

# OHIO MINE SUBSIDENCE INSURANCE UNDERWRITING ASSOCIATION ANNUAL REPORT

*January 2001 Through December 2001*

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This report is submitted by the board members of the Ohio Mine Subsidence Insurance Underwriting Association, Samuel W. Speck, Director of Natural Resources, Chairman; Joseph T. Deters, Treasurer of State; J. Lee Covington, Superintendent of Insurance; and M. Brooks Rorapaugh, insurance industry representative from an Ohio domiciled carrier, Grange Insurance Company.

## ABANDONED UNDERGROUND MINES

### How they impact Ohioans

In the United States, approximately 100,000 underground mines are known to exist, of which 90% are inactive or abandoned. Approximately one-fourth of the total surface area overlying these mines has been affected by subsidence. An estimated 99% of the subsided land overlies underground voids created by coal mining, while the remaining 1% is attributed to the underground extraction of metallic and nonmetallic minerals.

For more than a century and a half, underground mining, mainly for coal, has been an active industry in Ohio. During this period, approximately 4,100 underground coal and other mineral mines have been abandoned (see Exhibit 1). These mines range in size from small "doghole" mines utilized by

individuals for home heating to huge operations extending for several square miles.

Several generations of mining have left us with both a tradition of mining and a legacy of abandoned mines. Now, with an expanding population and its demand on space, the problems involved with abandoned underground mines are being fully realized. One such problem is that of mine subsidence loss and/or damage caused by the collapse or the lateral or vertical movement of structures resulting from the caving in of underground mines.

Geologic and mining factors that directly affect the extent of subsidence include the following: the mining method; the vertical and lateral dimension of the mine cavity; the depth of the mine void below ground surface; overburden characteristics; size, distribution and nature of support pillars; surface topography; location of ground water; and the method and quantity of backfilling used, if any. Prediction of when and where mine subsidence occurs is in its infancy state of development and research.

Two types of subsidence occur in Ohio. The first type, referred to as room and pillar subsidence occurs when the mine roof (substrata rock) collapses into a void created by the removal of coal. Shaft collapse, the second type of subsidence, takes place when an air or coal haulage shaft, which has been inadequately sealed, collapses. Shaft collapse can occur suddenly and is considered the most hazardous type of subsidence.

## MINE SUBSIDENCE INSURANCE

### Background

The Mine Subsidence Insurance Program in Ohio has undergone various changes since its inception. This section of the annual report will indicate the evolution of the program since its inception in 1987.

The Ohio Legislature enacted Ohio Revised Code sections 3929.50 to 3929.53 and 3929.55 to 3929.61 in January of 1985. This Act authorized the establishment of the Mine Subsidence Insurance Governing Board, the Mine Subsidence Insurance Fund (MSIF), and the Ohio Mine Subsidence Insurance Underwriting Association (OMSIUA).

The Governing Board consisted of the Director of Natural Resources or designee as chairperson, the Treasurer of State or designee, and one representative from an Ohio domiciled insurance company. The MSIF is administered by the Governing Board and the Treasurer of State is the custodian of the Fund. The MSIF was initially funded with state and federal government appropriations. The premium for mine subsidence insurance coverage was initially established at a level intended to cover all foreseeable claims, normal operating expenses, a reserve for unexpected contingencies, and to provide for repayment of all government funds.

The Governing Board has entered into a contract with the Ohio FAIR Plan Underwriting Association (OFPUA) for administrative duties since the inception of the program. The contract provides for OFPUA to perform administrative and claim services for the OMSIUA. OFPUA personnel are trained to handle necessary administrative duties and mine subsidence insurance claims.

Insurance companies who write basic property or multi-peril policies on a direct basis for 1-4 family dwellings in the 37 eligible counties are required to become members of the OMSIUA and offer the mine subsidence coverage to all eligible applicants. Companies can be exempted from active participation if approved by the Department of Insurance.

In April of 1992, the Ohio Legislature recognized that the program was not sufficiently populated to provide necessary funds for claims and operating expenses, for appropriate reserves, and for repayment of

State and Federal monies. The Ohio Revised Code was amended to provide:

1. The addition of the Superintendent of Insurance or designee to the Mine Subsidence Governing Board.

2. The designation of 26 Ohio counties as counties in which mine subsidence coverage is automatically added to dwelling fire, homeowners, or commercial fire policies for which dwelling/non-commercial/personal lines rates are applicable. The premium for the coverage, since 7/1/99, is \$1.00 for these 26 "mandatory" counties.

3. The designation of additional Ohio counties as "optional" counties. Owners of eligible properties in these counties must be offered the mine subsidence coverage and decide whether or not to buy the coverage. The premium for these insureds, since 7/1/99, is \$5.00.

This legislative change has provided sufficient revenue for claims and operating expense payments, appropriate reserves, and repayment of government funds.

### Program Funding

The Controlling Board approved an appropriation of \$200,000 as an initial reserve for the Fund on January 17, 1986. This initial reserve was to be used to pay subsidence claims resulting from active coal mining, from salt or industrial mineral extraction, and from post-August 3, 1977 abandoned coal mines. Repayment of these funds was completed in 1997.

### What is Mine Subsidence Insurance?

Mine subsidence insurance provides coverage for loss caused by the collapse or lateral or vertical movement of structures resulting from the caving in of underground mines, including underground coal mines, clay mines, limestone mines and salt mines. It does not include loss caused by earthquake, landslide, volcanic eruption, or collapse of

strip mines, any surface mines, or storm and sewer drains, or rapid transit tunnels.

For structures to be eligible for mine subsidence insurance, the following eligibility requirements must be met:

1. The structure must be an occupied 1-4 family dwelling and at least 50% of the total living area must be occupied. Seasonal properties are considered eligible for coverage as are properties under construction (if the property will become a 1-4 family occupied dwelling structure when completed).

2. The structure may have incidental occupancy if the occupancy does not cause the structure to be rated under commercial rating plans and if the structure qualifies for a homeowners, a farm owners, a dwelling fire, or other personal lines policy.

3. The structure must be located in one of the designated "mandatory" or "optional" counties.

4. The structure must be covered by a valid homeowners, farm owners, dwelling fire, or other personal lines insurance contract.

Additionally, coverage will be denied if a material misrepresentation of facts or circumstances concerning mine subsidence is made and/or if there is any increase in hazard within the control or knowledge of the insured.

What counties are insurable under the program?

Thirty-seven (37) Ohio counties are eligible for mine subsidence coverage under the mine subsidence program. Twenty-six (26) of these counties are mandatorily provided the coverage with their homeowners, farm owners, dwelling fire, or other personal lines insurance policies by attachment of the Mine Subsidence Coverage form. These 26 counties are: Athens, Belmont, Carroll, Columbiana, Coshocton, Gallia, Guernsey, Harrison, Hocking, Holmes, Jackson, Jefferson, Lawrence, Mahoning, Meigs, Monroe, Morgan, Muskingum, Noble, Perry,

Scioto, Stark, Trumbull, Tuscarawas, Vinton, and Washington counties.

The optional counties are Delaware, Erie, Geauga, Lake, Licking, Medina, Ottawa, Portage, Preble, Summit, and Wayne counties. Insurance companies must offer coverage in these counties and property owners may purchase the mine subsidence coverage if they choose.

Whether in a "mandatory" or an "optional" county, the mine subsidence insurance coverage cannot be purchased separately. The insurance company providing the coverage will process the coverage attachment, collect the premium, and process any claims notices for OSMIUA. All responsibility for claims rests with OSMIUA and not with any individual member company.

The coverage provided is equal to that of the dwelling only or \$50,000.00, whichever is less. A minimum deductible of \$250.00 and a maximum of \$500.00 will apply per occurrence. Coverage does not extend to industrial/commercial buildings, various outbuildings or barns, land, trees, crops, plants, or contents/personal property.

OUTREACH PROGRAM

The Ohio FAIR Plan, with the approval of the Mine Subsidence Insurance Governing Board, contracted with a consulting firm for professional services for the development and implementation of a formal educational outreach program. The outreach program addresses the hazards of constructing residential housing above abandoned underground mines in the counties where mine subsidence coverage is available. The goal of the program is to educate individuals, groups, and government agencies concerning the potential building problems associated with abandoned underground mines.

The Ohio FAIR Plan makes informational brochures available to interested groups and individuals. The Ohio

FAIR Plan also coordinates with the ODNR Geological Survey/Coal Geology Group, REALM/Resource Analysis Section, and Mineral Resource Management/AML Section on providing information on Ohio geology, digitized mapping and past reclamation projects.

### CLAIM HANDLING

Mine Subsidence is different from any other catastrophe that damages structures. A fire to a building is usually extinguished in minutes and repairs can be started shortly after settlement with the insurance company. A mine subsidence event causes ground movement and this process can last for several weeks, months, or years. Because of the ongoing movement, structures damaged by subsidence cannot be repaired until this movement ceases.

#### Reporting of a Claim

Property owners, who have mine subsidence coverage and suspect that their structure has been damaged by mine subsidence, are to notify their insurance agent or company as soon as possible. The agent or company will then send written notification to the OMSIUA informing them of the date of loss, the date that the mine subsidence coverage was effective for the property owner, and the location suffering the loss. OMSIUA will assign an adjuster to perform the initial investigation.

#### Investigation of Cause

The adjuster's initial inspection consists of an interview of the property owner and examination of damage. Typical suspected subsidence damage might be:

- Cracks in basement walls, floor, and foundation.
- Separation of porches, patios, and chimneys from the main structure.
- Doors and windows that are "jammed" shut.

- Cracks in the exterior walls.
- Tilting of the structure.

OMSIUA's adjusters work in close cooperation with the Ohio Department of Natural Resources to investigate a suspected mine subsidence claim. State mine maps, maintained by the Division of Geological Survey, are carefully reviewed to determine if the property in question is undermined. The Division of Mines and Reclamation - Abandoned Mine Lands Program - is consulted to secure any additional mining information. Unfortunately, in many cases, there are no mining company records that indicate prior mining activity.

If the structure is in an area of Ohio known for its coal resources and if subsidence is suspected as a possible cause of loss by the adjuster, OMSIUA will utilize the services of trained geologists and engineers to further aid the investigation. These experts are familiar with the "finger print" of subsidence damage and have extensive knowledge of Ohio's geology.

#### Stabilization of the Abandoned Mine

If the investigators believe there is an emergency situation with respect to the structure being damaged by ongoing mine subsidence, the Ohio Department of Natural Resources, Division of Mines and Reclamation (DOMR), is informed so that their office can take the appropriate action. The DOMR administers the Abandoned Mine Lands (AML) Program, which includes the stabilization of mine subsidence areas. The AML Program also oversees the Emergency Program, which allows for the immediate response to a subsidence event that poses a direct threat to the safety of the public. The subsidence can be halted in some cases through the "grouting" of underground mine voids. Grouting is the injection of concrete into specific areas of the abandoned underground mine to halt the subsidence.

### Temporary Repairs to the Structure

OMSIUA will make temporary repairs to damaged structures if warranted. In some cases, it is necessary for extensive shoring procedures to be performed so that the building will not collapse. Extensive shoring efforts to protect the structure from collapse can cost several thousands of dollars.

### Surveying

In certain cases of suspected mine subsidence, OMSIUA monitors the ground movement by surveying the structure. This technique involves establishing a survey line with monitoring points on the structure and the surrounding neighborhood. Initial benchmark measurements are taken with additional measurements occurring at intervals ranging from two to six months.

This investigation technique serves two purposes. First, if there is consistent and significant downward movement of the structure, it is probable that a subsidence event is ongoing. Secondly, when that downward movement has stopped for an

acceptable period of time, permanent repairs can be made to the structure.

### Claims Payments

OMSIUA makes partial payments of claims to enable the property owner to have adequate funds for temporary repairs.

All claims are settled on an actual cash value basis (the replacement cost of damage less depreciation or betterment). Coverage is limited to the amount of insurance being provided on the primary structure, or \$50,000.00, whichever is less.

### Ohio Mine Subsidence Claims

In 2001, 111 claims were reported while in 2000, 113 claims were reported. In 2001, 126 claims were closed with payments of \$284,541.28 in paid losses and adjustment expenses. Reserves totaled \$194,500 at the end of 2001. In 2000, 141 claims were closed with payments of \$284,573.74 in paid losses and adjustment expenses. Reserves totaled \$94,500 at 2000's year-end. Exhibit 2 details the 2001 claims activity by county.

**FINANCIAL STATEMENTS AND STATISTICAL INFORMATION**

**OHIO MINE SUBSIDENCE INSURANCE FUND STATEMENT OF RECEIPTS,  
DISBURSEMENTS, AND FUND BALANCE ACTUAL FOR 2000 AND 2001**

<i>Fund Balance (12/31/99)</i>	<i>\$10,057,983.37</i>
<i>2000 Income (Premiums et al)</i>	<i>1,688,280.77</i>
<i>2000 Disbursements</i>	<i><u>636,329.61</u></i>
<i>Fund Balance (12/31/00)</i>	<i>\$11,109,934.53</i>
<i>2001 Income (Premiums et al)</i>	<i>1,146,162.08</i>
<i>2001 Disbursements</i>	<i><u>689,384.21</u></i>
<b><i>Fund Balance (12/31/01)</i></b>	<b><i>\$11,566,712.40</i></b>

EXHIBIT 1

**NUMBER OF ABANDONED AND ACTIVE MINES**

COUNTY	ABANDONED MINES	ACTIVE MINES-2001
ATHENS	272	1
BELMONT	283	2
CARROLL	101	0
COLOMBIANA	196	1
COSHOCTON	192	0
DELAWARE	1	0
ERIE	1	0
GALLIA	86	0
GEAUGA	1	0
GUERNSEY	141	0
HARRISON	73	1
HOCKING	193	0
HOLMES	34	0
JACKSON	212	0
JEFFERSON	281	3
LAKE	0	1
LAWRENCE	97	0
LICKING	1	0
MAHONING	82	1
MEDINA	39	0
MEIGS	137	2
MONROE	1	0
MORGAN	1	0
MUSKINGUM	291	0
NOBLE	48	0
OTTAWA	6	0
PERRY	356	0
PORTAGE	15	0
PREBLE	1	0
SCIOTO	32	0
STARK	299	0
SUMMIT	37	0
TRUMBULL	24	0
TUSCARAWAS	419	1
VINTON	108	0
WASHINGTON	17	0
WAYNE	36	0
TOTAL	4140	13

Source of Mine information: Ohio Department of Natural Resources Division of Geological Survey



## EXHIBIT 2

## OMSIUA CLAIM ACTIVITY-2001

COUNTY	CLAIMS	CLOSED CLAIMS	OPEN CLAIMS	RESERVES	CLAIM PAYMENTS	LOSS ADJ. EXPENSES
ATHENS	0	1	0	0	0	\$1926.54
BELMONT	17	29	4	\$142,500	0	\$24,872.34
CARROLL	1	2	0	0	0	\$9,881.49
COLUMBIANA	7	8	2	\$19,000	0	\$6,086.66
COSHOCTON	1	2	0	0	0	\$1,316.49
DELAWARE	0	0	0	0	0	0
ERIE	0	0	0	0	0	0
GALLIA	1	1	0	0	0	\$510.00
GEAUGA	0	0	0	0	0	0
GUERNSEY	5	5	4	0	\$3,263.30	\$2,757.07
HARRISON	5	7	3	\$25,000	0	\$8,098.15
HOCKING	1	1	0	0	0	\$456.30
HOLMES	0	0	0	0	0	0
JACKSON	12	10	4	\$5,000	\$38,057.00	\$7,367.96
JEFFERSON	14	11	4	\$2,000	\$50,000.00	\$8,606.50
LAKE	0	0	0	0	0	0
LAWRENCE	4	4	3	0	0	\$2,722.57
LICKING	0	0	0	0	0	0
MAHONING	9	7	2	0	0	\$6,627.30
MEDINA	0	0	0	0	0	0
MEIGS	0	0	0	0	0	0
MONROE	0	3	1	0	0	\$1,646.08
MORGAN	0	0	0	0	0	0
MUSKINGUM	2	2	3	\$1,000.00	0	\$23,680.52
NOBLE	0	0	0	0	0	0
OTTAWA	0	0	0	0	0	0
PERRY	3	3	0	0	0	\$1,899.83
PORTAGE	0	0	0	0	0	0
PREBLE	0	0	0	0	0	0
SCIOTO	1	1	0	0	0	\$557.90
STARK	13	12	3	0	\$297.60	\$8,716.40
SUMMIT	4	5	1	0	\$50,000.00	\$6,971.99
TRUMBULL	3	5	2	0	0	\$7,425.51
TUSCARAWAS	6	6	3	0	0	\$9,128.78
VINTON	1	1	0	0	0	\$1,312.00
WASHINGTON	0	0	0	0	0	\$255.00
WAYNE	1	0	2	0	0	0
<b>TOTALS</b>	<b>111</b>	<b>126</b>	<b>41</b>	<b>\$194,500.00</b>	<b>\$141,617.90</b>	<b>\$142,923.38</b>

## EXHIBIT 3

## OMSIUA POLICIES AND PREMIUM WRITTEN-2001

COUNTY	POLICIES 2000	POLICIES 2001	PREMIUM 2000	PREMIUM 2001
ATHENS	17,217	15,459	\$ 20,239.86	\$ 15,461.07
BELMONT	23,383	21,333	\$ 25,713.01	\$ 21,340.09
CARROLL	10,053	9,963	\$ 11,507.53	\$ 9,962.53
COLUMBIANA	37,567	31,858	\$ 43,106.57	\$ 31,875.69
COSHOCTON	11,829	11,459	\$ 12,682.40	\$ 11,476.18
DELAWARE	1,336	1,675	\$ 4,857.52	\$ 5,831.35
ERIE	311	358	\$ 1,092.02	\$ 1,203.80
GALLIA	9,767	8,491	\$ 10,930.29	\$ 8,496.91
GEAUGA	692	861	\$ 2,557.63	\$ 2,921.90
GUERNSEY	13,426	11,556	\$ 14,952.52	\$ 11,557.27
HARRISON	6,019	6,007	\$ 6,361.05	\$ 6,009.78
HOCKING	8,767	7,841	\$ 10,844.89	\$ 7,849.87
HOLMES	6,652	7,480	\$ 7,056.30	\$ 7,538.78
JACKSON	10,330	10,368	\$ 11,659.56	\$ 10,439.61
JEFFERSON	24,629	24,722	\$ 26,338.84	\$ 24,724.32
LAKE	1,532	1,885	\$ 5,518.76	\$ 6,545.94
LAWRENCE	19,800	20,704	\$ 21,624.61	\$ 20,834.69
LICKING	937	1,081	\$ 3,355.11	\$ 3,755.69
MAHONING	77,265	74,213	\$ 81,853.93	\$ 74,467.84
MEDINA	2,047	2,568	\$ 7,463.43	\$ 8,901.32
MEIGS	7,138	6,489	\$ 7,763.62	\$ 6,493.48
MONROE	5,460	5,036	\$ 6,277.30	\$ 5,110.16
MORGAN	4,927	4,087	\$ 5,300.86	\$ 4,088.49
MUSKINGUM	27,410	24,050	\$ 29,628.05	\$ 24,096.37
NOBLE	4,060	2,865	\$ 4,517.97	\$ 2,868.98
OTTAWA	453	447	\$ 1,551.76	\$ 1,564.72
PERRY	9,846	8,945	\$ 12,189.31	\$ 8,946.69
PORTAGE	1,513	1,842	\$ 5,593.19	\$ 6,395.56
PREBLE	290	343	\$ 1,014.39	\$ 1,198.61
SCIOTO	23,526	22,335	\$ 25,958.51	\$ 22,340.52
STARK	119,723	123,388	\$132,796.47	\$123,387.12
SUMMIT	8,583	10,265	\$ 30,772.21	\$ 35,711.13
TRUMBULL	68,686	70,237	\$ 75,597.80	\$ 70,355.90
TUSCARAWAS	29,767	27,614	\$ 33,791.32	\$ 27,614.92
VINTON	3,886	3,944	\$ 4,405.56	\$ 4,015.15
WASHINGTON	21,146	19,466	\$ 23,134.51	\$ 19,486.28
WAYNE	6,498	6,286	\$ 22,363.90	\$ 21,768.20
<b>TOTALS</b>	<b>626,471</b>	<b>607,521</b>	<b>\$752,372.56</b>	<b>\$676,636.91</b>

