



*Route: W. Wayne Hedden
then to others? -*

Interstate Mining Compact Commission

445-A Carlisle Drive, Herndon, VA 20170
Phone: 703/709-8654 Fax: 703/709-8655

Web Address: www.imcc.isa.us E-Mail: gconrad@imcc.isa.us or bbotsis@imcc.isa.us

*then file?
Coal General
2006*

November 8, 2006

MEMORANDUM

TO: Environmental Affairs Committee
FROM: Greg Conrad
RE: Results of Subsidence Survey

Enclosed please find a compilation of results from the survey that IMCC conducted regarding the regulation of subsidence. Should you require additional copies please let us know.

We discussed the potential of hosting a benchmarking session on subsidence following publication of the survey results. Formats for this session could include: 1) a roundtable discussion where interested states discuss the results of the survey and share additional information and perspectives; or 2) a workshop where several presentations are made followed by interactive discussion. Then again, the survey may have served its purpose simply by providing the information that is contained in the compilation of responses and there may not be the need for any follow up. I would appreciate receiving your input on whether IMCC should sponsor any type of follow up activity to this survey. Based on input from the member states, we will decide how best to proceed. Should we decide to pursue a more formal workshop, I will work with the existing benchmarking steering committee to formulate a program, identify presenters, choose a location, etc. If we decide to pursue a roundtable discussion or a workshop, I would welcome your thoughts on the best location. Please provide your input regarding these matters by November 30.

Enclosure

COMMISSIONERS

GOV. MICHAEL F. EASLEY
North Carolina, Chairman

GOV. JOE MANCHIN III
West Virginia, Vice Chairman

GOV. MARK SANFORD
South Carolina, Treasurer

GOV. BOB RILEY
Alabama

GOV. MIKE HUCKABEE
Arkansas

GOV. ROD BLAGOJEVICH
Illinois

GOV. MITCHELL E. DANIELS, JR.
Indiana

GOV. ERNIE FLETCHER
Kentucky

GOV. KATHLEEN BABINEAUX BLANCO
Louisiana

GOV. ROBERT EHRLICH, JR.
Maryland

GOV. MATT BLUNT
Missouri

GOV. GEORGE PATAKI
New York

GOV. JOHN H. HOEVEN
North Dakota

GOV. ROBERT TAFT
Ohio

GOV. BRAD HENRY
Oklahoma

GOV. EDWARD G. RENDELL
Pennsylvania

GOV. PHIL BREDESEN
Tennessee

GOV. RICK PERRY
Texas

GOV. TIMOTHY M. KAINE
Virginia

ASSOCIATE MEMBERS

GOV. BILL RICHARDSON
New Mexico

GOV. JON HUNTSMAN, JR.
Utah

GOV. DAVE FREUDENTHAL
Wyoming

EXECUTIVE DIRECTOR

GREGORY E. CONRAD

RECEIVED
NOV 13 2006
DIV. OF OIL, GAS & MINING
11/22/06



Interstate Mining Compact Commission

445-A Carlisle Drive, Herndon, VA 20170

Phone: 703/709-8654 Fax: 703/709-8655

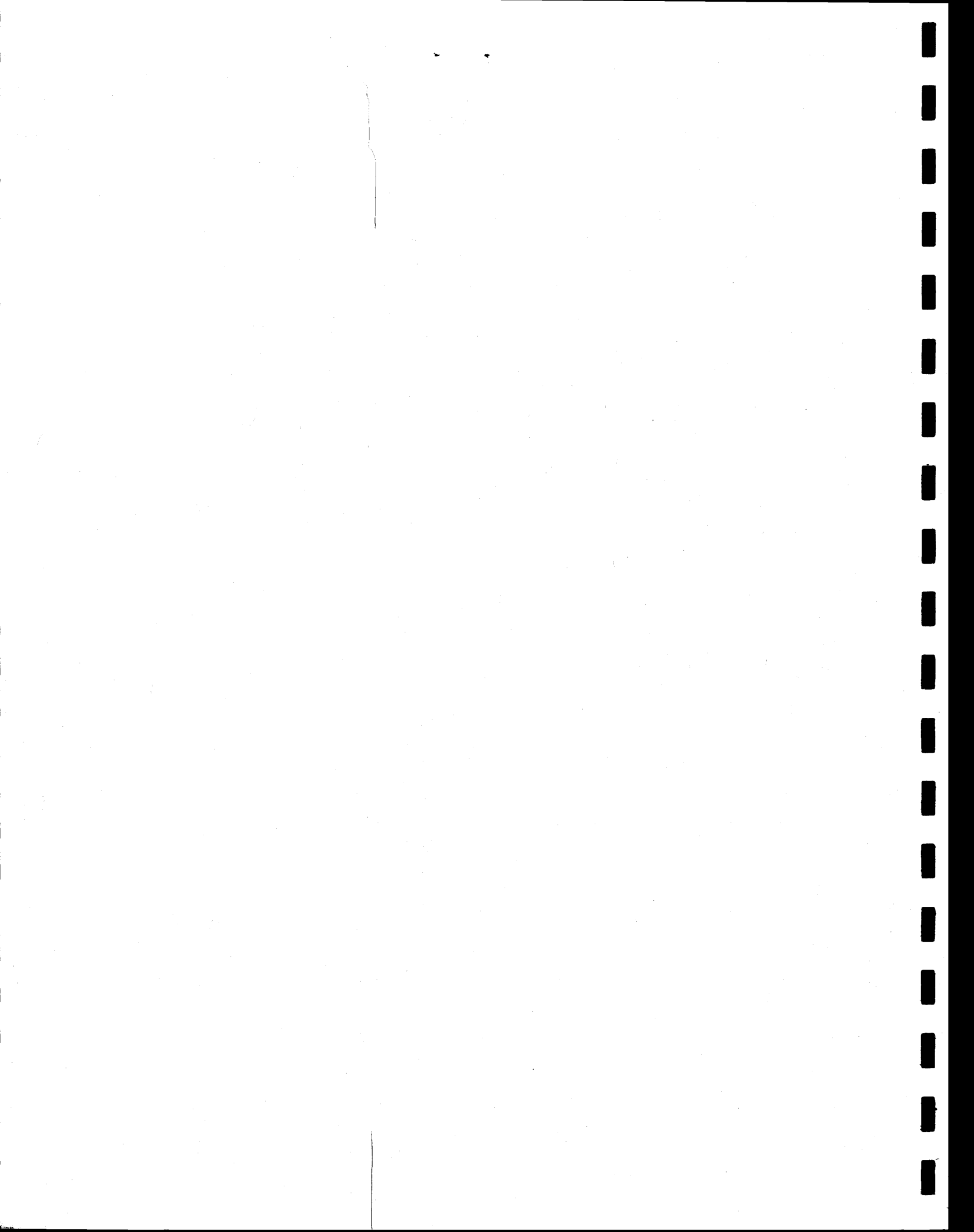
Web Address: www.imcc.isa.us E-Mail: gconrad@imcc.isa.us or bbotsis@imcc.isa.us

Survey Responses

State Regulation of Subsidence

November 2006

Rec'd 11/13/06



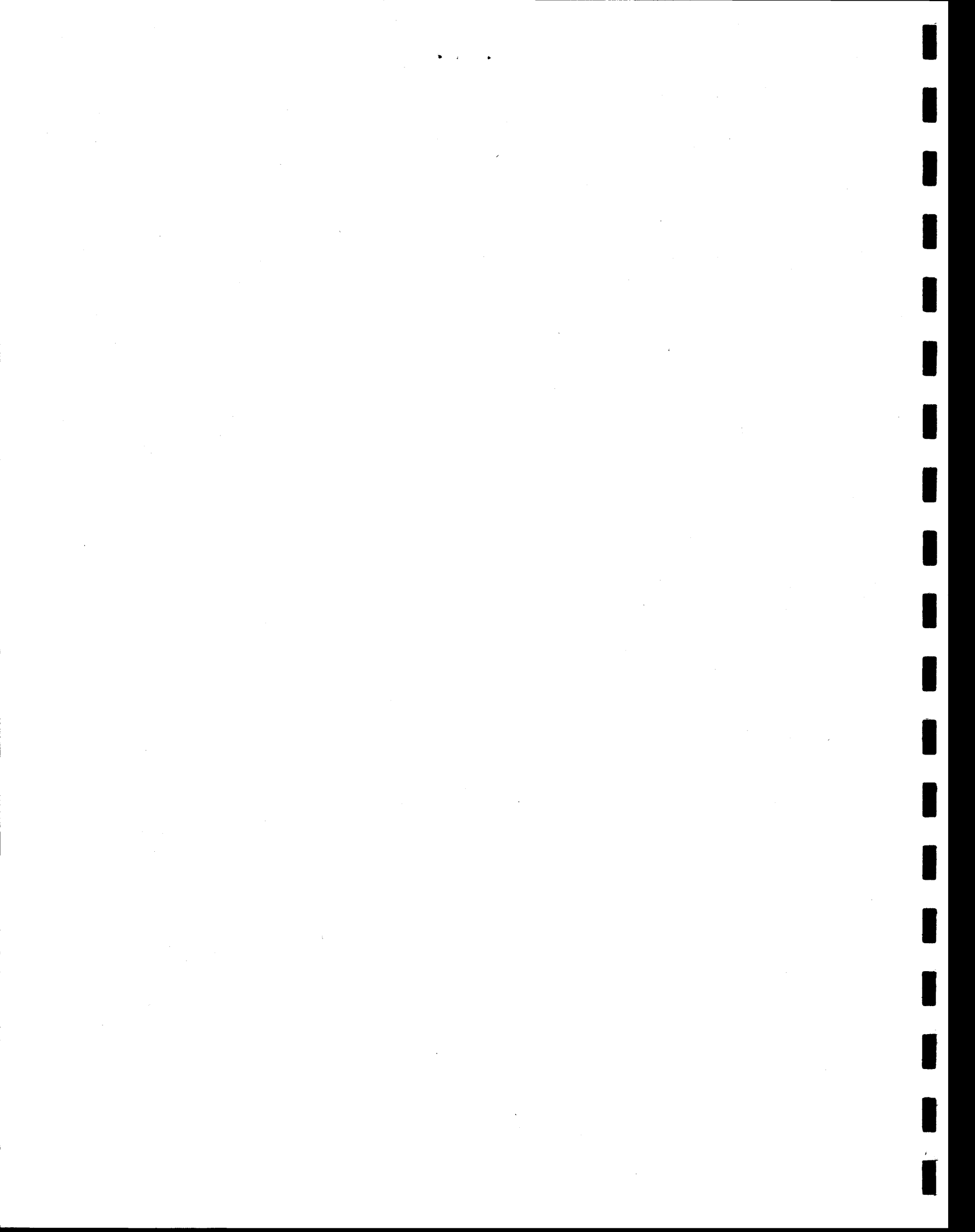
Introduction

As part of its ongoing state regulatory program benchmarking initiative, the Interstate Mining Compact Commission (IMCC) from time-to-time conducts surveys of the states concerning various components of their regulatory programs. The surveys focus on both the content of the program component and implementation thereof. IMCC collects the responses to these surveys from the states and presents the results in a report that is available for use by the states as they consider program improvements and enhancements (one of the goal's of benchmarking). From time to time, IMCC also sponsors workshops or roundtable discussions to allow for further exploration of the material gathered from the surveys. Examples of recent workshops include those on underground mine mapping, abandoned mine land funding enhancements and partnering opportunities, blasting, and financial assurance for mining and reclamation obligations.

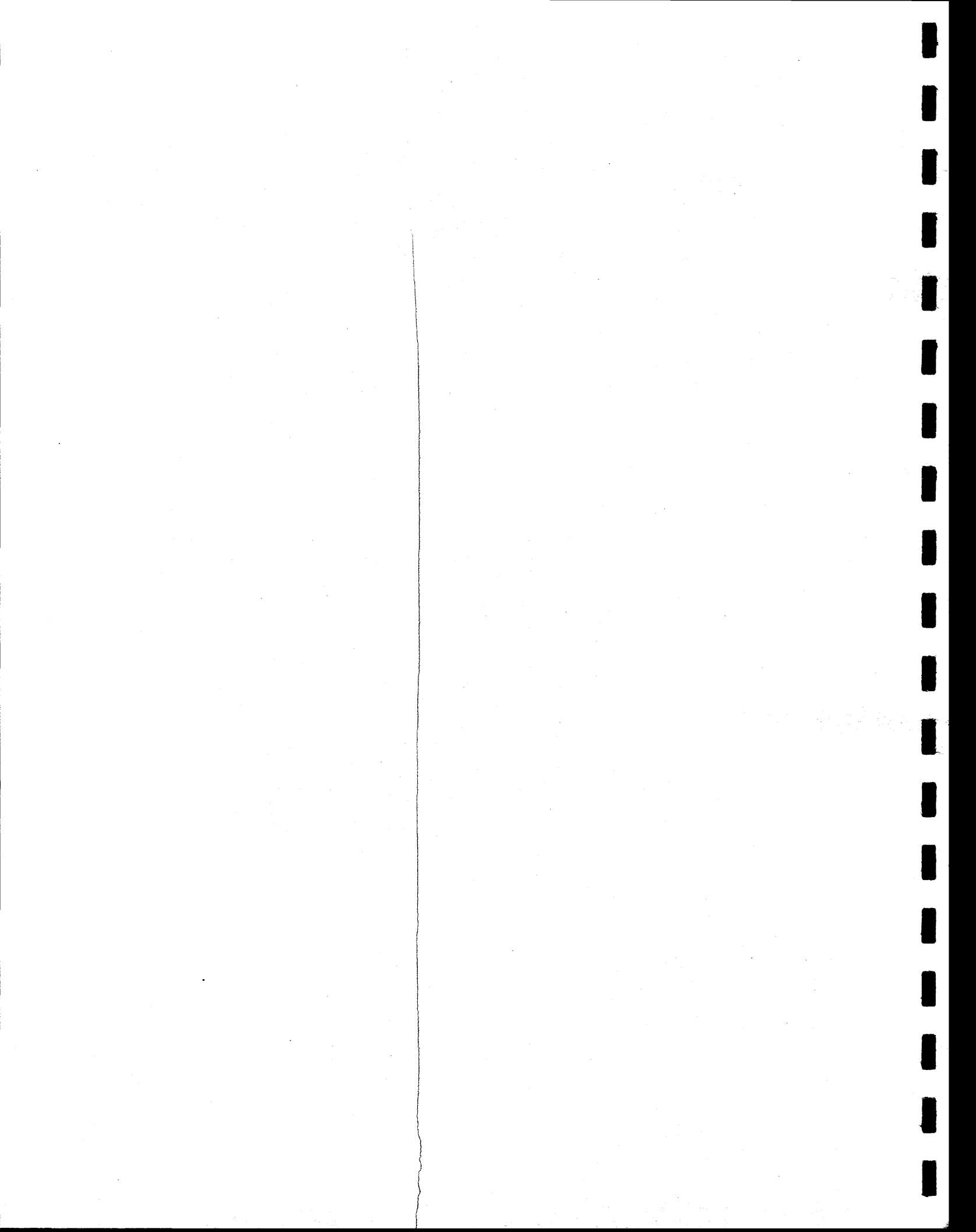
Among the many complex and controversial issues that states must handle as part of their mining regulatory programs, one of the most critical is subsidence. The Energy Policy Act of 1992 called for federal rulemaking by the Office of Surface Mining (OSM) on subsidence. The initial focus was on the protection of water supplies. On March 31, 1995, OSM published final rules to implement the Energy Policy Act that addressed subsidence control plans and permitting and performance standards for both water supplies and structures. Following legal challenges, certain of the rules were invalidated, including those relating to the angle of draw and a mandate for pre-subsidence condition surveys and a "presumption of guilt" when subsidence damages were alleged. Through the state program amendment process, OSM reviewed each state's regulatory program to determine whether it was "as effective as" the federal counterpart and, in some cases, state programs were adjusted.

Ten years have elapsed since the federal rules were enacted and resultant changes were made by states. The IMCC survey is intended to determine how each state has approached the implementation of the various subsidence permitting and performance standards. It is divided into five categories: General; Structures; Land; Water Supplies; and Mine Subsidence Insurance. While the survey is primarily targeted at coal regulatory programs, to the extent that it has applicability to noncoal mining operations, responses are also included. Responses from those states that participated in the survey are collated in the following pages. A copy of the survey instrument is attached as well. For further information on any of the responses from specific states, a listing of key contact persons in each state is also attached.

For additional copies of this report, please contact the Interstate Mining Compact Commission at (703) 709-8654 or Greg Conrad at gconrad@imcc.isa.us.



Survey Instrument



SURVEY ON REGULATION OF SUBSIDENCE

The Energy Policy Act of 1992 called for federal rulemaking by the Office of Surface Mining (OSM) on subsidence. The initial focus was to provide protection for groundwater supplies. OSM's March 31, 1995 Federal Register notice contained final regulations to implement EPACT. The rules went above and beyond the framework established in EPACT by defining in great detail new subsidence control plan, permitting and performance standards for both water supplies and structures.

After legal challenges by the coal industry, certain rules were subsequently invalidated. These included rules based on the angle of draw and a federal mandate for pre-subsidence condition surveys and a "presumption of guilt" when subsidence damages were alleged. Through the "732" state program amendment process, OSM reviewed each state's existing and proposed rules to determine if they were "as effective as" the federal counterpart.

Ten years have elapsed since the federal rules were enacted and resultant state changes were initiated. The following questionnaire is intended to determine how each state has approached the implementation of the various subsidence permitting and performance standards. It has been divided into four categories. General, Structures, Land, and Water Supplies. IMCC will collect and collate this information into a report following submission of state responses to the survey. IMCC may also sponsor a roundtable interactive discussion to allow further deliberation of these important issues. We appreciate your willingness to share the experiences under your regulatory program.

Please note that while this survey is primarily targeted at coal regulatory programs, to the extent that your state has experience with the regulation of subsidence impacts related to noncoal mining, we would appreciate your input. Many of these questions have applicability to both coal and noncoal regulatory programs.

PLEASE INDICATE WHETHER THE RESPONSES BELOW RELATE TO YOUR COAL PROGRAM, YOUR NONCOAL PROGRAM, OR BOTH. (If there are different requirements for each program, please submit survey responses for each program.)

The following responses relate to our ___ coal ___ noncoal regulatory program(s).

1. GENERAL

1. Do you differentiate between planned and unplanned (stable) subsidence control plans in your permitting process?

_____ Yes _____ No

How do you define the categories of subsidence control (percent extraction, etc.)?

2. Do you require information on a company's right to subside the surface in addition to the right to mine the coal?

_____ Yes _____ No

If so, how do you do this? (Listing of documents or a simple statement or affidavit)

3. For six month surface owner notification, do you allow companies to mail these notices well in advance of actual mining?

_____ Yes _____ No

4. Do you waive the 6-month notice to a lesser time frame if requested?

_____ Yes _____ No

If so, do you have specific guidelines as to when you will or will not waive the minimum time frame?

2. STRUCTURES

Regulated Extraction Area

- 1. What is the date of coal extraction used in your state to initiate the requirement to repair, replace or compensate for subsidence damage to structures?
- 2. How do you define mining areas that predate your jurisdiction as opposed to areas that are subject to your subsidence control regulations? (Map defining the pre-law and post-law workings; criteria used?)
- 3. OSM requires prompt repair or compensation for material damage to occupied residential dwellings and structures related thereto, or non commercial buildings. Some states (like Illionis) maintain the requirement to mitigate "all structures" and does not exclude commercial buildings. What structures are covered in your state?

Condition Surveys

1. Do you require condition surveys for surface structures?

_____ Yes _____ No

2. If so, are they required for all structures, whether over full extraction mining (planned subsidence) or room and pillar (stable mine plan)?

3. Do you specify the type of condition survey that is required to be performed (video, pictures, certified appraisal of value etc.)?

_____ Yes _____ No

If so, what are applicable requirements for the survey?

4. Whom do you require the company to submit the condition surveys to? (your office, to the land owner, kept on file at the mine office and/or anyone else)
5. If a structure owner denies access for a company to perform a pre-subsidence condition survey, what action does the state take? Does this refusal change the protection afforded to the structure owner?
6. What is the time requirement for performing pre-subsidence condition surveys? (i.e. must it be submitted in the application, or delayed until six months or 60 days before planned subsidence will impact the structure, etc.)
7. How often, if ever, have you had to use the condition survey to aid in detemining damages or compensation?

Public Roads, Utilities

1. In general, in the permitting process, how do you handle subsidence of public roads and utilities such as water, electric and gas lines? Do you require cooperative agreements between the mining company and the utility or road authorities to assure public safety?
2. Do you specifically hold the company financially liable for damages to public roads, utilities railroad lines etc. if damaged by subsidence?
3. How closely do you monitor the subsidence impacts and execution of subsequent repairs for these public facilities?

Private Homes and Other Structures

1. Is the choice between repair, replacement, or compensation for material damage to homes, outbuildings etc. that of the coal companies or that of the structure owner?
2. What is the maximum level of compensation for a given home or structure? Is it the fair market value, the replacement value or other?
3. Do you specifically require alternative housing when dwellings are subsiding?

_____ Yes _____ No

If so, how long does this alternative housing typically last?

4. When disputes develop between the company and the land owner over whether alleged damages are mine subsidence related or not, how is it resolved? Does the state make a determination as to whether the alleged subsidence damage is the responsibility of the coal company? If not, who referees the dispute?
5. If the state makes a determination that the damages are not due to mine subsidence, does the state specifically define the real cause of non subsidence related damage (termites, soils issue etc.) or simply indicate it is not mining related with no further explanation?
6. Does the state ever perform surveys or monitoring to determine if movements are occurring (such as with unplanned room and pillar subsidence or structures just outside the angle of draw of a longwall)?

_____ Yes _____ No

If so, who does it (in house staff or contracted out?)

7. When subsidence is the cause of damages and a dispute occurs between the structure owner and the company over the dollar value of the damage, how is the amount of compensation determined (arbitration or other)?
8. How involved is the state in the determination of a damage dollar amount?
9. When the plan is to compensate the damaged party (not repair), what dictates the compensation amount? Is the value based on the estimated cost of repair or the difference in the fair market value before and after damage?
10. When the damage will be repaired, how does the state determine if a repair estimate is properly done?
11. Does the state get involved in evaluating the quality of the work done to repair structural damage?

_____ Yes _____ No

Mine Subsidence Insurance

1. When did your state mine subsidence insurance program begin?
2. What is the source of funding for the program?
3. Who administers the program (is it run by the state or privately)?
4. What types of structures can be covered (i.e. residential commercial, etc.)?

5. What types of exclusions are there?
6. Does your program get involved with post-law damage within your regulatory jurisdiction and if so, how?
7. Is the program voluntary or mandatory? Is a waiver provided?
8. What types of minerals are covered (i.e. coal, limestone, salt, etc.)?
9. What is the maximum amount of coverage?
10. What types of losses are paid (i.e. cost of repair; living expenses) and what the limits?
11. What are the annual fees (specify for residential or commercial)?
12. What are the deductibles (specific for residential or commercial)?
13. What is the current number of policyholders?
14. What is the current fund balance?
15. How many claims have there been over the life of the program (indicate what portion were deemed valid v. invalid)?
16. How many residences/homeowners are eligible (v. those who have actually signed up)?
17. What types of marketing/notification efforts have been undertaken by the state to encourage homeowners to sign up for subsidence insurance? How successful have these efforts been?
18. How many subsidence emergencies have occurred in your state (estimate per year)?
19. What procedure applies if these emergencies involve homes/structures where a mine subsidence insurance program is also in place?
20. Are there any state or local laws that prohibit building or that place restrictions on development over abandoned coal mine areas?
21. Has the regulatory program ever been involved in any legal action by a homeowner for lack of notification, denial of claim, etc.?

Minimization of Damage Requirement

When planned subsidence (longwall and HER) operations are being used, the company is required to minimize damage to structures.

1. Do you require a minimization plan for all structures, certain structures or never (please explain)?

2. Do you dictate what level of minimization is required (house floating, foundation trenching, cable raps, cribbing, flexible gas couplings etc.?)
3. A company has the option of eliminating the need to minimize damage if the cost of minimization exceeds the cost of repairs and no public safety issues exist. Has this ever been done in your state and if so what type of economic analysis did you accept?
4. How do you verify if an operator has obtained the written consent of the owner of a structure or facility documenting that minimization measures need not be taken? Do you dictate the language required in such a written waiver?
5. If a structure owner refuses to allow minimization efforts to be implemented, what does the state do?
6. If a structure owner disagrees with the type of minimization effort proposed or believes the efforts just aren't enough, what does the state do?

Historic Structures

1. Do you require an inventory of historic structures or structures eligible for listing on the national register over mining/planned subsidence areas?
 Yes No
2. Do you require any type of archeological survey over areas of mining/ planned subsidence?
 Yes No
3. If such structures are present, are they treated any differently than other structures where subsidence is planned?
 Yes No

Bonding of Subsidence Damage

1. How do you comply with the requirement to bond subsidence damage if it is not repaired within 90 days? Do you allow an extension of the time frame to one year?
2. What type of bond do you accept?
3. Do you require subsidence damage bonds for both structures and land?
 Yes No

4. Do you individually bond each and every damage or do you have a blanket bond for all potential outstanding subsidence?
5. How do you determine when to release a bond?
6. Do you allow liability insurance to stand in place of individual bonding of subsidence damages?
 Yes No
7. If liability insurance is an option, do you require the policy to specifically identify subsidence and is there a minimum amount of coverage? Do you allow a deductible?

3. WATER SUPPLIES

1. What is the specific date used to determine which wells or springs are covered by the requirement to replace or compensate for subsidence damage to water supplies?
2. How do you differentiate between mining areas that predate your jurisdiction and mining areas that are subject to your subsidence control regulations concerning water replacement (map defining the pre-law and post-law workings)?
3. The performance requirement to replace water is limited to "drinking, domestic and residential water supplies contaminated, interrupted..." Does your state limit water replacement to this extent only or do you also cover agricultural or commercial use water supplies?
4. Do you require quality and quantity monitoring of all wells and springs over proposed mining areas or can an exemption be obtained from conducting specific monitoring on individual wells or springs based on mining type or geologic setting?
5. How many pre-subsidence samples are required and over what period of time?
6. How do you determine if a company can be exempted from conducting water quality and quantity monitoring for a given well or spring?
7. Do you require the individual quality and quantity data to be submitted as part of the application, or can the monitoring be delayed until after permit approval but before the individual water source is potentially impacted?
8. What information is required in the permit, such as the location and ownership of all existing drinking, domestic and residential water supplies, including private wells, municipal wells and springs.

9. How far beyond the proposed mining area (angle of draw) do you require inventorying and monitoring of wells and springs?
10. OSM did not define the parameters to monitor for quality. For wells and springs that will be specifically monitored for water quality and quantity, do you define the specific parameters to monitor for pre-mine quality and quantity? If so, what are they?
11. Do you define the number of samples required over time (such as four samples over one year to reflect seasonal fluctuations)?
12. Do you require a specific test to define water quantity before and after subsidence? (Slug test, pump test, etc.)
13. Do you require a specific plan in the permit for replacing any contaminated, diminished, or interrupted water supply? Must the plan spell out possible contingencies for emergency, temporary and/or permanent replacement of affected water supplies?
14. Do you allow a hook up to public water supply as a replacement for a lost spring or well?
- _____ Yes _____ No
15. Do you require a plan for determining the present worth of the cost to replace a water supply if the operator wishes to pursue a one-time lump-sum payment for costs associated with providing both an equivalent water delivery system and operation and maintenance costs in excess of customary and reasonable delivery costs for pre-mining water supplies?
- _____ Yes _____ No
16. Must the water supply owner agree to a lump-sum payment for future costs?
- _____ Yes _____ No
17. If a water supply owner denies access to perform pre-subsidence water surveys, what do you do?
18. If a company cannot get a landowner to agree to a lump-sum payment for cost above and beyond customary, how do you monitor the payments made to a surface owner over time to supplement increased water bills?

4. LAND

1. What are the primary issues for restoring pre-mining land capabilities in your state? (Surface drainage restoration, etc.)

2. Is a man-made pond considered a structure or land damage? Can a mining operator destroy a pond, eliminate the pond and then compensate for the damages?

____ Yes ____ No

3. Are there any circumstances where you will allow a land use change due to subsidence? (for example, a stream subsidence that creates flooding in adjacent crop fields and is now a wetland)

4. How detailed must the pre-mining topography be defined in your application? Does the permittee project post-subsidence topography when longwalling?

5. Are there any land circumstances where you have or would prohibit longwall mining due to inability to make surface repairs?

6. How do you handle the regulatory language "to the extent technologically and economically feasible" concerning repair of land damage?

7. Has a company ever tried to show land damage was not technologically or economically feasible to repair? What analysis did they present and did the state agree with the company's position?

General Information

Name of Person Completing this Survey: _____

State: _____

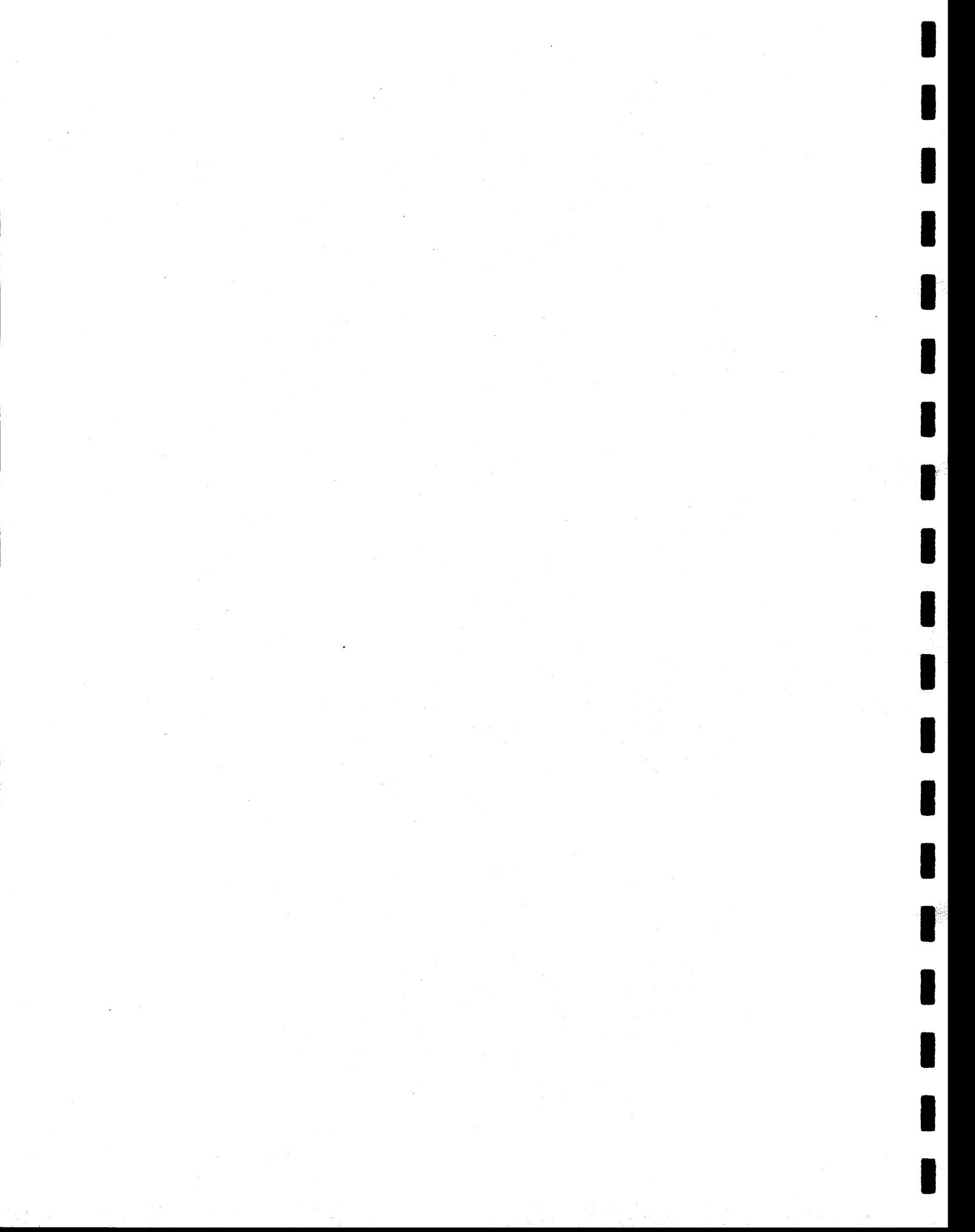
State Agency: _____

Phone Number: _____

E-mail Address: _____



Coal Regulatory Programs



COAL PROGRAM RESPONSES:

General:

1) Do you differentiate between planned and unplanned (stable) subsidence control plans in your permitting Process?

Alabama: Yes.

Arkansas: Yes.

Illinois: Yes.

Indiana: Yes.

Kansas: Survey not applicable. There are no state regulations for subsidence.

Kentucky: Yes.

Maryland: Yes.

Mississippi: General Information: Because Mississippi does not have any underground mining there are no regulations concerning subsidence. Underground coal mining is extremely unlikely due to the soft-sediment nature of the geology of Mississippi's lignite deposits.

Missouri: General Information: The state of Missouri has not produced any coal through the process of underground mining for many decades. There has been no coal produced by underground mining since the enactment of any laws regulating the extraction of coal. Therefore, the survey is not pertinent to the state of Missouri at the present time with respect to the problem of subsidence related to active coal mining.

New Mexico: No.

North Dakota: General Information: Since there is no underground mining in North Dakota, the subsidence survey was not completed.

Ohio: Yes.

Oklahoma: Yes.

Pennsylvania: Yes.

Utah: Yes.

Virginia: Yes.

West Virginia: Yes.

Wyoming: Yes.

How do you define the categories of subsidence control (percent extraction, etc.)?

Alabama: The subsidence control plans identify the percent extraction, stability of pillars, stability of roof and stability of mine floor for room and pillar mining. Longwall mining and high extraction room and pillar mining are addressed as planned subsidence.

Arkansas: We do not define any categories of subsidence control.

Illinois: If it is a longwall or high extraction retreat pillaring operation, it is classified as "planned subsidence." If it is a room and pillar mine, we review each plan based on geotechnical calculations of pillar, roof and floor stability. If we agree it is designed to be stable, it is classified as "unplanned subsidence." There are not specific limitations placed on percent extraction such as "above 70 percent is planned subsidence."

Indiana: Planned subsidence must be designed so that safety factors are low enough to assure subsidence. The permit must also contain a plan to monitor and assure that subsidence is occurring as planned; if not the plan must be modified.

Kentucky: The applicant can proposed either (1) planned subsidence, (2) a plan to prevent subsidence, or (3) a plan to prevent subsidence from causing material damage. Planned subsidence commonly occurs during pillar removal in retreat mining, and as a result of longwall mining. Generally, fifty (50) percent or less extraction will prevent subsidence beneath a structure or renewable resource land if there is at least 100 feet of cover. Designs (taking into account pillar load, pillar size, depth to the coal seam(s), etc.) may be implemented for greater than fifty (50) percent extraction using the room and pillar method, while still preventing subsidence if the factor of safety recommended in RAM #107 is met. Prevention of subsidence from causing material damage to a structure would require either supporting a structure on the surface or removing it from the area where it would be affected.

Maryland: All operations must address the potential for subsidence damage, but the higher the percent of extraction the more emphasis is placed on protection of structures. Generally, first mining with less than 60% extraction is considered relatively stable; but depth of cover and thickness of the seam are considered even in these areas.