responses to the questions of Representative Mustio.

Inspection Date: June 26, 2002. "Appears that demolition may have started. There are dumpsters along Toms Run Rd. that are filled with bricks and other debris. No earth moving was seen during inspection." No violations were observed at the time, and a notation was made that an NPDES permit was required but not yet issued.

Inspection Date: October 27, 2005. "Demolition of structures where proposed basin is to be implemented was taken [sic] place at time of inspection. Silt fence along Rt. 65 was installed. Rock construction entrance was installed. Inlet protection in existing inlets off of Thoms [sic] Run Rd. was installed. Silt fence was added in demolition area. Silt fence was installed along access road." No violations were observed at the time, and notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required. The phrase "minimal disturbance encountered" was also noted.

Inspection Date: July 11, 2006. "Sediment Basin is partially constructed and not fully functional. The Hillside falling into Route 65 has delayed the completion of this basin. Super Silt Fence below field slopes has been installed. The field slopes under construction are

being seeded and blanketed in regular increments as per the plan. The Rock Construction Entrance is installed but there is a potential for maintenance issues." No violations were observed at the time, and notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required. It was also noted that "[i]nspection of this project has revealed site conditions which constitute violations of 25 Pa. Code Chapters 92 and/or 102 of the Clean Streams Law, the act of June 22, 1937, P.L. 1987, 35 P.S. § 691.1 et seq." Furthermore, the inspector noted that "[o]nce the ongoing cleanup of the Route 65 blockage is finished, then completion of the Sediment Basin should take place. The Rock Construction Entrance should be monitored for its condition and any required maintenance performed to ensure its proper functioning."

Inspection Date: September 21, 2006. "Massive landslide onto S.R. 0065 and Norfolk Southern Railway Tracks. No indication of pollution to the waters of the Commonwealth were observed. Inspected site with Darl Rosenquest, DEP." No violations were observed at the time, and notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required. It was noted that "[o]nce the ongoing cleanup of the Route 65 blockage is finished, then contractor should submit a revised plan to ACCD."

Inspection Date: September 22, 2006. "Investigated the site from the eastern side of Huntington Avenue due to a telephone complaint of earth disturbance in that area. No such disturbance was observed." No violations were observed at the time, and notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required.

Inspection Date: October 4, 2006. "Remediation of landslide area is continuing. Material from north edge of slide is being trucked to south end of cut. Inspection to determine compliance with emergency E&S plan only."

The inspection report noted the following site descriptions and observations:

- 1. Sed. Basin has been enlarged & hole in side closed. Basin still not to plan specs (no emergency spillway, no baffles, slope pipe enters near skimmer).
- 2. Temp. Channel #1 has been roughed in. No liner.
- 3. Super silt fence between Rt. 65 & RR was actually installed below RR. Another fence is being installed above highway. Posts not installed correctly (bent and/or cut).

- 4. Temp. Channel #2 is roughed in. No liner, some places in need of maintenance (blockage, standing water).
- 5. Super silt fence installed below part of soil stockpile #2.

The inspection report also noted several inspection findings: failure to implement effective Best Management Practices, failure to maintain effective Best Management Practices, failure of earth disturbance activities to comply with permit conditions and site conditions present a potential for pollution to waters of the Commonwealth. In addition, it was noted that "[i]nspection of this project has revealed site conditions which constitute violations of 25 Pa. Code Chapters 92 and/or 102 of the Clean Streams Law, the act of June 22, 1937, P.L. 1987, 35 P.S. § 691.1 et seq."

The inspection report also outlined the following compliance assistance measures:

- 1. Submit an as-built of the sediment basin to DEP by 10/11/06. Correct all deficiencies noted in this report & by the as-built.
- 2. Provide a liner for Temp. Channel #1. (An impervious liner should be used in the slide area.)
- 3. Install super silt fence as per plan. (Use post hole drill to install posts.)
- 4. Install liner in Temp. Channel #2.
- 5. Complete installation of super silt fence.

Notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required; an Erosion and Sedimentation Control Plan was requested.

Finally, the inspection report noted that "[a]n E&S plan that addresses the final configuration of this site should be submitted to DEP once the slide area is stabilized."

Inspection Date: October 13, 2006. "Landslide remediation is continuing with some material being hauled to offsite waste area (Stroyne Property)."

The inspection report noted the following site descriptions and observations:

- 1. Work is progressing on Sed. Basin (slope pipe moved, rip cap apron being installed). Still no baffle. Emergency spillway is installed; needs shaped.
- 2. Still no liner in Temp. Channel #1. Water pooling in some locations where it crosses slide area.

- 3. Super silt fence along Rte. 65 is installed. Needs cleaned out near south end.
- 4. Temp. Channel #2 has been opened & lined.
- 5. Super silt fence below soil stockpile is completed.

The inspection report also noted several inspection findings: failure to implement effective Best Management Practices, failure of earth disturbance activities to comply with permit conditions and site conditions present a potential for pollution to waters of the Commonwealth. In addition, it was noted that "[i]nspection of this project has revealed site conditions which constitute violations of 25 Pa. Code Chapters 92 and/or 102 of the Clean Streams Law, the act of June 22, 1937, P.L. 1987, 35 P.S. § 691.1 et seq."

The inspection report also outlined the following compliance assistance measures:

- 1. Submit as-built of sed. basin to DEP by 10/20/06[;] continue to correct deficiencies.
- 2. Line Temp. Channel #1 & address pooling of water.
- 3. Install E&S BMPs in waste area.

Notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required; an Erosion and Sedimentation Control Plan was requested.

Inspection Date: October 16, 2006. "Inspection of waste area. Fill in waste area less than anticipated & confined to one side of access road. Therefore revision to plan is necessary to keep runoff from fill out of roadside diversion channel. Road is being graded to dip into fill. Super silt fence has been broken into 2 sections to keep access road open."

The inspection report noted the following site descriptions and observations:

- 1. Areas below channels [have] been disturbed.
- 2. Material excavated from upper channel was placed above channel.
- 3. No means provided to convey runoff to receiving water from upper channel.
- 4. Tipping roadway into fill will concentrate flow toward super silt fence.

The inspection report also noted several inspection findings: failure of earth disturbance activities to comply with permit conditions and site conditions present a potential for pollution to waters of the Commonwealth. In addition, it was noted that

"[i]nspection of this project has revealed site conditions which constitute violations of 25 Pa. Code Chapters 92 and/or 102 of the Clean Streams Law, the act of June 22, 1937, P.L. 1987, 35 P.S. § 691.1 et seq."

The inspection report also outlined the following compliance assistance measures:

- 1. Stabilize disturbed areas below channels.
- 2. Remove material from above upper channel & stabilize.
- 3. Provide means to safely convey discharge from upper channel to receiving water.
- 4. Provide means of diffusing concentrated flow to super silt fence.

Notations were made that an NPDES permit and a written Erosion and Sedimentation Control Plan were required; an Erosion and Sedimentation Control Plan was requested.

ORDERS OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

On January 17, 2007, DEP made findings of fact and issued an order in the matter of Kilbuck Properties, L.P. regarding violations of The Clean Streams Law, its rules and regulations, and the previous order of DEP. The findings of fact included the following background information and status of the development site:

- 1. The Department [of Environmental Protection] is the administrative agency with the duty and authority to administer and to enforce The Clean Streams Law . . .; Section 1917-A of the Administrative Code of 1929 . . . ; and, the rules and regulations promulgated pursuant thereto.
- 2. Kilbuck Properties, L.P. is the . . . developer of a project known as Kilbuck Wal-Mart, which . . . is located North of Highway 65 (Ohio River Boulevard) at Toms Run Road, in Kilbuck Township, Allegheny County (hereinafter "Site").
- 3. Kilbuck Properties, L.P. applied for, and, on or about December 27, 2004, the Department issued an authorization to use General Permit for Storm Water Management Discharges Associated with Construction Activities, PAG 2050204001 ("Permit"), for earth disturbance activities at the Site.
- 4. Thereafter, Kilbuck Properties, L.P. began and continued to conduct earth disturbance activities at the Site.
- 5. Beginning on or about Tuesday, September 19, 2006, a large earth slide occurred at the Site, which covered Highway 65, and railroad tracks adjacent thereto. The earth slide also rendered inoperative the storm sewers along Highway 65.
- 6. A fifteen-foot "safety zone" back from Route 65 was created by Kilbuck Properties, L.P., and monitoring is being conducted, which indicated that a lateral creep of the earth slide, or approximately one inch per week, was taking place toward the safety zone.

- 7. The conditions at the Site and at the earth slide adjacent thereto created and continue to create a high potential for pollution of waters of the Commonwealth, in violation of Section 402 of The Clean Streams Law, 35 P.S. § 691.402.
- 8. The conditions at the Site and at the earth slide adjacent thereto constituted and continue to constitute a public nuisance, abatable under Section 1917-A of the Administrative Code, 71 P.S. § 510-17.
- 9. The conditions at the Site and at the earth slide adjacent thereto necessitate the continued closure of one north-bound land of Route 65.
- 10. The conditions at the Site and at the earth slide adjacent thereto necessitate the presence and supervision of a licensed Professional Engineer, with expertise and experience in geotechnical engineering matters, and the application of that engineer's technical expertise and judgment, in making decisions about the selection, movement, placement and stabilization of soils at the Site and at the earth slide adjacent thereto.²⁴¹

The findings of fact continued by referencing the October 2006 administrative order and the lack of compliance by Kilbuck Properties, L.P.:

- 11. On October 4, 2006, the Department issued an Administrative Order to Kilbuck Properties, L.P., imposing certain performance obligations, culminating in a requirement that it submit a full and complete geotechnical report, prepared and sealed by a licensed Professional Engineer, detailing how the Site will be managed to achieve permanent stability and the schedule for accomplishing that goal.
- 12. By letter dated November 1, 2006, the Commonwealth granted Kilbuck Properties, L.P.'s request for a one-month extension of time, to December 1, 2006, for submission of the full and complete geotechnical report for permanent site stability.
- 13. On December 1, 2006, instead of submitting a full and complete geotechnical report for permanent site stability, Kilbuck Properties, L.P. submitted a document labeled *Geotechnical Report on Slope Unloading and Monitoring ("Slope Unloading Report")*.

²⁴¹ Order of the Dep't of Envtl. Prot., *In re Kilbuck Props.*, *Ltd. P'ship* (Jan. 17, 2007), 1-2.

14. The *Slope Unloading Report* was far short of the full and complete geotechnical report for permanent site stability required by the Administrative Order. In fact, in its conclusion section of the *Slope Unloading Report*, Kilbuck Properties, L.P. stated:

At this point, sufficient time has not elapsed since placement of the monitoring devices to gather the data necessary to provide a final plan for permanent stability. If during this final planning phase areas of excessive movement, as provided in the Safety Zone section of the report are identified, action as provided for in the Safety Zone section will be initiated.

Slope Unloading Report, at 9.

- 15. The *Slope Unloading Report* was also deficient in many other ways, from the most basic: a failure to have it sealed by the professional geologist and professional engineer who prepared it; to the more sophisticated: a failure to assess the presence and location of groundwater at the Site through installation and monitoring of piezometers.
- 16. By letter dated December 5, 2006, the Commonwealth notified Kilbuck Properties, L.P. that its *Slope Unloading Report* was incomplete and deficient, and provided a list of the elements that would be required to constitute a full and complete geotechnical report for permanent site stability. Not only did Kilbuck Properties, L.P. fail to submit the required geotechnical plan for permanent site stability, but Kilbuck Properties, L.P. also failed to assess and characterize the site sufficiently to enable it to prepare and submit a full and complete geotechnical plan for permanent site stability.
- 17. The Commonwealth provided additional information about the ways in which the *Slope Unloading Report* was incomplete and deficient, and the means by which the deficiencies should be corrected, at a meeting between the Commonwealth and Kilbuck Properties, L.P.'s representatives. The meeting was held on December 6, 2006.
- 18. In the letter and during the meeting, the Commonwealth informed Kilbuck Properties, L.P. that the Commonwealth would require that Kilbuck Properties, L.P. correct the deficiencies of the *Slope Unloading Report*, and provide the full and complete geotechnical report within two weeks of the meeting, or on or before December 20, 2006.

- 19. On December 21, 2006, Kilbuck Properties, L.P. submitted a supplement to its *Slope Unloading Report*. The supplement was sealed by Kilbuck Properties, L.P.'s professional geologist and engineer but still fails to provide a full and complete geotechnical report for permanent site stability.
- 20. More fundamentally, Kilbuck Properties, L.P. has yet to identify the means by which it will achieve permanent site stability at the Site.
- 21. A review of this submittal by a team of geotechnical experts assembled by the Commonwealth (Commonwealth Geotechnical Team) was conducted and the geotechnical report was determined to be incomplete, in violation of the October 4 Order. Additional investigation and characterization of the Site is essential for protection of public health, safety and the environment, and must be undertaken in order for Kilbuck Properties, L.P. to prepare a full and complete geotechnical report and plan for achieving permanent stability at the Site and in order for the Department to review and evaluate that plan.²⁴²

As a result of the lack of compliance outlined in the findings of fact, DEP ordered that Kilbuck Properties, L.P., complete specific tasks under specific deadlines. With respect to additional investigation, Kilbuck Properties, L.P., was ordered to assess water conditions and multiple failure zones, test shear strength, evaluate and eliminate tunnels, investigate reservoirs and associated piping of the former Dixmont State Hospital, completely investigate the extent of rock underlying the area and the presence or absence of water zones beneath the soil stock pile, and evaluate and properly manage onsite drainage, collection and conveyance systems. In addition, Kilbuck Properties, L.P., was ordered to "submit bi-weekly progress reports to the Commonwealth, with the information necessary to allow the Department to assess and track implementation of the work." 243

With respect to achieving permanent stability at the site, DEP ordered the following:

Kilbuck Properties, L.P. must plan for and achieve permanent stability of this site. The extent and means of soil removal must be based upon a slope stability analysis achieving a 1.5 Factor of Safety. Both the plan and the actual re-grading must conform to the Kilbuck Township ordinances or the Pennsylvania Uniform Construction Code and references thereto if either is more conservative than the 1.5 Factor of Safety. This redesign of the site must provide for a minimum 15 foot wide soil free bench buffer

²⁴² *Id.* at 2-3.

²⁴³ *Id.* at 4-6.

area on the top of sandstone next to Route 65. The slope above the sandstone shall be designed with a minimum FOS of 1.5 and all tunnels must be removed or demolished, to eliminate voids.²⁴⁴

Kilbuck Properties, L.P., was ordered to submit proposed redesign parameters to be used in the model for review and acceptance by DEP prior to analyzing the slope stability.²⁴⁵ In addition, DEP ordered the following:

On or before April 13, 2007, Kilbuck Properties, L.P. shall make an oral presentation to the Department and the Commonwealth Geotechnical Team of its preliminary findings, and proposals for the geotechnical report, detailed final design and specifications for implementation, grading plan, and construction schedule for achieving permanent site stability.

On or before April 19, 2007, Kilbuck Properties, L.P. must submit a geotechnical report, detailed final design and specifications for implementation, grading plan, and the detailed construction schedule (including a schedule for recovering any lost time) required to achieve permanent stability of the site independent of any future site uses. This submission shall also include a calculation of the quantity of the soil to be removed, the soil waste area location, and its associated geotechnical report, and Erosion and Sedimentation Control Plans for both the construction site and the waste area. This submission shall also include a detailed plan for post construction monitoring. A slope stability analysis shall be conducted for all existing and proposed cut and fill slopes, and included in this submission.

Any work plans such as drilling plans, schedules, stabilization plans, modeling, etc. required to be submitted for review prior to conducting the work will be reviewed by the Commonwealth Geotechnical Review Team and either accepted in writing or written deficiencies will be provided to Kilbuck Properties, L.P. Within 15 days of the receipt of the Department's request for modification of the plan, Kilbuck Properties, L.P. shall modify the plan as requested by the Department.

Within fifteen days of its receipt of the Department's approval or approval with modifications of the final stabilization plan, Kilbuck Properties, L.P. shall begin implementation of the plan as approved or approved with modification by the Department.

On or before October 31, 2007, Kilbuck Properties, L.P. shall complete implementation of the final stabilization plan, and achieve permanent stability of the site.

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²⁴⁴ *Id.* at 6. ²⁴⁵ *Id.*

Beginning within fifteen days of completion of the final stabilization plan, Kilbuck Properties, L.P. shall install inclinometers and surface monitoring to assure that the plan has accomplished permanent stability with no further lateral movement.

All work at the site must be performed in a manner that is based on sound professional engineering judgment, and is protective of public health and safety and the environment. 246

With respect to reinstatement of continuous monitoring, the January 17, 2007 DEP order required that Kilbuck Properties, L.P., resume continuous monitoring at the site by a qualified technician, required to inspect the site, with particular attention to the "safety zone," every four hours.²⁴⁷ In addition:

At 10:00 a.m., on each and every business day, Kilbuck Properties, L.P. shall phone into the Department a report of the observations made during the previous twenty-four hour period. If movement in excess of six inches is detected, Kilbuck Properties, L.P. shall immediately notify the Kilbuck Township Police, the Pennsylvania Department of Transportation, the Pennsylvania Department of Environmental Protection, and the Norfolk Southern Railroad.²⁴⁸

²⁴⁶ *Id.* at 6-7. ²⁴⁷ *Id.* at 7.

²⁴⁸ *Id*.

Composition and Purpose of Communities First!

In February 2002, Communities First! was formed out of a belief that Wal-Mart's proposed retail development at the site of the former Dixmont State Hospital would adversely affect the local economy, traffic and environment. Communities First! is a group of residents, public officials and small business owners from approximately 20 communities along the Ohio River corridor. The goal of the organization is to promote development that is *healthy* for the local and regional economies and environment. Our overall mission is to preserve and enhance the livability and natural beauty of the Ohio River corridor communities. We will oppose any development that would undermine these assets. The specific mission of Communities First! is as follows:

Our mission is to enhance the livability and natural beauty of our Ohio River Corridor communities by encouraging development that is compatible and respectful of these objectives. Our organization actively opposes any development that would undermine or overburden the infrastructure, existing neighborhoods and shopping districts and natural assets.

To achieve our mission, we have pursued three main goals: (1) to raise public awareness about proposed development and its likely impact on our communities and way of life; (2) to ensure that new development is strictly meeting all local, state and federal requirements and to take action

²⁵⁰ *Id.* at 81. At a Pa. Dep't of Transp. admin. hearing, Mary Louise Fowkes testified that Communities First! "is a group of approximately 400 supporters who live and work along the Ohio River Corridor and who seek to preserve infrastructure, environment, business districts, and home values." *In re Highway Occupancy Permit #11028977* (Pa. Dep't of Transp., filed June 17, 2005), at 3. The members of the group were "about 90 percent residential property owners and 10 percent commercial." *Id.*

²⁴⁹ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 82 (statement of Mary Louise Fowkes).

²⁵¹ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 83 (statement of Mary Louise Fowkes) (emphasis in original). Mary Louise Fowkes emphasized that "our group is *not* opposed to development. But we *are* opposed to development that is *inappropriate* for the land and for the surrounding communities." *Id.* at 84 (emphasis in original).

where such requirements are violated; and (3) to create an alternative development for development sites which promote sustainable development practices and conserve open space. 252

Communities First! hired Victor-Wetzel Associates, a land-use consulting firm, to review the developmental site plans and comment on compliance with the Kilbuck Township ordinances and comprehensive plan.²⁵³ Communities First! also hired consultants to review the traffic impact study and the DEP permitting process. Accordingly, Communities First! provided comments and expressed concerns to Kilbuck Township, PennDOT and DEP.

Review of the Development Plans

On May 14, 2002, Communities First! appealed the approval of the development plans by the Kilbuck Township Board of Supervisors and its amendment of the township grading ordinance. 254

With respect to the development and the provisions of the Kilbuck Township ordinances, in May 2003, Victor-Wetzel cited 72 concerns with the second set of site plans; in January 2004, it cited 55 concerns (all with respect to grading) with the third set of site plans.²⁵⁵

Michael Wetzel of Victor-Wetzel Associates testified regarding the specific deficiencies of the development plan, which contravened the provisions of the Kilbuck Township Grading Ordinance. First, he stated that the development plan did not comply

²⁵² In re Highway Occupancy Permit #11028977, supra note 250, at 4; Communities First! v. Dep't of Transp., No. 1861 C.D. 2005 (Pa. Commw. filed Apr. 12, 2006), at 3, n.2.

Kilbuck Twp. Landslide Hearing, supra note 49, at 88 (statement of Mary Louise Fowkes) and 110 (statement of Michael Wetzel, partner, Victor-Wetzel Assocs.). Victor-Wetzel Assocs. is a land dev. and landscape architecture firm in Allegheny County, specializing in land dev. design and approvals through all municipalities within the western Pa. area. *Id.* at 110 (statement of Michael Wetzel).

²⁵⁴ *Id.* at 87 (statement of Mary Louise Fowkes).
²⁵⁵ *Id.* at 88-89. Michael Wetzel clarified that "[i]n review of these particular plans, we found 55 items that had either missing or incomplete submittal items and other issues that once again required modifications or variances from the Kilbuck Twp. ordinances. And from those ordinances, once again, we found 38 items from the Subdivisional [sic] Land Development Ordinances were either incomplete or violative. In the Zoning Ordinance there were five items; four that were incomplete and one violative, and once again, in the Grading Ordinance 12 items, five were incomplete and seven were violative; 55 items." Id. at 113 (statement of Michael Wetzel). Michael Wetzel continued by noting that "[i]n review of the Subdivisional [sic] Land Development Ordinances, we found several incomplete and violative issues that needed addressed. . . . Some of those issues regarded street alignments and street designs, sight distance concerns, car stacking, storm water and other miscellaneous submittal items that were incomplete." Id. Accordingly, he focused his comments on the steep slope disturbances associated with the dev. site and on the provisions of the Kilbuck Twp. Grading Ordinance.

with § 115-11(F) of the Kilbuck Township Grading Ordinance, which requires that the top and bottom edges of cuts or fill slopes be kept back from property or right-of-way lines three feet plus 1/5 the height of the cut or fill, for a maximum of ten feet, because [a] lot of the gradings had grading right up to and also into road right-of-ways."

Second, he argued that the development plan did not comply with § 115-11(J)(1) of the Kilbuck Township Grading Ordinance, ²⁵⁸ limiting the maximum steepness of graded slopes to no greater than two horizontal to one vertical (2:1) (or 1:1 if the proposed slope does not exceed a maximum of 10 feet). He stated that three locations on the site plan showed excessively steep slopes. ²⁵⁹

Third, although § 115-11(J)(2) of the Kilbuck Township Grading Ordinance²⁶⁰ requires that a retaining wall be designed and sealed by a registered professional engineer, "[n]o detailed elevations or structural plans were submitted with the submittal package given the structural integrity of those walls in association with those slopes."

Fourth, § 115-11(L) of the Kilbuck Township Grading Ordinance²⁶² requires graded slopes of 20 or more feet in height to be benched every 12 feet and have a minimum width of six feet, with tree plantings every 30 lineal feet of bench. However, "[t]his plan had absolutely no benches within the whole entire development site in regard to the front cut and fill slope or any benches located in the back of the site."

Fifth, for slopes between 25 and 40 percent, no more than 25 percent of the slope areas may be stripped of vegetation or disturbed through grading; for slopes exceeding 40 percent, no development or disturbance is allowed, although very limited disturbance for utilities may be allowed if the applicant demonstrates that no feasible alternative location exists. Testimony with respect to this provision indicated that the development "site has an average slope of greater than 25 percent," and "there were no calculations provided by the developer in regard to the amount of disturbance in the slopes." In addition, 18 out of the 75 total acres contained slopes of between

²⁵⁶ Michael Wetzel's testimony at the Kilbuck Twp. Landslide Hearing, *supra* note 49, references the ordinance provision as § 1900.11.f, which was renumbered later.

²⁵⁷ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 114 (statement of Michael Wetzel).

²⁵⁸ Michael Wetzel's testimony at the Kilbuck Twp. Landslide Hearing, *supra* note 49, references the ordinance provision as § 1900.11.j:1, which was renumbered later.

²⁵⁹ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 115 (statement of Michael Wetzel). A description of the specific locations on the site plans where the excessively steep slopes occur appears *id.* at 115.16

²⁶⁰ Michael Wetzel's testimony at the Kilbuck Twp. Landslide Hearing, *supra* note 49, references the ordinance provision as § 1900.11.j:2, which was renumbered later.

²⁶¹ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 117 (statement of Michael Wetzel).

²⁶² Michael Wetzel's testimony at the Kilbuck Twp. Landslide Hearing, *supra* note 49, references the ordinance provision as § 1900.11.1.1, which was renumbered later.

²⁶³ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 117 (statement of Michael Wetzel).

²⁶⁴ Kilbuck Twp. Grading Ordinance, § 115-11(M). Michael Wetzel's testimony at the Kilbuck Twp. Landslide Hearing, *supra* note 49, references the ordinance provision as §§ 1900.11.m.1 and 1911.m.2 [sic], which was renumbered later.

²⁶⁵ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 117 (statement of Michael Wetzel).

25 and 40 percent, and of those 18 acres, 7.7 acres were disturbed (approximately 43 percent). Although "there were a considerable amount" of slopes in the development site exceeding 40 percent, whereby no development or disturbance could occur, the site plans indicated that "all slopes within the 75 acres were manmade slopes from the construction of the Dixmont site" and were, therefore, developable since the slopes were manmade and not natural. 267

Sixth, Wetzel averred that the proposed development violated the provisions of the Kilbuck Township Comprehensive Plan. He said that the Comprehensive Plan provides that areas with slopes exceeding an average of 25 percent are regulated by the township zoning ordinance as non-buildable and that "areas that have slopes of greater than 26 percent should not be developed." He reiterated that "the average slope of the site was in excess of 26 percent."

Wetzel concluded his testimony by stating the following:

In conclusion, we really feel that many of the township ordinances were waived to proceed with this development. In our opinion, there was to [sic] much retail proposed to support the existing condition of the site. The overall length of the access road to serve the development as well as the intensity of the site grading really proved that this plan really exceeded its boundaries in regard to a proper plan.²⁷⁰

In June 2003, Communities First! appealed the May 2003 approval of the site plans by the Kilbuck Township Board of Supervisors. Shortly thereafter, ASC Development, Inc., withdrew its plans from consideration, thereby rendering moot the second appeal by Communities First!.²⁷¹

In September 2003, the Allegheny Court of Common Pleas nullified the Kilbuck Township Board of Supervisors' 2002 approval of the development plans.²⁷²

²⁶⁶ *Id.* at 117-118.

²⁶⁷ *Id* at 118.

²⁶⁸ *Id.* at 118-119.

²⁶⁹ *Id.* at 119.

²⁷⁰ *Id.* at 120.

²⁷¹ *Id.* at 89 (statement of Mary Louise Fowkes).

²⁷² *Id*.

Review of the Traffic Impact Study

Communities First! also expressed its big concern regarding increased traffic from the proposed development in Kilbuck Township.²⁷³ In March 2004, Communities First! hired the Maguire Group, Inc., a traffic engineering firm, to review the August 2003 traffic impact study prepared by Widmer Engineering, Inc., on behalf of the developer.²⁷⁴

On May 14, 2004, the Communities First! Traffic Engineer circulated a letter that opposed the traffic impact study. The consultant of Communities First! noted the "potential danger from the lack of benching, particularly because of the slope's proximity to Rt. 65 and the main access driveway."

Review of the Highway Occupancy Permit Application

Communities First! expressed its concerns regarding the highway occupancy permit application process involving Kilbuck Township and the development at the site of the former Dixmont State Hospital.²⁷⁷

After numerous meetings of PennDOT and the developer, municipal officials, legislators and the Communities First! group, in October 2004, Communities First! intervened in PennDOT's highway occupancy permit application process.²⁷⁸

On February 22, 2005, Communities First! and two municipalities neighboring Kilbuck Township filed an administrative appeal from PennDOT's decision to issue a highway occupancy permit for the development.²⁷⁹

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²⁷³ *Id.* at 90. Mary Louise Fowkes noted that "[b]ased on the most recent Trip Generation report, the Wal-Mart super center would generate an additional 18,000 to 19,000 car trips a day on Rt. 65, a 75 percent increase on an old, narrow highway." *Id.* For a complete discussion of the procedural history regarding the traffic impact studies for the proposed dev., *see supra* pp. 55-56.

²⁷⁴ *Id.* at 90; Kilbuck Twp. Gen. Timeline, *supra* note 39. Mary Louise Fowkes noted that the

^{2/4} *Id.* at 90; Kilbuck Twp. Gen. Timeline, *supra* note 39. Mary Louise Fowkes noted that the Maguire Group withdrew as a consulting firm of Communities First! shortly after Communities First! announced that it would appeal the decision of the Pa. Dep't of Transp. granting the developers a highway occupancy permit for the dev. site (Jan. 2005). Kilbuck Twp. Landslide Hearing, *supra* note 49, at 91 (statement of Mary Louise Fowkes).

²⁷⁵ Kilbuck Twp. Gen. Timeline, *supra* note 39.

²⁷⁶ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 90 (statement of Mary Louise Fowkes).

²⁷⁷ See supra pp. 55-56 and *infra* pp. 84-90 for a more detailed discussion of the procedural history of the administrative and legal process regarding the highway occupancy permit and the issue of standing.

²⁷⁸ Kilbuck Twp. Landslide Hearing, *supra* note 49, at 37 (statement of William Lester).

²⁷⁹ *Id.* at 38.

On May 17, 2005, an administrative hearing was held to determine whether Communities First! had standing to appeal PennDOT's issuance of a highway occupancy permit for the development. PennDOT, the developer and Communities First! all testified at the hearing.²⁸⁰

On June 17, 2005, the PennDOT hearing ruled that Communities First! was not entitled to challenge the issuance of the highway occupancy permit for the development because no member of the Communities First! group owned property with a driveway affected by the proposed highway improvements. Communities First! unsuccessfully appealed that decision to the Secretary of Transportation, who similarly denied the group standing. Page 282

In September 2005, Communities First! appealed to Commonwealth Court the administrative denial of standing to appeal the issuance of the highway occupancy permit for the development site.²⁸³ In April 2006, Commonwealth Court affirmed the PennDOT decision by denying standing to Communities First!.²⁸⁴

Review of the Storm Water Management Plans

Because of its concerns regarding storm water runoff management, Communities First! hired consultants to review the plans for the development site. Communities First! raised concerns at the October 18, 2004 public hearing on the storm water management plans for the development site, and, as a result, DEP requested that the developers provide a response before its issuance of the NPDES permit. On December 2, 2004, the DEP Regional Director and other DEP personnel met with representatives of Communities First! regarding the storm water management plans.

²⁸⁰ *Id*.

 $^{^{281}}$ Id

²⁸² *Id.* at 92 (statement of Mary Louise Fowkes).

²⁸³ *Id.* at 93.

²⁸⁴ *Id*.

²⁸⁵ *Id.* Mary Louise Fowkes stated that the consultants for Communities First! "found serious deficiencies -- particularly the inadequate plans to mitigate (1) the high velocity and high volume of water coming off the slopes[;] (2) parking lot runoff, carrying lawn, de-icing and automotive chemicals[; and] (3) runoff from 35 acres of impermeable surfaces -- the collection pipe had been downsized from a prior 54 inches to 36 inches, with no explanation. And finally, the plan's lack of retention pond or infiltration system violated the state's new storm water runoff management policy." *Id.* at 93-94.

²⁸⁶ *Id.* at 94-95.

Review of the Site Stabilization Plans

After the Wal-Mart Real Estate Business Trust submitted its site stabilization plan to DEP in July 2007, Communities First! hired an independent geotechnical engineer to review the plan. John C. Oliver, the Mayor of Sewickley Heights and the former Secretary of the Pennsylvania Department of Conservation and Natural Resources, wrote the following:

[T]he review indicates that, rather than being the optimum way to stabilize the site, Wal-Mart's plan is really the first step in preparing it for development. That would explain the plan's large, level building platform.

According to Chris Ryan, the review's author, accommodating that building platform requires "astonishingly large" and steep slopes -- in excess of 100 feet high. The current rock wall facing Route 65 is 35 to 50 feet above the roadway.

Mr. Ryan questioned the stability of such slopes, putting aside their severe visual impact. A similarly constructed wall in Washington, Pa., is showing signs of deterioration and erosion even though it is only one or two years old and is only 50 feet high.

Even more serious is water-pressure build-up behind the slopes -- believed to have been a primary cause of last September's landslide. Mr. Ryan noted a "severe deficiency" in both the water-level analysis and de-watering design of the Wal-Mart plan.

The DEP last week also disagreed with Wal-Mart's assessment of the site's water levels. It also expressed concern about the steepness of the proposed slopes.

But if the slopes are so problematic, why can't the company take some of the soil off site? According [to] Wal-Mart's consultant, 500,000 cubic yards of soil would have to be removed -- enough to fill 41 miles of trucks. That, he felt, would be a burden on the community. Instead, Wal-Mart wants to move and restack 2 million cubic yards of soil on private property immediately behind the site.

Well, extrapolating from its own numbers, Wal-Mart's method would require 164 miles of trucks, moving up and down steep hillsides. That's two years of diesel exhaust, noise and dust pollution for Emsworth-, Glenfield- and Sewickley-area residents.²⁸⁷

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²⁸⁷ John C. Oliver, "The Kilbuck site still needs a better plan," *Pittsburgh Post-Gazette* (Aug. 29, 2007), http://www.postgazette.com/pg/07241/812821-109.stm (last accessed Sept. 24, 2007).

Definitions and Requirements

Standing is "[a] party's right to make a legal claim or seek judicial enforcement of a duty or right."²⁸⁸ Jurisdiction, on the other hand, is "[a] court's power to decide a case or issue a decree."²⁸⁹ In addition, "[a] person complaining of anything done or omitted to be done by a person subject to the jurisdiction of an agency, in violation of a statute or regulation administered or issued by the agency may file a complaint with the agency."290

The following summarizes the traditional presumption for standing:

Where a person is not adversely affected in any way by the matter challenged, he is not aggrieved and thus has no standing to obtain a judicial resolution of that challenge. William Penn Parking Garage v. City of Pittsburgh, 464 Pa. 168, 346 A.2d 269 (1975). To be considered aggrieved, the party must have a substantial, direct, and immediate interest in the outcome of the appeal. *Id.*²⁹¹

The following summarizes case law regarding the establishment of derivative standing for a community group or association:

Our Supreme Court has consistently held that, in order to have standing to challenge the validity of a governmental action, one must generally have a substantial, direct, and immediate interest in the claim sought to be litigated. A substantial interest is one in which there is 'some discernible adverse effect to some interest other than the abstract interest of all citizens in having others comply with the law.' . . . A 'direct' interest requires a showing that the matter complained of causes harm to the party's interest. . . . An 'immediate' interest is something more than a 'remote consequence' and centers on the causal nexus and proximity between the action complained of and the injury to the party challenging it. . . . The requirement that the interest be 'immediate' is also met where it falls with the 'zone of interests sought to be protected by the statute or constitutional guarantee in question.' . . . Finally, the rationale underlying

 $^{^{288}}$ Black's Law Dictionary 1413 (7th ed. 1999). 289 Id. at 855.

²⁹⁰ 1 Pa. Code § 35.9. An agency is a dep't of the Commw. *Id.*, § 31.3.

²⁹¹ Communities First! v. Dep't of Transp., supra note 252, at 6.

the requirement that the party be 'aggrieved' or 'adversely affected' by the action at issue is to ensure that a legal challenge is made by the appropriate party.

. . .

[A]n association, even without sustaining injury itself, may nevertheless have standing to commence litigation as the representative of its members who are suffering immediate or imminent injury because of the disputed action. 292

The Supreme Court of Pennsylvania, however, has stated that a party or individual may be granted standing as a taxpayer, even if not aggrieved.²⁹³ Five requirements must be satisfied to achieve "taxpayer standing":

- (1) the governmental action would otherwise go unchallenged;
- (2) those directly and immediately affected by the complained of matter are beneficially affected and not inclined to challenge the action;
- (3) judicial relief is appropriate;
- (4) redress through other channels is unavailable; and
- (5) no other persons are better situated to assert the claim.²⁹⁴

Communities First! versus Department of Transportation

Petition to Intervene

In March 2004, Kilbuck Township submitted to PennDOT's Engineering District 11-0 Office an application for a highway occupancy permit, seeking permission to construct a high-volume driveway for the entrance to a proposed development, with turning lanes and a traffic signal on Ohio River Boulevard (Pennsylvania State Route 65). The proposed development envisioned the establishment of a Wal-Mart Super Center store. ²⁹⁵

²⁹² *Id.* at 7-8 (quoting *Pittsburgh Trust for Cultural Res. v. Zoning Bd. of Adjustment*, 604 A.2d 298, at 303-04 (Pa. Commw. 1992)) (citations omitted). These standards are also quoted in the Pa. Dep't of Transp. Hearing Officer's Memorandum Opinion & Order in *In re Highway Occupancy Permit #11028977*, *supra* note 250, at 5-6.

²⁹³ Communities First! v. Dep't of Transp., supra note 252, at 10 (citing Pittsburgh Palisades Park v. Commonwealth, 888 A.2d 655 (Pa. 2005)).

²⁹⁴ *Id.* (quoting *Consumer Party of Pa. v. Commonwealth*, 507 A.2d 323, 329 (Pa. 1986)). These requirements are also quoted in *In re Highway Occupancy Permit #11028977*, *supra* note 250, at 9 and in the Memorandum Opinion & Order of the Pa. Sec'y of Transp. in *In re Highway Occupancy Permit #11028977* (Pa. Dep't of Transp., filed Aug. 10, 2005), at 5.

²⁹⁵ Communities First! v. Dep't of Transp. supra note 252, at 1-2; In re Highway Occupancy Permit #11028977, supra note 250, at 1.

On October 12, 2004, Communities First! petitioned to intervene in the highway occupancy permit application. On November 15, 2004, the group amended its petition to intervene. 296

Both Kilbuck Township and the developers opposed Communities First!'s intervention. PennDOT did not oppose the intervention, suggesting that Communities First! should be given an opportunity to review the information submitted by the Developers in support of the highway occupancy permit application.²⁹⁷

On November 16, 2004, the PennDOT hearing officer authorized Communities First!'s intervention.²⁹⁸ However, the administrative order explicitly stated that "[t]he granting of intervention is not a final determination by the Department that Communities First[!] has a substantial, immediate, and direct interest in the proceeding or that it will be aggrieved by the Department's adjudication on the merits."²⁹⁹

On January 25, 2005, PennDOT approved the application and issued a highway occupancy permit to Kilbuck Township. On February 22, 2005, Communities First! appealed that decision and requested a hearing. Communities First! challenged the accuracy and sufficiency of a traffic impact study prepared by Widmer Engineering, Inc., submitted in conjunction with the highway occupancy permit application by the township and the developers. Both the township and the developers specifically denied Communities First!'s allegations with respect to the accuracy and sufficiency of the traffic impact study. The developers also moved to dismiss the request for a hearing, alleging that Communities First! lacked standing to make that request. 300

²⁹⁶ Communities First! v. Dep't of Transp., supra note 252, at 2: In re Highway Occupancy Permit #11028977, supra note 250, at 1.

²⁹⁷ Communities First! v. Dep't of Transp., supra note 252, at 2; In re Highway Occupancy Permit #11028977, supra note 250, at 1-2.

²⁹⁸ Communities First! v. Dep't of Transp., supra note 252, at 2; In re Highway Occupancy Permit #11028977, supra note 250, at 2. The Pa. Dep't of Transp. ordered, among other things, (1) Eng'g Dist. Office 11-0 to permit Communities First! to inspect and copy the highway occupancy permit application and supporting documents and to provide Communities First! with a reasonable opportunity to submit comments; (2) the parties to contemporaneously serve on each other all future submission, responses and comments regarding the application; and (3) the Dist. Office to provide Communities First!, ASC Dev. & Kilbuck Props. contemporaneous written notice of any formal action taken regarding the application. The order also specifically provided that the intervention did not stay the underlying permit application procedure, thereby allowing the Dist. Office to continue processing the application in the normal course. In re Communities First! Petition to Intervene in ASC Dev. and Kilbuck Props. Application for Highway Occupancy Permit (Pa. Dep't of Transp., filed Nov. 16, 2004).

²⁹⁹ Communities First! v. Dep't of Transp. supra note 252, at 2; Communities First! v. Dep't of

Transp., supra note 252, at 2; In re Highway Occupancy Permit #11028977, supra note 250, at 2.

Communities First! v. Dep't of Transp., supra note 252, at 2; In re Highway Occupancy Permit #1018977, supra note 250, at 2.

PennDOT Hearing and Order of Hearing Officer

During an administrative hearing on May 17, 2005, PennDOT received testimony to determine whether Communities First! had standing to challenge the highway occupancy permit issued to Kilbuck Township. Mary Louise Fowkes, a co-chair of Communities First!, testified that Communities First! "is a group of approximately 400 supporters who live and work along the Ohio River Corridor and who seek to preserve infrastructure, environment, business districts, and home values." The members of the group are "about 90 percent residential property owners and 10 percent commercial." Fowkes also related the mission statement of Communities First!:

Our mission is to enhance the livability and natural beauty of our Ohio River Corridor communities by encouraging development that is compatible and respectful of these objectives. Our organization actively opposes any development that would undermine or overburden the infrastructure, existing neighborhoods and shopping districts and natural assets.

To achieve our mission, we have pursued three main goals: (1) to raise public awareness about proposed development and its likely impact on our communities and way of life; (2) to ensure that new development is strictly meeting all local, state and federal requirements and to take action where such requirements are violated; and (3) to create an alternative development for development sites which promote sustainable development practices and conserve open space.³⁰³

Fowkes added that with respect to the Wal-Mart project, the organization (1) pursued petitions, letters to the editor, and op-ed pieces, (2) sued Kilbuck Township over ordinance and grading changes and (3) assembled an advisory board and hired a consultant to come up with an alternative development with less impact on the surrounding communities. She also testified that "some members of Communities First! are residents and property owners of Kilbuck Township" and that "the impact of the proposed Wal-Mart development will fall on the communities that are along Ohio River Boulevard (S.R. 0065), especially Emsworth and Glenfield."

At the May 17, 2005 hearing, Fowkes also summarized her concerns regarding the increased traffic that would result because of the proposed development:

³⁰¹ In re Highway Occupancy Permit #11028977, supra note 250, at 3.

³⁰³ Communities First! v. Dep't of Transp., supra note 252, at 3, n.2.

 $^{^{304}}$ In re Highway Occupancy Permit #11028977, supra note 250, at 4. 305 Id. at 3.

She expressed their concerns about increased traffic especially at the junction of S.R. 0065 and Interstate 79, which she believes is already dangerous, and the addition (or "transfer") of traffic to local roads used by "kids on skate boards, and strollers and walkers." She testified that these are not "big roads," are not well maintained, and that some have had mudslides. She indicated that persons from the affected communities who want to go into Pittsburgh will become part of the Wal-Mart traffic.³⁰⁶

However, Fowkes acknowledged "that her testimony was a generalized summary of anticipated harm, and that she could not testify regarding Communities First[!]'s allegation that the traffic study submitted by the Township and Developers was incomplete, flawed and not representative of actual conditions." She did not know whether any of the nine members of Communities First! with property along State Route 65 would have their access affected by the development project. Finally, "[t]he only potential effect of the construction work Ms. Fowkes could identify was a timing change of signaling lights[,]" although she expressed a concern that "the proposed development would negatively impact business in the area, in addition to increasing traffic."³⁰⁹

At the hearing, William Lester, the Engineering District 11-0 Permits Manager, "testified that the driveways of the nine members Ms. Fowkes identified would not in any way be affected by the proposed development" and "that any signal changes that would result from the proposed development would 'improve traffic flow.' "310 Lester noted that the only persons he was aware of opposing the highway occupancy permit application "are those involved with Communities First[!]."311

On June 17, 2005, the PennDOT hearing officer dismissed the request by Communities First! for a hearing on its standing issue and challenge to the issuance of the highway occupancy permit to Kilbuck Township. 312 The generalized concerns expressed by Communities First! were not considered to be "substantial" and the interest of Communities First! and its members was not "direct," since the high-volume driveway was not the cause of the asserted harms.

The action challenged here is the Department's issuance of a high-volume highway occupancy permit; the impacts alleged by Communities First[!] relate to the negative effects of additional traffic and the associated problems. The problem for Communities First[!] is that these impacts are not the product of the driveway or its design; they are a function of the commercial enterprise that is proposed for the location served by the driveway. In other words, it is not the driveway approved by the

³⁰⁷ Communities First! v. Dep't of Transp., supra note 252, at 4.

³⁰⁸ In re Highway Occupancy Permit #11028977, supra note 250, at 4.

³⁰⁹ Communities First! v. Dep't of Transp., supra note 252, at 4.

³¹⁰ *Id.* at 5.

³¹¹ In re Highway Occupancy Permit #11028977, supra note 250, at 5.

³¹³ In re Highway Occupancy Permit #11028977, supra note 250, at 6.

Department that "causes harm" to the interests articulated by Communities First[!], a proposition which becomes fairly evident if one imagines the existence of the driveway but the absence of the Wal-Mart.³¹⁴

Finally, the interest of Communities First! was not immediate "because the feared injuries are essentially the remote consequences of approving a high-volume driveway on a state highway, even if they are within the zone of interests protected by the regulatory scheme."315 The hearing officer observed the following:

Communities First[!] has not, in its filings or testimony, linked the identified impacts to an enforceable regulatory standard. I say this because even if I did conclude that the impacts are within some generalized zone of interests addressed in the regulatory scheme, it is not clear to me how Communities First[!] can assert standing without identifying the legal standard that protects its members. More important, the interest of Communities First[!] is not immediate because the causal connection between the feared traffic impacts and the existence of a high-volume driveway is too remote. That is to say, the construction of a high-volume driveway is not likely to result in any of the impacts identified by Communities First[!]. Only if and when the Wal-Mart is constructed, a matter as to which the Department has no regulatory function, would the public be attracted in sufficient numbers to produce the traffic impacts that Communities First[!] fears. Thus, while it is probably true that without a high-volume driveway on S.R. 0065 there is no Wal-Mart, it would not be accurate to say that the traffic impacts from the Wal-Mart would be an immediate consequence of issuing a driveway permit.³¹⁶

The June 17, 2005 Memorandum Opinion and Order also rejected the argument by Communities First! that the group is entitled to an exemption from the standing requirements that is sometimes afforded to taxpavers when the questioned governmental action would otherwise go unchallenged.³¹⁷

Order of the Secretary of Transportation

Communities First! appealed the PennDOT hearing officer's order to the Secretary of Transportation, arguing that the hearing officer committed an error of law and abused his discretion because he failed to recognize: (1) the common law principle that neighboring property owners are generally presumed to have standing; (2) that Communities First! met the criteria for associational standing; (3) that Communities

³¹⁴ *Id.* at 7. ³¹⁵ *Id.* at 8.

³¹⁶ *Id.* at 8-9.

³¹⁷ *Id.* at 9-10.

First! is entitled to "taxpayer standing" regardless of the general standing requirements and (4) the conclusions of Community First's traffic engineer and that the complaints of Communities First! were not "generalized concerns." 318

The Secretary of Transportation rejected these arguments, first stating that common law criteria for standing were applied.³¹⁹ The Secretary then stated that Communities First!'s reliance on section 441.2 of Title 67 of the Pennsylvania Code³²⁰ was misplaced:

The bona fides of Community First[!]'s interests are not in question. The issue is whether these interests, however laudable, are within the zone of interests protected by the cited regulation. My conclusion is that they are not. While Communities First[!] is legitimately concerned about the impact of commercial development on neighborhoods and local businesses, the Department's highway access regulations are not intended to address those issues. . . . Further, although afforded a hearing, Communities First[!] presented no evidence that it (or any of its members) was actually affected by "the location, design, construction, maintenance [or] drainage" of the access authorized by the permit in dispute. . . . Standing to challenge a highway occupancy permit requires more than generalized complaints of potential community impacts arising from proposed land developments. Communities First[!] has simply failed to demonstrate that its interests and those of its members are within the relevant zone of protected interests. 321

The Secretary of Transportation next stated that "the record does not support a finding of taxpayer status, and judicial precedent does not recognize taxpayer standing to challenge a highway access permit, in any event." ³²²

Finally, the Secretary of Transportation held that "although the hearing officer provided Communities First[!] an opportunity to produce 'evidence sufficient to establish its legal standing' . . . , it produced no engineering testimony at the hearing." Furthermore, "none of the engineering issues listed by Communities First[!] in either its request for a hearing or its current brief deal with the access driveway authorized by the permit. Instead, these issues relate to the effects of the proposed commercial development and the anticipated additional traffic."

³¹⁸ In re Highway Occupancy Permit #11028977, supra note 250, at 2-6.

 $^{^{319}}$ *Id*. at 2

³²⁰ "It is in the public interest to regulate the location, design, construction, maintenance and drainage of access driveways, local roads, and other property within State highway right-of-way for the purpose of security, economy of maintenance, preservation of proper drainage and safe and reasonable access." 67 Pa. Code § 441.2(a).

³²¹ In re Highway Occupancy Permit #11028977, supra note 250, at 4-5.

³²² *Id.* at 5.

³²³ *Id.* at 6.

³²⁴ *Id*.

Accordingly, the Secretary of Transportation denied the appeal of Communities First! and dismissed the challenge to the highway occupancy permit. 325

Commonwealth Court Holding

Communities First! then appealed the order of the Secretary of Transportation to the Commonwealth Court of Pennsylvania, raising four arguments: (1) that Communities First! meets the traditional presumption for standing, (2) that Communities First! meets all the criteria necessary for community groups and associations to establish derivative standing, (3) that Communities First! meets the taxpayer exception to the traditional presumption for direct standing and (4) that the department erroneously concluded that Communities First!'s concerns were vague and general.³²⁶ The Commonwealth Court rejected each of these arguments, for reasons similar to those set forth by the Secretary of Transportation.³²⁷ Accordingly, the court affirmed the order of the Secretary of Transportation.

Communities First! versus Board of Supervisors of Kilbuck Township

The Commonwealth Court of Pennsylvania addressed the issue of standing and jurisdiction as a result of an appeal by Communities First! from an order of the Allegheny County Court of Common Pleas. The county court affirmed the decision of the Kilbuck Township Zoning Hearing Board, which upheld the validity of the challenged amendment to section 1900.11(o) of the Kilbuck Township Ordinances, relating to the general standards imposed on the grading of land within the township. The Commonwealth Court affirmed the lower court decision. The Commonwealth Court affirmed the lower court decision.

On May 14, 2002, Communities First! appealed to the Kilbuck Township Zoning Hearing Board alleging that § 1900.11(o) of the township's ordinances:

is invalid and contrary to law because: (1) it impermissibly leaves its interpretation, administration and enforcement to the unbridled discretion of the Administrator; (2) it is an unlawful delegation of the Board of Supervisors' legislative power; (3) it does not contain any standards governing the exercise of the Administrator's discretion; (4) it is unconstitutional as it is overbroad and vague; (5) it constitutes spot

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³²⁵ *Id.* at 7

³²⁶ Communities First! v. Dep't of Transp., supra note 252, at 5-6.

 $^{^{327}}$ *Id.* at 6-13

³²⁸ Kilbuck Twp. Grading Ordinance, § 115-11(O). Supra p. 51 and note 185.

³²⁹ Communities First! v. Bd. of Supervisors, No. 1615 C.D. 2004 (Pa. Commw. Ct. filed July 1, 2005).

legislation because it was enacted solely to benefit the development of a Wal-Mart Store on the former site of the Dixmont State Hospital; and (6) it was not properly enacted pursuant to the requirements of Section 505 and/or Section 609 of the Pennsylvania Municipalities Planning Code (MPC).

That same day, Communities First! also directly appealed the enactment of section 1900.11(o) to the county court, alleging that the provision is invalid and contrary to law because of reasons (1) to (5) cited previously.³³¹

Subsequently, both ASC Development, Inc., the developer of the Wal-Mart store, and the Stroyne Family Limited Partnership, the owner of the former site of the Dixmont State Hospital, intervened in the appeal. 332

On July 9, 2002, the Kilbuck Township Zoning Hearing Board heard the appeal of Communities First!. Appearing at the hearing were representatives of Communities First!, ASC Development, Inc., and the Stroyne Family Limited Partnership. At the conclusion of the hearing, the Zoning Hearing Board voted 2-0 to dismiss the appeal on the basis that the Zoning Hearing Board "did not possess jurisdiction over the appeal, under section 1300.06A.2 of the Township Ordinances, as the Grading Ordinance was not a land use ordinance under the relevant provisions of the MPC." 333

On August 8, 2002, Communities First! appealed the decision of the Kilbuck Township Zoning Hearing Board to the county court, which subsequently consolidated the two appeals filed by Communities First!. 334

The trial court disposed of the consolidated appeals in its decision of July 8, 2004, by stating the following:

- 1. The Zoning [Hearing] Board's decision that the Township Grading Ordinance is not a land use ordinance is supported by law;
- 2. The decision to dismiss the appeal of the grant of the grading permit is supported by fact and law;

 331 *Id.* at 2-3.

³³⁰ *Id.* at 2.

 $^{^{332}}$ *Id.* at 3.

³³³ *Id.* at 3-4. The Commw. Ct. quoted § 1300.06A.2 of the Twp. Ordinances, to wit: "Except as provided in the Pennsylvania Municipalities Planning Code, the ZHB shall have no power to pass upon the validity of any provision of an ordinance or map adopted by the supervisors." *Id.* at 3, n.5. In n.5, the Commw. Ct. then quoted § 909.1(a) of the Pa. Municipalities Planning Code, which assigns exclusive jurisdiction to zoning hearing bds. to hear and render final adjudications in the following matters:

⁽¹⁾ Substantive challenges to the validity of any land use ordinance, except those brought before the governing body pursuant to sections 609.1 and 916.1(a)(2).

⁽²⁾ Challenges to the validity of a land use ordinance raising procedural questions or alleged defects in the process of enactment or adoption which challenges shall be raised by an appeal taken within 30 days after the effective date of said ordinance. 334 *Id.* at 4.

The Appellants' lack of standing to raise a facial challenge to the Grading Ordinance since they have not engaged in conduct regulated by the Act nor have they asserted an intention to do so and there are no First Amendment implications to the Act;

Therefore, the decision of the [ZHB] of Kilbuck Township is affirmed and validity challenge to the Grading Ordinance is denied.³³⁵

Communities First! then appealed the trial court decision of July 8, 2004 to the Commonwealth Court, claiming that "(1) the trial court erred in raising the issue of standing sua sponte and in dismissing the consolidated appeals upon that basis; and (2) the enactment of section 1900.11(o) of the Township's Ordinances constitutes an unlawful delegation of the legislative power."336

The Commonwealth Court stated that the Kilbuck Zoning Hearing Board correctly determined that the board did not have "jurisdiction to consider the appeal of Communities First! as the amendment to the Kilbuck Township Grading Code is not a 'land use' ordinance as defined in the MPC." Accordingly, the Commonwealth Court noted that the proper means to challenge the validity of "the amendment to the Kilbuck Township Grading Code is under section 7533 of the Declaratory Judgments Act."338 The Commonwealth Court continued:

To have standing to petition for declaratory relief, a party must plead facts which establish a direct, immediate and substantial injury. [Citation omitted.] Where, as here, a statute designates who may initiate a cause of action, only those persons so designated have standing to initiate the cause of action. [Citations omitted.] Likewise, where a statute designates who may file an appeal in the trial court, only those persons so designated may file such an appeal. [Citation omitted.]³³⁹

The Commonwealth Court then directly addressed the first issue on appeal raised by Communities First! and gave its reasoning in upholding the trial court's decision:

Generally, the issue of standing is not an issue of subject matter jurisdiction and, therefore, may not be raised by the court sua sponte. [Citations omitted.] However, where a statute creates a cause of action or an appeal, and designates who may sue or prosecute such an appeal, the

 $^{^{335}}_{336}$ *Id.* at 4-5. *Id.* at 5.

³³⁷ *Id.* at 6.

³³⁸ Id. at 6-7. The Declaratory Judgments Act allows any person whose rights are affected by a municipal ordinance to question the validity of the ordinance & obtain a declaration. 42 Pa.C.S. § 7533. Similarly, the Commw. Ct. noted that, because Kilbuck Twp. is a 2d Class Twp., that code authorizes any person aggrieved by the adoption of any ordinance to challenge the legality of the ordinance in a court of common pleas. Communities First! v. Bd. of Supervisors, supra note 329, at 7, n.10 (quoting and citing the act of May 1, 1933 (P.L.103, No.69), § 1601(f)).

339 Id.

issue of standing is interwoven with that of subject matter jurisdiction and becomes a jurisdictional prerequisite to the action or appeal. [Citations omitted.] Moreover, it is well settled that questions of subject matter jurisdiction can never be waived, and they may be raised at any time by the parties or *sua sponte* by the court. [Citations omitted.] As the foregoing statutes designate who may initiate a cause of action or an appeal, standing was interwoven with the subject matter jurisdiction of the trial court, and it was a jurisdictional prerequisite to the cause of action or appeal. [Citations omitted.] As a result, the trial court properly raised the issue *sua sponte*, and properly dismissed the matter on this basis. Accordingly, the order of the trial court is affirmed.³⁴⁰

The Commonwealth Court's concurring opinion agreed that Communities First! lacked standing but emphasized:

[T]he trial court was precluded from reaching the issues raised by Communities First[!] in its validity challenge. When it amended the Township's Grading Code the Board of Supervisors acted in its *legislative* capacity. Thus, "[b]ecause the courts have no power to interfere in the legislative process, the Supervisors' determination is not subject to judicial review. [Citation omitted.] Moreover, until the developer in this case actually applies for a permit under the new grading ordinance, there is no actual controversy which is ripe for litigation. [Citation omitted.] Such a controversy will only arise after the developer seeks, and is granted, a permit under the new grading ordinance.³⁴¹

³⁴⁰ *Id.* at 8. Because Communities First! lacked standing, the Commw. Ct. did not decide whether the amended ordinance illegally delegated legis. power. *Id.* n.11.

³⁴¹ *Id.* (concurring opinion, at 1-2).

Throughout their discussions, the members of the Kilbuck Township Landslide Task Force and Advisory Committee specifically discussed two types of geologic hazards common to Pennsylvania: landslides and sinkholes. Recognizing that these geologic conditions could constitute a danger or potential danger to life, health or property, or threaten the safety, use or stability of property, public ways, structures and utilities, the members reviewed background material on landslides and sinkholes, summarized as follows.

Landslides

A landslide is defined as "the movement of an unstable mass of rock, unconsolidated earth, or debris down a slope."342 The following natural factors affect slope stability: (1) rock and soil characteristics, such as strength, permeability and the presence and orientation of fractures and other discontinuities; (2) slope steepness and orientation; (3) precipitation and other sources of water; (4) the presence of old landslides and (5) oversteepening of slopes by stream or lake erosion. Human-induced factors causing a landslide "include removal of support on lower slopes, increasing the load on upper slopes, and alteration of surface and subsurface drainage."344

Although "[t]he easiest way to avoid landslide hazards is to keep construction and development out of landslide-prone areas[,]" such an approach is unrealistic, "so the next best way is to be aware of the hazards and prepare for them."³⁴⁵

Recognizing the existence of the hazard is the most important step in controlling it. Once recognized, the hazard potential may be reduced by (1) limiting development in the highest hazard areas, and (2) requiring special construction practices in other areas. Maps showing generalized slide-prone areas are available for much of Pennsylvania [citation deleted]. When a site is being considered for a project, a specific investigation of the site and surrounding area is necessary for construction design. Lack of knowledge about ground conditions at and near sites has resulted in

³⁴² Helen L. Delano & J. Peter Wilshusen, *Landslides in Pa.* 1 (Pa. Bureau of Topographic & Geologic Survey, Dep't of Conservation & Nat. Res. 2001).

³⁴⁴ *Id*.

³⁴⁵ *Id.* at 28.

many slope failures and has led to expensive repairs. construction-related landslide can cost many times more than the original project.

Before undertaking remedial measures, the cause of a slide must be understood....

Where a natural geologic hazard exists, designing around it or leaving it undisturbed has given the best results. 346

Although much of Pennsylvania is susceptible to landslides, the southwestern part of the state has by far the highest concentration of landslides.³⁴⁷ In addition, "[u]rban and rural land development is increasing both the number of landslides and the economic effects of natural slides. Major highway construction with large excavations and fills located in mountainous areas creates potential for many landslides." 348

The effects and costs of landslides vary, but they may be extensive:

Landslides cause damage to transportation routes, utilities, and buildings and create travel delays and other side effects. Fortunately, deaths and injuries due to landslides are rare in Pennsylvania. Almost all of the known deaths due to landslides have occurred when rockfalls or other slides along highways have involved vehicles. Storm induced debris flows are the only other type of landslide likely to cause death and injuries. As residential and recreational development increases on and near steep mountain slopes, the hazard from these rapid events will also increase. Most Pennsylvania landslides are moderate to slow moving and damage things rather than people.

One small landslide in 1990 that involved a broken petroleum pipeline is an extreme example of the costs of related damages. Spilled petroleum products entered a major river, causing city water systems to shut down. The identified costs of repair of this landslide damage, clean-up of the spill, technical investigations, legal and court costs and environmental fines were approximately \$12 million. The incalculable costs include: lost productivity while people staved at home because their businesses were closed or to care for children normally in schools that were closed due to lack of water supply, costs for the National Guard to deliver water to neighborhoods and costs to the pipeline company and its customers due to business loss for several months. Although this example is extreme, "associated damages" such as this occur with many landslides.

³⁴⁷ Pa. Bureau of Topographic & Geologic Survey, Dep't of Conservation & Nat. Res., Areas of Pa. Susceptible to Landslides, http://www.dcnr.state.pa.us/ topogeo/hazards/slideareas.aspx (last accessed Aug. 22, 2007). 348 *Id*.

Most damages are less expensive, but significant. "Backyard" landslides, common in the Pittsburgh area, are usually repaired incompletely or not at all. Cost estimates of several hundred thousand dollars for stabilization and repair of a landslide affecting two or three properties are typical. With repair estimates exceeding the value of the properties, abandonment is a frequent "solution". Sometimes local governments assist with relocation costs or "buy out" homeowners. Insurance covers landslide damage only for some business situations.

The Pennsylvania Department of Transportation and large municipalities incur substantial costs due to landslide damage and to extra construction costs for new roads in known landslide-prone areas. One PA DOT estimate in 1991 showed an average of \$10 million per year in landslide repair contracts across the state and a similar amount in mitigation costs for grading projects. A number of highway sites in Pennsylvania are in need of "permanent" repair at estimated costs of \$300,000 to \$2 million each.

A study done by The U. S. Geological Survey found that the total public and private costs of landsliding in Allegheny County averaged at least \$4 million per year from 1970 to 1976. No more recent similar accounting is known.³⁴⁹

Human activity plays a considerable role in destabilizing slopes that otherwise may have endured much longer if left undisturbed. Destabilization may occur through the following: cutting slopes at steep angles or undermining the toes of slopes; locating man-made earth fills on top of unstable or marginally stable slopes; redirecting storm runoff so that flows are concentrated onto portions of slopes that are not prepared to receive them; adding water to slopes by landscape irrigation or septic systems; and removing trees, shrubs and other woody vegetation. The best engineering methodology and best intentions are not always enough: "grading may not be done exactly as specified, construction mistakes may be made and slopes may still be destabilized. Thus restricting or prohibiting development in landslide-prone areas may often remain the wisest option for loss mitigation, in spite of pressures to the contrary." 351

Several approaches exist regarding landslide hazard mitigation:

Careful development of hillside slopes can reduce economic and social losses caused by slope failure by avoiding the potential hazards, by reducing the damage potential, and/or by warning the at-risk population.

³⁴⁹ Pa. Bureau of Topographic & Geologic Survey, Dep't of Conservation & Nat. Res., *Effects & Costs of Landslides*, http://www.dcnr.state.pa.us/topogeo/hazards/slidecost.aspx (last accessed Aug. 22, 2007).

³⁵⁰ Robert L. Schuster & Lynn M. Highland, *The Third Hans Cloos Lecture -- Urban Landslides:* Socioeconomic Impacts & Overview of Mitigative Strategies 2 (pub. online Dec. 13, 2006).
351 Id. at 11.

Landslide risk in urban areas can be reduced by four regulatory approaches:

- 1. Restricting development in landslide-prone urban areas, a function assisted by mapping landslide susceptibility;
- 2. Requiring (by means of codes) that grading, excavation, landscaping, construction, vegetation clearance, and drainage activities not contribute to slope instability;³⁵²
- 3. Protecting existing developments and population by physical mitigation measures, such as slope geometry modifications, drainage, counterfort berms that serve as buttresses, and protective barriers;
- 4. Development and installation of monitoring and warning systems.

... These mitigative measures, when used with modern technology, can greatly reduce losses dues to landslides.³⁵³

One of the most economical and effective practices to reduce landslide losses is "avoidance," land use planning aimed at locating developments on stable ground and relegating landslide-prone slopes to open space, parks or other low density uses. Although total avoidance of landslide risks is unrealistic, local communities often adopt policies that attempt to limit the types and/or densities of development in landslide-prone areas as a means of minimizing the exposure to risk. Avoidance may be accomplished by discouraging, regulating or preventing new development on unstable slopes and by removing or converting existing development. Several methods exist for discouraging development on hillsides, including government acquisition of property, disclosure of urban landslide hazards to potential property buyers, limiting public investment through the exclusion of public facilities, increasing public education, raising public awareness of legal liabilities, posting warning signs, providing tax credits and levying special assessments, denying loans for development or construction, and instituting prohibitive insurance costs.

To successfully implement urban grading and construction standards from a geotechnical standpoint, four requisites must be met:

1. Strong geotechnical performance in identifying, characterizing and evaluating the landslide problems.

³⁵² Although there is no "uniform" ordinance to achieve standardization of excavation and grading, certain codes have been developed for federal projects, such as those standards used by the U.S. Army Corps of Eng'rs and the U.S. Bureau of Reclamation, which are in charge of major construction efforts. Municipalities often adopt these types of standards for construction and design.

³⁵³ *Id.* at 13-14 (internal citations omitted).

³⁵⁴ *Id.* at 14 (internal citations omitted).

³⁵⁵ *Id.* at 14-15.

- 2. Adequate agency review of the consultants' products and agency field trips during and after grading activities.
- 3. A board of appeals to weigh possible disputes between the geotechnical consultants and the agency.
- 4. Recognition of the importance of geotechnical considerations by other professional people and the general public.³⁵⁶

Sinkholes

A sinkhole is a subsidence feature in an area underlain by carbonate bedrock. Large areas of central and eastern Pennsylvania are underlain by carbonate bedrock, and large population centers are on or adjacent to these areas. For example, [46] of the 62 municipalities in Lehigh and Northampton Counties are underlain entirely or in part by carbonate geology. These limestone and dolomite formations underlie the heart of the Lehigh Valley's urban core. 360

With a sinkhole, "the support for the land surface is gradually removed over a period of time, causing the land surface to sag and finally collapse, leaving a hole or cavity as a result. Overlying surface materials then move downward into the hole." Sinkholes vary in size and shape: "[t]hey are commonly circular in outline, but they can also be elliptical, linear, or irregular in shape." Often, "one side of the sinkhole remains steep, and the opposite side has a more gentle slope; the sinkhole resembles a funnel that has been cut in half along its length." Additionally, "[o]n average, sinkholes in Pennsylvania range from 4 to 20 feet in diameter and have approximately the same range in depth."

³⁵⁶ *Id.* at 19.

³⁵⁷ William E. Kochanov, *Sinkholes in Pa.* 2 (Pa. Bureau of Topographic & Geologic Survey, Dep't of Conservation & Nat. Res., 1999). The term "subsidence" refers to "the downward movement of surface material; it involves little or no horizontal movement." *Id.* at 1. In addition, "[s]ubsidence occurs naturally due to the physical and chemical weathering of certain types of bedrock. Subsidence can occur as a result of underground mining, excessive pumping of groundwater, or subsurface erosion due to the failure of existing utility lines." *Id.* It "usually occurs slowly over a relatively long period of time." *Id.* at 2. Carbonate bedrock includes limestone, dolomite and marble. *Id.*

³⁵⁸ *Id*.

³⁵⁹ *Id.* at 18.

³⁶⁰ J. Planning Comm'n, Lehigh-Northampton Counties, *Minimizing Sinkhole Occurrences: An Initial Inquiry into Regulatory Approaches* 1 (Nov. 1988).

Kochanov, supra note 357, at 2.

³⁶² *Id.* at 14.

³⁶³ *Id.* at 15.

³⁶⁴ *Id.* at 14. Of note is that one sinkhole in Upper Saucon Twp., Lehigh County measured 120 feet in diameter with a depth of 55 feet. J. Planning Comm'n, *supra* note 360, at 2.

Karst topography involves sinkholes and is a type of topography formed on limestone or dolomite by bedrock dissolution, characterized by sinkholes, surface and closed depressions, caves or underground drainage. 365

Sinkholes are commonly formed by "the downward migration of soils and unconsolidated fill into subterranean voids and channels. . . . The sinkhole reflects the localized downward movement of the overburden." Underground voids are caused by chemical weathering or mechanical erosion. The following describes the process of chemical weathering:

Water enters the ground, percolates through the soil zone, and then reaches the bedrock. As a result of chemical reactions which occur as the water passes through the soil zone, the water is slightly acidic even if it did not fall as acid rain. This acidic water can dissolve the limestone and dolomite found in the bedrock in a geologic time scale. The voids created by chemical weathering can become conduits for additional groundwater movement.³⁶⁷

The process of mechanical erosion, on the other hand, is described as follows:

In this process, as subterranean voids and conduits are created, they become channels for the downward or lateral movement of water, sediment, soil, and other unconsolidated deposits. The water and its associated sediment can cause the enlargement of the voids and conduits as they erode and remove the bedrock through abrasion. As the voids and conduits are enlarged, the velocity of the water passing through can increase. The faster flows can accelerate the erosion process. ³⁶⁸

Development necessarily alters a landscape to accommodate residential, commercial or industrial structures: land is cleared, soil and rocks are moved, foundations are dug, utility lines are laid and roadways are constructed. Storm water drainage problems are a major urban concern and are compounded when karst topography exists; development reduces the surface area available for rainwater to infiltrate naturally into the ground. Excavation for the placement of utility lines may unwittingly create artificial drainageways; a water main failure may cause dramatic changes regarding land surface support by eroding subsurface soil and rock.

³⁶⁵ Kochanov, *supra* note 357, at 16 and 30. A "surface depression" is "a variable but generally bowl-shaped depression in the land surface; it may be of variable size and depth and have an unbroken ground surface around the perimeter." *Id.* at 30.

³⁶⁶ J. Planning Comm'n, *supra* note 360, at 5.

^{36/} *Id*.

³⁶⁸ *Id*.

³⁶⁹ Kochanov, *supra* note 357, at 19.

 $^{^{370}}$ *Id.*

³⁷¹ *Id.* at 20-21.

In general, the following human activities cause sinkholes: water table manipulation (the result of pumping activities or storm water management techniques that direct the storm water to surface water courses such as streams and rivers, when the water had in the past percolated into the ground), concentrated water introduction (through pipe construction or storm water management), placing new loads on the bedrock and the breakdown of fill material (if, for example, the fill operation has not been properly engineered). 372

With respect to the prevention of sinkholes, "[a]s with any geological hazard, most often it is the lack of awareness of the hazard (in this case, subsidence) that leads to the greatest problems." Preventing sinkholes, or minimizing their impact in a local area, involves becoming informed about the geology of the area, ensuring that municipalities regularly inspect existing utility lines, ensuring that development is regulated (in other words, taking proper steps to minimize the potential for future problems; it does not necessarily mean discouraging development) and maintaining sinkhole insurance. In addition, "[s]inkhole locations can be identified through historic data, aerial photograph interpretation, surface inspections and subsurface testing."

When sinkholes occur in developed areas, "they can cause property damage, injury and the loss of life, and disruption to vital utility and public services." In several instances, sinkholes have engulfed public roads. Consequently, the roads were closed for repairs, resulting in motorist inconvenience. While some smaller repairs are quick, one road in Upper Saucon Township, Lehigh County underwent repairs lasting three years before the sinkhole damage could be fixed. The collapse of a road has also involved the disruption of underground utility lines, as the lines may be broken or service may be cut off to prevent problems. Sinkholes have prevented the delivery of water, sanitary sewer, gas, electric and/or cable television services to neighboring communities. In addition, sinkholes have breached storm water detention basins, broken storm water pipes and affected recreation areas and airport infrastructure. As expected, the costs related to repairing the damage caused by sinkholes to the public facilities and restoring services can be considerable. Services are caused by sinkholes to the public facilities and restoring services can be considerable.

³⁷² J. Planning Comm'n, *supra* note 360, at 7-9.

³⁷³ Kochanov, *supra* note 357, at 27.

³⁷⁴ *Id.* at 27-28.

³⁷⁵ J. Planning Comm'n, *supra* note 360, at 10.

³⁷⁶ *Id.* at 1.

³⁷⁷ *Id.* at 2.

³⁷⁸ *Id.* at 2 and 4.

³⁷⁹ *Id.* at 4.

³⁸⁰ *Id*.

PROPOSED LEGISLATION: THE GEOLOGICALLY HAZARDOUS AREAS ACT

The Need for Legislation

In reviewing the topic of the Kilbuck landslide, the members of the Kilbuck Township Landslide Task Force and Advisory Committee discussed the need for legislation to prevent an occurrence similar to that of the Kilbuck landslide of September 19, 2006. While the members acknowledged the need to address landslide prevention in legislation, they also recognized the need to provide statutory guidance regarding other types of geologic hazards, such as sinkholes. In this regard, any proposed legislation could have a broader application.

The task force and advisory committee also recognized the need for statewide review and oversight regarding proposed developments in geologically hazardous areas. In this regard, local governments are afforded the benefit of additional expertise and guidance regarding geologic hazards. The task force and advisory committee agreed that DEP is well suited to provide this expertise and guidance; its heightened review of proposals involving geologically hazardous areas can be done in conjunction with its current review of National Pollutant Discharge Elimination System (NPDES) permit applications, erosion and sediment control plans and post-construction storm water management plans.

A goal of this type of statewide review and oversight is to have municipalities give and obtain more thoughtful consideration to proposed developments. As a matter of course, developers should identify proposed courses of action, and their sequence, to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the developer's proposed earth disturbance activity.

The task force and advisory committee favored legislation in this regard, believing that if such mandates and procedures were in place and followed prior to September 2006, the Kilbuck landslide could possibly have been prevented.

Summary of Recommendations

As a result of their discussions, the members of the Kilbuck Township Landslide Advisory Committee reached consensus on developing a statutory framework (the Geologically Hazardous Areas Act) that recognizes and regulates geologically hazardous areas. In reaching consensus on the proposed act, the advisory committee considered how legislation could prevent or ameliorate the adverse consequences of the occurrence of a landslide or sinkhole. The proposed legislation resulted from numerous subcommittee meetings and advisory committee meetings over a one-year period.

The Geologically Hazardous Areas Act has the following structure:

CHAPTER 1 PRELIMINARY PROVISIONS

Section 101. Short title. Section 102. Purpose. Section 103. Definitions.

CHAPTER 3 AGENCY AND MUNICIPAL RESPONSIBILITIES

Section 301. Duties of Department of Conservation and Natural Resources.

- (a) General rule.
- (b) Report.
- (c) Review and update.
- (d) Performance of duties.
- (e) Publication of hazardous areas.
- (f) Regulations.

Section 302. Geologic reports.

- (a) General rule.
- (b) Additional requirements.
- (c) Fees.
- (d) Review.
- (e) Scope.

Section 303. Duties of department.

- (a) Approval.
- (b) Disapproval.
- (c) Delegation of permit review.

³⁸¹ Under the legislation proposed by the advisory comm., "geologically hazardous area" is defined as "[a]n area with geologic formations or soil conditions, or both, that under natural conditions or when disturbed are documented by a licensed professional to be susceptible to cause, or historically have caused, a hazardous condition." The terms "hazardous condition" & "licensed professional" are also defined in the legis.

- (d) Duties.
- (e) Regulations.
- Section 304. Inspections.
 - (a) Condition.
 - (b) Inspection warrant.
 - (c) Grounds.
- Section 305. Liability.
 - (a) General rule.
 - (b) Costs.
- Section 306. Conditioned approval by municipality.

CHAPTER 5 ENFORCEMENT AND REMEDIES

- Section 501. Enforcement and remedies.
 - (a) Unlawful conduct.
 - (b) Remedies and enforcement under The Clean Streams Law.
 - (c) Scope.
 - (d) Construction.

CHAPTER 21 MISCELLANEOUS PROVISIONS

- Section 2101. Administration.
- Section 2102. Effect on other law.
- Section 2103. Repeal.
- Section 2104. Savings clause.
- Section 2105. Effective date.

As noted in section 102 of the proposed Geologically Hazardous Areas Act, the purpose of the legislation is to:

- (1) Protect people and property from the dangers and damage associated with land development in geologically hazardous areas that may be prone to landslides or sinkholes and other hazardous conditions, such as hazardous rock and soil slippage, and other soil management problems.
- (2) Recognize and minimize the man-made conditions that increase the potential for:
 - (i) Landslides and other gravity-driven movements of susceptible rock and soil.
 - (ii) Sinkhole development and related subsidence in soluble units.
 - (iii) Degradation of surface and groundwater resources associated with the alteration of geologic conditions.

- (3) Authorize a comprehensive and coordinated program to regulate land development in geologically hazardous areas using sound land use practices, designed to prevent damage to and destruction of private and public property and structures, prevent the disruption of commerce and preserve and restore the natural ecological systems.
- (4) Encourage administration, management and stewardship of geologically hazardous areas consistent with the obligation to avoid unnecessary expenditure of public monies, the Commonwealth's duty as trustee of natural resources and the people's constitutional right to the preservation of the natural, scenic, aesthetic and historic values of the environment.

The members emphasized that mapping, planning and geological expertise should be primary considerations, with the understanding that "good regulations are of little help without strong enforcement and various levels of inspection throughout the progress of the project." The recommendations of the members emphasize the following:

- (1) The duties of the DCNR to: develop techniques and criteria for mapping geologically hazardous areas in Pennsylvania; identify and delineate such areas; analyze the type of rock and soil susceptible to acid formation, a landslide, a sinkhole or development of karst³⁸³ that may result in a hazardous condition; create a publicly available inventory of data; and notify municipalities identified as falling within a geologically hazardous area or having within their boundaries a geologically hazardous area.
- (2) The need for a person proposing to undertake earth disturbance activity³⁸⁴ within a geologically hazardous area to submit a geologic report, prepared and sealed by a licensed professional, to the municipality and DEP or its delegated designee. The geologic report will accompany an application to discharge pollutants or storm water, a plan to control erosion and sediment, or a plan to manage postconstruction storm water. A geologic report must adequately identify the proposed courses of action, and their sequence, to be

³⁸³ Under the legis. proposed by the advisory comm., "karst" is defined as "[a] type of topography that is formed over limestone, dolomite or gypsum by bedrock solution and characterized by closed depressions or sinkholes, caves and underground drainage."

³⁸² William Russell Adams, Jr., *Landsliding in Allegheny County, Pa.: Characteristics, Causes & Cures* 211 (Univ. of Pittsburgh 1986) (citations omitted) (on file with the J. State Gov't Comm'n).

Under the legis. proposed by the advisory comm., "earth disturbance activity" is defined as "[a] construction or other human activity that disturbs the surface of the land, including, but not limited to, land clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling cultivation, operation of animal heavy use areas, timber harvesting activities, road maintenance activities, oil and gas activities, well drilling, mineral or oil extraction and the moving, depositing, stockpiling or storing or soil, rock or earth minerals."

taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity.

(3) The duties of DEP to review the geologic reports and determine whether they adequately identify the proposed courses of action to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity. The department may authorize or refuse to authorize the earth disturbance activity. In addition, the department must: review and appropriately act on all permit applications and issue, modify, suspend, limit, renew or revoke permits; receive and act upon written complaints; issue orders necessary to implement the act or departmental regulations.

The proposed Geologically Hazardous Areas Act also includes provisions regarding inspections, liability and enforcement and remedies.

Specifically, the proposed legislation contains the following provisions:

- DCNR shall develop techniques and criteria for mapping geologically hazardous areas in Pennsylvania. (§ 301(a)(1))
- DCNR shall identify and delineate geologically hazardous areas in Pennsylvania. (§ 301(a)(2))
- DCNR shall analyze the type and nature of rock and soil susceptible to acid formation, a landslide, a sinkhole or development of karst that may result in a hazardous condition. (§ 301(a)(3)(i))
- DCNR shall create a publicly available inventory of data. (§ 301(a)(4))
- DCNR shall notify the municipalities identified as falling within a geologically hazardous area or having within their borders a geologically hazardous area. (§ 301(a)(5))
- Within two years following enactment of the Geologically Hazardous Areas Act, DCNR shall report to the General Assembly its accomplishments under this act and highlight geologically hazardous areas of high priority as well as project a plan to continue its work under this act. (§ 301(b))
- DCNR shall periodically review and update information regarding geologically hazardous areas. (§ 301(c))

- A person proposing to undertake earth disturbance activity within a geologically hazardous area must submit a geologic report to the municipality and DEP, along with an application to discharge pollutants or storm water, a plan to control erosion and sediment, or a plan to manage postconstruction storm water. (§ 302(a))
- A geologic report shall be prepared and sealed by a licensed professional. (§ 302(a))
- A geologic report shall accompany an application to discharge pollutants or storm water, a plan to control erosion and sediment, or a plan to manage postconstruction storm water. (§ 302(a))
- A geologic report must adequately identify the proposed courses of action and their sequence, to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity. (§ 302(b))
- A person submitting a geologic report is responsible for all fees for the preparation and review of the report. (§ 302(c))
- Based on the content of the geologic report, DEP shall determine whether to authorize or refuse to authorize earth disturbance activity. (§ 303(a) and (b))
- DEP may issue orders or permits and appropriately act to enforce the Geologically Hazardous Areas Act. (§ 303(d))
- An agent or employee of a municipality or DEP may enter a property to survey a geologically hazardous area or ascertain the location of a structure. (§ 304(a)(1))
- An agent or employee of a municipality or DEP may enter a property or structure to ascertain compliance or noncompliance with the Geologically Hazardous Areas Act, municipal and Commonwealth law, regulation, approval, conditional approval or order. (§ 304(a)(2))
- A search or inspection warrant may be sought if an agent or employee of a municipality or DEP is improperly refused access to the property or reasonably requires access to the property without prior notice to the owner. (§ 304(b))
- DEP shall promptly inspect earth disturbance activity within a geologically hazardous area when the municipality presents information to the department that gives the department probable cause to believe that there is a violation of the Geologically Hazardous

Areas Act. The department shall notify the municipality of its inspection and allow a municipal inspector from the municipality to accompany the departmental inspector during the inspection. If the department determines that there is insufficient probable cause to believe that a violation is occurring or has occurred, the department must promptly provide a written explanation to the municipality of its decision not to inspect. (§ 304(c))

- Approval, conditional approval or issuance of a permit under the Geologically Hazardous Areas Act does not (1) relieve a person from liability for damage to persons or property resulting from the issuance or compliance, or as otherwise imposed by law; or (2) impose any liability for damages to persons or property on the municipality or Commonwealth or its officers, employees or agents. (§ 305(a))
- Any person conducting earth disturbance activity in violation of the Geologically Hazardous Areas Act, or a regulation or order under the act, is liable for the costs of abatement of any pollution and any public nuisance caused by the violation. (§ 305(b))
- Enforcement and remedies regarding the Geologically Hazardous Act are governed by The Clean Streams Law, although an offense that constitutes a violation of both acts may not result in dual penalties. (§ 501)

The Role of the Department of Conservation and Natural Resources

Statutory Authority

As previously described, section 301 of the proposed Geologically Hazardous Areas Act specifies the duties of DCNR. The comment to the section states that its provisions are "intended to provide context to the statutory framework and supplement the powers and duties set forth in § 305 of the Conservation and Natural Resources Act." The Conservation and Natural Resources Act provides the following:

Section. 305. Ecological and geological services.

(a) Powers and duties enumerated.--The department shall have the power and its duty shall be with respect to the study and protection of the Commonwealth's ecological and geological resources:

³⁸⁵ Act of June 28, 1995 (P.L.89, No.18).

- (1) To undertake, conduct and maintain the organization of a thorough and extended survey of this Commonwealth for the purpose of elucidating the geology and topography of this Commonwealth. The survey shall disclose the . . . location of . . . soils, . . . and of waters, as shall be necessary to afford the . . . interests of this Commonwealth and the public a clear insight into the character of its resources. It shall also disclose the location and character of such rock formations as may be useful in the construction of highways or for any other purpose. . . .
- (3) To put the results of the survey, with the results of previous surveys, into a form convenient for reference.
- (4) To collect copies of the surveys of this and other states and countries and digest the information therein contained to the end that the survey hereby contemplated may be made as thorough, practical and convenient as possible.
- (5) To enter into and upon all lands and localities in this Commonwealth which it may be necessary to examine for the purpose of survey; but, in such entry, no damage to property shall be done.
- (6) To avail itself as fully as possible of the information, maps and surveys possessed by citizens and corporations of this Commonwealth, relative to the geology and topography of this Commonwealth.
- (7) To transmit all publications of the survey, or any part thereof, to the Department of General Services to be copyrighted by the Secretary of General Services in the name of the Commonwealth.
- (8) To arrange for the cooperation of the United States Geological Survey or of such other national organization as may be authorized to engage in such work. . . . ³⁸⁶

DCNR raised the issue of whether setting forth all the specified duties in the Geologically Hazardous Areas Act is necessary in light of section 305 of the Conservation and Natural Resources Act. Therefore, although proposed section 301 reflects the consensus of the Advisory Committee on the Kilbuck Township Landslide, it may need to be reviewed further throughout the legislative process.

Current and Potential Capacity

DCNR indicated that prior to and at the time of the Kilbuck landslide, substantial documentation existed "in the public record of the soil instability and prior landslide activity in and around Kilbuck Township and specifically on the site that was under

³⁸⁶ *Id.*, § 305.

development where the landslide occurred."387 The department "has a current capacity to provide general maps, without detailed boundaries, identifying geologically hazardous areas in the [C]ommonwealth." The current data inventory where a landslide or sinkhole has occurred. The department indicated that significant work would not be required to inform municipalities of the available data regarding landslides and sinkholes within their boundaries. 389

The department estimates that a Commonwealth investment of approximately \$9 million would enable it to develop statewide mapping of landslides and sinkholes that would have more specific boundaries for geologically hazardous areas.³⁹⁰

Text of the Geologically Hazardous Areas Act

AN ACT

Providing for the designation and regulation of geologically hazardous areas throughout this Commonwealth to protect people and limit property damage and the disruption of commerce from the possible dangers associated with land development in areas that are prone to landslides, sinkholes or other geologic hazards; imposing duties and conferring powers on the Department of Environmental Protection, the Department of Conservation and Natural Resources and municipalities; and providing for enforcement and remedies.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

CHAPTER 1 PRELIMINARY PROVISIONS

Section 101. Short title.

This act shall be known and may be cited as the Geologically Hazardous Areas Act.

Section 102. Purpose.

The purpose of this act is to:

³⁸⁷ E-mail from Susan Felker, Dir. of Policy & Planning, Pa. Dep't of Conservation and Nat. Res. (May 22, 2008) (on file with the J. State Gov't Comm'n). The e-mail acknowledged reliance upon the expertise and information provided by the staff of the Pa. Bureau of Topographic & Geologic Survey, Dep't of Conservation & Nat. Res. ³⁸⁸ *Id*.

³⁸⁹ *Id*.

³⁹⁰ *Id*.

- (1) Protect people and property from the dangers and damage associated with earth disturbance activity in geologically hazardous areas that may be prone to landslides or sinkholes and other hazardous conditions, such as hazardous rock and soil slippage, and other soil management problems.
- (2) Recognize and minimize the man-made conditions that increase the potential for:
 - (i) Landslides and other gravity-driven movements of susceptible rock and soil.
 - (ii) Sinkhole development and related subsidence in soluble units.
 - (iii) Degradation of surface and groundwater resources associated with the alteration of geologic conditions.
- (3) Authorize a comprehensive and coordinated program to regulate earth disturbance activity in geologically hazardous areas using sound land use practices, designed to prevent damage to and destruction of private and public property and structures, prevent the disruption of commerce and preserve and restore the natural ecological systems.
- (4) Encourage administration, management and stewardship of geologically hazardous areas consistent with the obligation to avoid unnecessary expenditure of public moneys, the Commonwealth's duty as trustee of natural resources and the people's constitutional right to the preservation of the natural, scenic, aesthetic and Section 103. Definitions.

The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Closed depression." Part of the land surface on a site that drains internally, has generally sunk to a variable depth and is generally characterized by a downward movement of soil into bedrock voids without breaking the ground surface.

"Department." The Department of Environmental Protection of the Commonwealth.

"Earth disturbance activity." A construction or other human activity that disturbs the surface of the land, including, but not limited to, land clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling cultivation, operation of animal heavy use areas, timber harvesting activities, road maintenance activities, oil and gas activities, well drilling, mineral or oil extraction and the moving, depositing, stockpiling or storing of soil, rock or earth materials.

"Geologically hazardous area." An area with geologic formations or soil conditions, or both, that under natural conditions or when disturbed are documented by a licensed professional to be geologically susceptible to cause, or historically have caused, a hazardous condition.

"Hazardous condition." Any condition that may include, but not be limited to, a mass earth movement, such as a soil and rock slide, acid formation or sinkhole development, that:

- (1) has a negative environmental impact;
- (2) constitutes a danger or potential danger to life, health or property; or
- (3) threatens the safety, use or stability of property, public ways, structures or utilities.

"Karst." A type of topography that is formed over limestone, dolomite or gypsum by bedrock solution and characterized by closed depressions or sinkholes, caves and underground drainage.

"Licensed professional." A person licensed by the Commonwealth in the applicable practice under the act of May 23, 1945 (P.L.913, No.367), known as the Engineer, Land Surveyor and Geologist Registration Law.

"Sinkhole." A surface feature that is:

- (1) formed in a karst area;
- (2) characterized by a roughly circular hole in the ground of variable size and depth; and
- (3) the result of the movement of soil, rocks or similar materials down into voids in the limestone bedrock or regolith.

<u>Note</u>

The incorporation of the term "earth disturbance activity" will allow the Department of Environmental Protection to integrate this proposed statutory requirement with other preexistent regulatory permit programs. The definition in this section is based on the definition of "earth disturbance activity" in 25 Pa. Code § 102.1.

The terms "municipality" and "person" are not separately defined in this act, since they are defined in 1 Pa.C.S. § 1991 as follows:

"Municipality."

- (1) When used in any statute finally enacted on or before December 31, 1974, a city, borough or incorporated town
- (2) When used in any statute finally enacted on or after January 1, 1975, a county, city, borough, incorporated town or township.

"Person." Includes a corporation, partnership, limited liability company, business trust, other association, government entity (other than the Commonwealth), estate, trust, foundation or natural person.

CHAPTER 3 AGENCY AND MUNICIPAL RESPONSIBILITIES

Section 301. Duties of Department of Conservation and Natural Resources.

- (a) General rule.--The Department of Conservation and Natural Resources shall:
- (1) Develop techniques and criteria for mapping geologically hazardous areas in this Commonwealth.
 - (2) Identify and delineate geologically hazardous areas in this Commonwealth.
 - (3) Analyze:
 - (i) The type and nature of rock and soil susceptible to acid formation, a landslide, a sinkhole or development of karst that may result in a hazardous condition.
 - (ii) Other relevant factors determined by the Department of Conservation and Natural Resources.
- (4) Create an inventory of data developed under this section that is publicly available.
- (5) Notify the municipalities identified as falling within a geologically hazardous area or having within their boundaries a geologically hazardous area.
- (b) Report.--Within two years following enactment of this act, the Department of Conservation and Natural Resources shall report to the General Assembly the information gathered under subsection (a), including the mapping of geologically

hazardous areas of high priority, as defined by the Department of Conservation and Natural Resources, and a projected plan to continue gathering the information directed by subsection (a).

- (c) Review and update.--The Department of Conservation and Natural Resources shall periodically review and update the following, which shall be forwarded to the department:
 - (1) The techniques and criteria for mapping geologically hazardous areas in this Commonwealth.
 - (2) The maps of geologically hazardous areas in this Commonwealth.
- (d) Performance of duties.--In performing its duties under this section, the Department of Conservation and Natural Resources shall:
 - (1) Review aerial photographs and maps, soil data and geologic information, which may include:
 - (i) Data and reports from other departments.
 - (ii) Geologic reports under section 302.
 - (2) Perform site visits and studies as necessary.
- (e) Publication of hazardous areas.--At least annually and more often if updated, but at least 30 days prior to becoming effective, the Department of Conservation and Natural Resources shall publish in the Pennsylvania Bulletin a list of all municipalities that fall within a geologically hazardous area or have geologically hazardous areas within their boundaries, as identified and delineated under subsection (a)(2).

(f) Regulations.--The Department of Conservation and Natural Resources may promulgate regulations necessary to implement this section.

Comment

Section 305 of the act of June 28, 1995 (P.L.89, No.18), known as the Conservation and Natural Resources Act, specifies the powers and duties of the Department of Conservation and Natural Resources. This section of the Geologically Hazardous Areas Act is intended to provide context to the statutory framework and supplement the powers and duties set forth in § 305 of the Conservation and Natural Resources Act.

Under subsection (a)(3)(ii), the Department of Conservation and Natural Resources may choose to analyze other topographic conditions that may exacerbate the development of a hazardous condition. The purpose of making the information under subsection (d)(1) available to the Department of Conservation and Natural Resources is to provide the department with as much statewide background information as possible. The Department of Conservation and Natural Resources may then use this information as it deems necessary to carry out its duties under this section.

The ability of the Department of Conservation and Natural Resources to fulfill its duties under this section is, of course, dependent upon its budgetary constraints, which encompass financial resources and staffing. Therefore, different levels of investment affect the timeliness and specificity of the work product of the department. Subsection (b) requires the department to report to the General Assembly on its progress in fulfilling its duties under this section, thereby allowing the department to provide an estimated time frame and plan for continuing its work under this section, given the available resources of the department.

Section 302. Geologic reports.

(a) General rule.--A person proposing to undertake earth disturbance activity within a geologically hazardous area shall submit a geologic report, prepared and sealed by a licensed professional, to the municipality and department or its delegated designee, along with:

- (1) any application to discharge pollutants or storm water under a National Pollutant Discharge Elimination System Permit for Discharges Associated with Construction Activities or any other authorization relating to earthmoving activities;
- (2) a plan to control erosion and sediment required under departmental rules and regulations; or
- (3) a plan to manage postconstruction storm water required under departmental rules and regulations.
- (b) Additional requirements.--In addition to the application requirements for the items set forth in subsection (a), a geologic report under this section must adequately identify the proposed courses of action and their sequence, to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity.
- (c) Fees.--A person submitting a geologic report under this section shall be responsible for all fees involving the preparation and review of the report.
- (d) Review.--The department, its delegated designee or a municipality may have a geologic report submitted under this section reviewed by a licensed professional independent from the preparer and sealer of the submitted report.
- (e) Scope.--This section shall not apply to a municipality engaging in road construction and maintenance activities.

Note

With respect to subsection (a), *see* 25 Pa. Code chs. 92 (relating to national pollutant discharge elimination system permitting, monitoring and compliance) and 102 (relating to erosion and sediment control).

With respect to subsection (d), the Department of Environmental Protection may either directly employ the "licensed professional independent from the preparer and sealer of the submitted report" or contract out the services of such licensed professional.

Section 303. Duties of department.

- (a) Approval.--The department may authorize earth disturbance activity in a geologically hazardous area in accordance with applicable laws and regulations if the department determines that the geologic report under section 302 adequately identifies the proposed courses of action to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity.
- (b) Disapproval.--The department may refuse to authorize earth disturbance activity in a geologically hazardous area if the geologic report under section 302 fails to adequately identify proposed courses of action to be taken during and after construction to eliminate or reduce the occurrence of a hazardous condition as a result of the proposed earth disturbance activity.
- (c) Delegation of permit review.--The department may delegate its permit review, enforcement and inspection authority under this act to a county conservation district.
- (d) Duties.--In issuing orders or permits, and in taking any other action under this act, the department shall:
 - (1) Review and take appropriate action on all permit applications submitted under this act and issue, modify, suspend, limit, renew or revoke permits under this act and departmental regulations.

- (2) Receive and act upon written complaints.
- (3) Issue orders necessary to implement this act or departmental regulations.
- (e) Regulations.--The Environmental Quality Board may promulgate regulations necessary to implement this act.

The Department of Environmental Protection may require the identification of the person responsible to implement any earth disturbance activity approved under this act.

Section 304. Inspections.

- (a) Condition.--Approval of earth disturbance activity within a geologically hazardous area may be conditioned upon the granting of permission for an agent or employee of a municipality or the department to:
 - (1) Enter a property to survey a geologically hazardous area or ascertain the location of a structure.
 - (2) Enter a property or structure to ascertain compliance or noncompliance with this act, municipal and Commonwealth law, regulation, approval, conditional approval or order.
- (b) Inspection warrant.--If an agent or employee of a municipality or the department charged with the enforcement of the provisions of this act has been improperly refused access to the property to survey or inspect as authorized by subsection (a) or reasonably requires access to the property without prior notice to the owner, the agent or employee of the municipality or the department may apply for an inspection warrant to any Commonwealth official authorized by law to issue a search or inspection warrant to permit the agent or employee of the municipality or the department to access and inspect

the property. In determining whether to issue an inspection warrant, sufficient probable cause is that the inspection is necessary to properly enforce the provisions of this act.

(c) Grounds.--The department shall promptly inspect earth disturbance activity within a geologically hazardous area when the municipality presents information to the department that gives the department probable cause to believe that there is a violation of this act, including a violation of regulation, approval, conditional approval or order issued under this act. The department shall notify the municipality of this inspection and allow a municipal inspector from the municipality to accompany the departmental inspector during the inspection. If the department determines that there is insufficient information to give the department probable cause to believe that a violation is occurring or has occurred, the department shall promptly provide a written explanation to the municipality of its decision not to inspect.

<u>Note</u>

The term "promptly" is not defined in subsection (c), since as a matter of course, the department investigates complaints and performs inspections immediately (generally within a 24-hour time frame).

Comment

Because of § 303(d)(2), subsection (c) does not foreclose persons other than municipalities from presenting information to the Department of Environmental Protection regarding alleged violations.

Section 305. Liability.

(a) General rule.--Approval, conditional approval or issuance of a permit under this act does not:

- (1) relieve a person from liability for damage to persons or property resulting from the issuance or compliance, or as otherwise imposed by law; or
- (2) impose any liability for damages to persons or property on the municipality or Commonwealth or its officers, employees or agents.
- (b) Costs.--Any person conducting earth disturbance activity in violation of this act, or a regulation or order under this act, is liable for the costs of abatement of any pollution and any public nuisance caused by the violation.

Compliance with this act represents no warranty, finding, guarantee or assurance that a landslide, sinkhole or subsidence will not occur on a site.

Section 306. Conditioned approval by municipality.

A municipality may not finally approve a proposal involving earth disturbance activity under this act unless and until the department approves the earth disturbance activity, but a municipality may conditionally approve a proposal involving earth disturbance activity under this act, subject to approval or conditional approval by the department.

CHAPTER 5 ENFORCEMENT AND REMEDIES

Section 501. Enforcement and remedies.

- (a) Unlawful conduct.--It is unlawful to:
- (1) Fail to comply with any departmental rule, regulation, order, permit or license.
 - (2) Violate this act or any rule or regulation adopted under this act.

- (3) Hinder, obstruct, prevent or interfere with the department, its personnel or any delegated designee in the performance of any duty under this act.
- (b) Remedies and enforcement under The Clean Streams Law.--Except as provided in subsection (c), for purposes of enforcement of this act and remedies under this act, the act of June 22, 1937 (P.L.1987, No.394), known as The Clean Streams Law, shall govern.
- (c) Scope.--Nothing in subsection (b) is intended to broaden the scope of persons that must comply with the provisions of this act.
- (d) Construction.--An offense that constitutes a violation of this act and The Clean Streams Law shall not result in dual penalties.

Subsection (c) clarifies that although the definition of "person" under The Clean Streams Law is more inclusive than the definition of "person" (defined by 1 Pa.C.S. § 1991) under this act, the application of subsection (b) does not broaden the definition of "person" under this act. For example, such application does not expand who must comply with the requirements regarding geologic reports under § 302.

If a person commits a violation of this act, and that offense constitutes a violation of The Clean Streams Law, the person may not receive a "double" penalty for the offense.

CHAPTER 21 MISCELLANEOUS PROVISIONS

Section 2101. Administration.

The General Assembly shall appropriate the funds necessary to implement this act. Section 2102. Effect on other law.

Nothing contained in this act shall be construed to create additional review powers already regulated by other law.

This section clarifies that this act does not affect or expand the jurisdiction or review process of agencies or departments, most notably in the areas of wetlands regulation and storm water management.

Section 2103. Repeal.

All acts or parts of acts are repealed insofar as they are inconsistent with this act.

Section 2104. Savings clause.

The provisions of this act do not affect any suit or prosecution pending under the authority of any statute repealed by this act.

Section 2105. Effective date.

This act shall take effect immediately.

House Resolution No. 897 of 2006 (Printer's No. 4824)

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE RESOLUTION

No. 897

Session of 2006

INTRODUCED BY PETRONE, RAMALEY, BEBKO-JONES, CALTAGIRONE, COHEN, COSTA, DALEY, DELUCA, FLAHERTY, GERGELY, GRUCELA, JAMES, JOSEPHS, KOTIK, LEDERER, MELIO, MUSTIO, PALLONE, PISTELLA, PRESTON, READSHAW, SAINATO, SIPTROTH, SOLOBAY, THOMAS, WALKO, WHEATLEY AND YOUNGBLOOD, OCTOBER 18, 2006

REFERRED TO COMMITTEE ON STATE GOVERNMENT, OCTOBER 18, 2006

A RESOLUTION

1 2 3 4 5	Directing the Joint State Government Commission to conduct an in-depth investigation into the landslide in Kilbuck Township, Allegheny County, including a thorough review of the applicable State and local permit and approval processes; and requiring a report.
6	WHEREAS, On September 19, 2006, a massive landslide occurred
7	at the commercial construction project at the Kilbuck
8	Properties, L.P. site in Kilbuck Township, Allegheny County; and
9	WHEREAS, Between 500,000 and 600,000 cubic yards of earth and
10	stone from the site cascaded down onto the four-lane
11	Pennsylvania State Route 65, a vital roadway for 22,000 vehicles
12	a day, and three Norfolk Southern Railways tracks, a major
13	commercial rail link between Chicago and New York City, which
14	carry close to 100 trains a day, forcing their closure; and
15	WHEREAS, The closure of these major transportation arteries
16	completely disrupted the lives of thousands of people daily and
17	negatively impacted the quality of life of the residents and the
18	economy of Allegheny County and a large portion of southwestern

- 1 Pennsylvania, resulting in untold costs for cleanup, wages,
- 2 damages and lost revenue; and
- 3 WHEREAS, Officials of the Allegheny County Office of Economic
- 4 Development cautioned Kilbuck Township officials prior to the
- 5 incident that the site, formerly the location of the Dixmont
- 6 State Hospital, was well-known to be prone to landslides; and
- 7 WHEREAS, Local residents expressed numerous concerns about
- 8 the safety and viability of the proposed construction project at
- 9 that site; and
- 10 WHEREAS, Permits or approvals, or both, for the project were
- 11 ultimately granted by the Department of Environmental
- 12 Protection, the Department of Transportation and Kilbuck
- 13 Township, and the project commenced; therefore be it
- 14 RESOLVED, That the House of Representatives direct the Joint
- 15 State Government Commission to conduct an in-depth investigation
- 16 into the landslide in Kilbuck Township, Allegheny County,
- 17 including a thorough review of the applicable State and local
- 18 permit and approval processes; and be it further
- 19 RESOLVED, That the Joint State Government Commission be
- 20 authorized to create a task force and an advisory committee to
- 21 assist the task force in this undertaking; and be it further
- 22 RESOLVED. That additional assistance in this endeavor be
- 23 provided by the Joint Legislative Air and Water Pollution
- 24 Control and Conservation Committee; and be it further
- 25 RESOLVED, That the task force be authorized to hold public
- 26 hearings, take testimony and conduct any site visits; and be it
- 27 further
- 28 RESOLVED, That the Joint State Government Commission compile
- 29 a report based on the findings and recommendations of the task
- 30 force and submit the report to the House of Representatives as

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- 1 soon as possible but no later than one year following the
- 2 adoption of this resolution.