

# 2001 REPORT ON OHIO MINERAL INDUSTRIES

WITH  
DIRECTORIES OF REPORTING  
COAL AND INDUSTRIAL MINERAL OPERATORS

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OHIO DEPARTMENT OF NATURAL RESOURCES  
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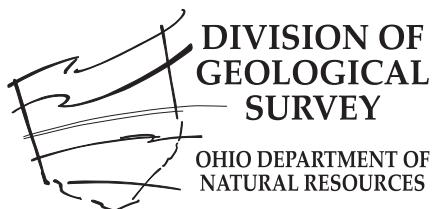
WITH

DIRECTORIES OF REPORTING  
COAL AND INDUSTRIAL MINERAL OPERATORS

compiled by

Mark E. Wolfe

Columbus  
2002



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*Cover photo:* Harold Oesch loads shot holes with explosives at the East Fairfield Coal Co. underground limestone mine in Mahoning County. Compressed air is used to blow the explosive (ANFO, an ammonium nitrate and fuel oil mixture) through a 1-inch-diameter hose into the hole. The booster and blasting cap have already been installed at the back of the 16-foot-deep hole prior to the hole being filled with the blasting agent. Each shot face creates 850 tons of aggregate from the Pennsylvanian-age Vanport limestone.

## PREFACE

As Mark Wolfe points out in his foreword to this *2001 Report on Ohio mineral industries*, producers of coal, aggregates, oil and gas, and other minerals showed encouraging resiliency in 2001. As we watch the volatile world scene following the events of September 11, 2001, we wonder if that resiliency will continue. I certainly hope so. As a nation, we need to move aggressively toward energy independence. We need to be able to maintain and improve our transportation infrastructure. We need to be able to provide housing, hospitals, and schools for our citizens. All of that requires healthy and productive mineral industries.

The Ohio Department of Natural Resources, Division of Geological Survey has been providing the geologic information needed for intelligent mineral-resource decisions for more than 165 years. In the past decade, the Survey has moved vigorously toward providing that information in digital format and in a geographic information system (GIS) environment. In this information-technology age, we are able to provide geologic maps and geologic data faster and more efficiently than ever before. For example, based on our new 3-D surficial-materials mapping program, we can produce customized derivative maps showing specific mineral resources in a flash. For instance, we can now query the 3-D database for the Lorain 1:100,000-scale surficial-materials map and produce a map of all sand and gravel bodies greater than 20 feet thick, no matter whether they are at the surface or buried beneath thick till deposits.

As economic conditions allow, the Ohio Geological Survey will continue to move ahead in making geologic information, maps, and derivative products available in digital format. The benefits of moving into the digital world are worth the investment. We will be better able to serve the mineral industries and all Ohioans with greater effectiveness and efficiency. We hope that a more stable economy will prevail.

Thomas M. Berg  
State Geologist & Chief

## **FOREWORD**

The mineral industries of Ohio displayed remarkable resiliency in 2001, particularly in light of the national recession. Ohio coal production increased 14.7 percent in 2001 compared to 2000. The total value of Ohio industrial minerals increased 1.3 percent, primarily due to continued strength in aggregate production. Approximately 20 percent more oil and gas wells were drilled in Ohio during 2001 compared to 2000. Economic challenges were overcome by innovation, productivity increases, and the positive work ethic that is prevalent in the Ohio mineral industry.

This year's article, "Salt deposits of Ohio—geology, mining, and uses," by Thomas E. Tomastik, Senior Geologist with the Ohio Department of Natural Resources, Division of Mineral Resources Management, highlights the importance and long history of the salt industry in Ohio. Ohio has been a national leader in salt production since the large underground mines at Cleveland and Fairport Harbor were opened more than 40 years ago. The salt produced is used primarily for ice control, which is vital to keeping weather-related disruptions to business in the northern U.S. to a minimum.

We thank Tim Miller of East Fairfield Coal Co. for his cooperation in obtaining the photographs on the cover and interior of the *2001 Report on Ohio mineral industries*. The Report is truly a team effort. It would not be possible without the dedication of the following Ohio Division of Geological Survey employees: Douglas L. Crowell, Supervisor of the Coal and Industrial Minerals Group; Merrianne Hackathorn, Geologic Editor; Edward V. Kuehnle, Supervisor of the Cartography and Editing Group; Lisa Van Doren, Electronic Designer; and Joseph G. Wells, Database Administrator.

Your suggestions for future improvements to the *Report on Ohio mineral industries* are always welcome. The Ohio Division of Geological Survey continues to work toward a Web-based geographic information system (GIS) that will allow the public to easily access and manipulate the vast amount of geologic data available.

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## CONTENTS

|  |     |
|--|-----|
| Preface .....  | v   |
| Foreword .....   | vi  |
| Salt deposits of Ohio—geology, mining, and uses, by Thomas E. Tomastik .....                                     | 1   |
| 2001 Ohio mining activities in brief .....   | 9   |
| Coal .....   | 12  |
| Industrial minerals .....  | 22  |
| Limestone and dolomite .....   | 26  |
| Sand and gravel .....  | 29  |
| Sandstone and conglomerate .....   | 32  |
| Clay .....   | 34  |
| Shale .....  | 35  |
| Salt .....   | 36  |
| Gypsum .....   | 36  |
| Peat .....   | 36  |
| Oil and gas .....  | 38  |
| 2001 Coal companies with sales or production .....   | 42  |
| 2001 Ohio alphabetical directory of producing coal-mine operators .....  | 43  |
| 2001 Ohio directory of coal-preparation plants and associated facilities, by county .....                        | 48  |
| 2001 Ohio directory of producing coal-mine operators, by county .....  | 52  |
| 2001 Ohio alphabetical directory of industrial-mineral mine operators .....                                      | 62  |
| 2001 Limestone/dolomite companies with sales or production .....   | 102 |
| 2001 Ohio directory of limestone/dolomite operators reporting sales or production, by county .....               | 103 |
| 2001 Sand and gravel companies with sales or production .....  | 110 |
| 2001 Ohio directory of sand and gravel mining operators reporting sales or production, by county .....           | 112 |
| 2001 Sandstone/conglomerate companies with sales or production .....   | 126 |
| 2001 Ohio directory of sandstone/conglomerate mine operators reporting sales or production, by county .....      | 127 |
| 2001 Clay companies with sales or production .....   | 128 |
| 2001 Ohio directory of clay-mine operators reporting sales or production, by county ....                         | 129 |
| 2001 Shale companies with sales or production .....  | 132 |
| 2001 Ohio directory of shale-mine operators reporting sales or production, by county ..                          | 133 |
| 2001 Ohio directory of salt-mine and salt-brining-plant operators reporting sales or production, by county ..... | 134 |
| 2001 Ohio directory of gypsum-mine operators reporting sales or production .....                                 | 134 |
| 2001 Ohio directory of peat-mine operators reporting sales or production, by county ....                         | 134 |
| Numerical index of operators of mines shown on 2001 mineral industries map, by commodity .....                   | 136 |

## FIGURES

|   |    |
|---|----|
| Location of artificial-brining facilities in Ohio .....             | 1  |
| Location and extent of underground salt mines in Ohio .....         | 2  |
| Extent of the salt-bearing Salina Group .....                       | 2  |
| Generalized stratigraphic section of the Salina Group in Ohio ..... | 3  |
| Illustrations of salt-solution mining methods .....                 | 4  |
| Location of underground hydrocarbon-storage projects in Ohio .....  | 6  |
| 1. Value of coal, nonfuel minerals, and oil and gas in Ohio .....   | 9  |
| 2. Generalized map of the glacial deposits of Ohio .....            | 10 |
| 3. Generalized geologic map of Ohio .....                           | 11 |
| 4. Coal production in Ohio in 2001, by county .....                 | 12 |
| 5. Sales and value of coal in Ohio .....                            | 12 |
| 6. Sales of limestone and dolomite in Ohio in 2001, by county ..... | 26 |

|   |    |
|---|----|
| 7. Sales and value of limestone and dolomite in Ohio .....                                | 26 |
| 8. Sales of sand and gravel in Ohio in 2001, by county .....                              | 29 |
| 9. Sales and value of sand and gravel in Ohio .....                                       | 29 |
| 10. Sales of sandstone and conglomerate in Ohio in 2001, by county .....                  | 32 |
| 11. Sales and value of sandstone and conglomerate in Ohio .....                           | 32 |
| 12. Clay sales in Ohio in 2001, by county .....   | 34 |
| 13. Sales and value of clay in Ohio .....   | 34 |
| 14. Shale sales in Ohio in 2001, by county .....  | 35 |
| 15. Sales and value of shale in Ohio .....  | 35 |
| 16. Sales and value of salt in Ohio .....   | 36 |
| 17. Sales and value of gypsum in Ohio .....   | 36 |
| 18. Sales and value of peat in Ohio .....   | 37 |
| 19. Counties producing salt, gypsum, and peat in Ohio in 2001, and their ranking in sales | 37 |
| 20. Production of oil and gas in Ohio .....   | 38 |
| 21. New wells drilled for oil and gas in Ohio in 2001, by county .....                    | 38 |

## TABLES

|   |    |
|---|----|
| 1. 2001 Mineral sales and production in Ohio.....   | 9  |
| 2. 2001 Ohio coal production and sales by county, in descending order of production ..                              | 13 |
| 3. 2001 Ohio coal production by production-size group and change from 2000 .....                                    | 13 |
| 4. 2001 Ohio coal production by county and mining method.....   | 13 |
| 5. 2001 Ohio coal production by county and month .....  | 14 |
| 6. 2001 Ohio coal production by county and seam .....   | 14 |
| 7. 2001 Disposition of Ohio coal, by county .....   | 16 |
| 8. 2001 Rail shipments of Ohio coal, by county of origin and carrier .....  | 16 |
| 9. 2001 Washed Ohio coal .....  | 17 |
| 10. 2001 Dollar value of coal at mine by county and mining method .....   | 17 |
| 11. 2001 Ohio coal-mine employment, by occupational group and month .....   | 18 |
| 12. 2001 Ohio coal-mine production employment, by county and month .....  | 18 |
| 13. 2001 Ohio coal-mine employment in central preparation plants, central shops, etc.,<br>by county and month ..... | 19 |
| 14. 2001 Ohio coal-mine employment in supervisory, technical, and clerical positions, by<br>county and month .....  | 19 |
| 15. 2001 Ohio surface coal-mine reclamation employment, by county and month .....                                   | 20 |
| 16. 2001 Ohio coal-mine employment in other positions, by county and month .....                                    | 20 |
| 17. 2001 Wage and salary payments to Ohio coal-mine employees, by county and occu-<br>pational group .....          | 21 |
| 18. 2001 Value of Ohio industrial minerals .....  | 22 |
| 19. 2001 Employment at Ohio industrial mineral operations, by county and commodity                                  | 24 |
| 20. 2001 Production of lime from Ohio stone, by county and type .....   | 26 |
| 21. 2001 Ohio limestone and dolomite sales, by county and type .....  | 27 |
| 22. 2001 Ohio sand and gravel sales, by county and type .....   | 30 |
| 23. 2001 Ohio Lake Erie sand and gravel production.....   | 31 |
| 24. 2001 Ohio sales of crushed sandstone and conglomerate, by county and type .....                                 | 33 |
| 25. 2001 Ohio sales of dimension sandstone, by county and type .....  | 33 |
| 26. 2001 Ohio clay sales, by county and type .....  | 34 |
| 27. 2001 Ohio shale sales, by county and type .....   | 35 |
| 28. 2001 Ohio summary of new oil and gas well completions by county .....   | 39 |
| 29. 2001 Ohio summary of new oil and gas well completions by producing zone .....                                   | 40 |
| 30. Ohio counties and their state mine number abbreviations .....   | 41 |

## PHOTOS

|   |   |
|---|---|
| Close-up view of the Salina F unit salt ..... | 5 |
| View of a room and pillars.....               | 5 |

## PHOTOS, cont.

|   |     |
|---|-----|
| Undercutting of salt .....  | 6   |
| Donny Collins uses a Fletcher roof-bolter .....                                 | 8   |
| Manufactured sand is being conveyed to storage .....                            | 15  |
| Plant Manager David Conrad and Underground Foreman Tim Miller .....             | 21  |
| Bob McIntyre and Harold Oesch wire up a shot .....                              | 23  |
| A Gradall XL 5110 scaler is operated by Jason Julian .....                      | 37  |
| A Cannon twin-boom jumbo drill is operated by John Bergles .....                | 51  |
| The aggregate processing plant at the East Fairfield Coal Co. .....             | 61  |
| The mine openings at the East Fairfield Coal Co. ....                           | 131 |
| Aggregate is washed on the secondary screen at the East Fairfield Coal Co. .... | 135 |

**[CLICK HERE FOR  
MINERAL INDUSTRIES MAP](#)**

# SALT DEPOSITS OF OHIO—GEOLOGY, MINING, AND USES

by Thomas E. Tomastik, Geologist,  
Ohio Department of Natural Resources,  
Division of Mineral Resources Management

## INTRODUCTION

What does the word “salt” mean to you? To most people, the word “salt” is associated with table salt used for seasoning food. To the rural person, it’s the salt blocks for livestock or the water-softening salt used for their domestic water well. For the Ohio motorist, it means safer driving conditions in ice and snow.

Salt is the general term for naturally occurring sodium chloride ( $\text{NaCl}$ ). Its mineral name is halite, and it is often referred to as rock salt. Halite or salt is easily recognized by its cubic crystal form and its taste; it is also very soluble in water.

Historically, natural brine springs or salt licks, such as the Scioto Saline in Jackson County (Hansen, 1995), were used by both man and animal as a source of salt for at least 8,000 years. From the late 1700’s to the early 1800’s, salt licks supported Ohio’s early salt industry. The first natural brine well was drilled in Ohio in 1809. The natural brines were boiled in large kettles to evaporate the salt. The early natural brine/evaporation industry continued to operate in Ohio for many years. The Excelsior Salt Works in Pomeroy was still in operation in 1959. Today, however, naturally occurring brines as a source of salt have been replaced by Ohio’s development of its underground salt deposits.

Since the discovery of rock salt in Cuyahoga County in 1886, Ohio salt production has relied on the solution-mining and underground-mining industries. The salt beds in Ohio also have been used for the underground storage of hydrocarbon products such as propane and butane.

In 1886, while drilling for natural gas at its rolling mill in Newburg, Ohio, the Cleveland Rolling Mill Company encountered rock salt at a depth of 1,990 feet (Orton, 1888, p. 53; Bownocker, 1906, p. 34; Cushing and others, 1931, p. 112). This discovery led to the creation of the Newburg Salt Company in 1889 and the establishment of the first artificial-brine operation in Ohio (Bownocker, 1906). Since 1889, nine salt-solution-mining facilities have operated in Ohio (see map). Approximately 251 salt-solution-mining wells have been drilled in Ohio at these nine facilities. In 2002, only two of these facilities and 44 wells remain in operation.

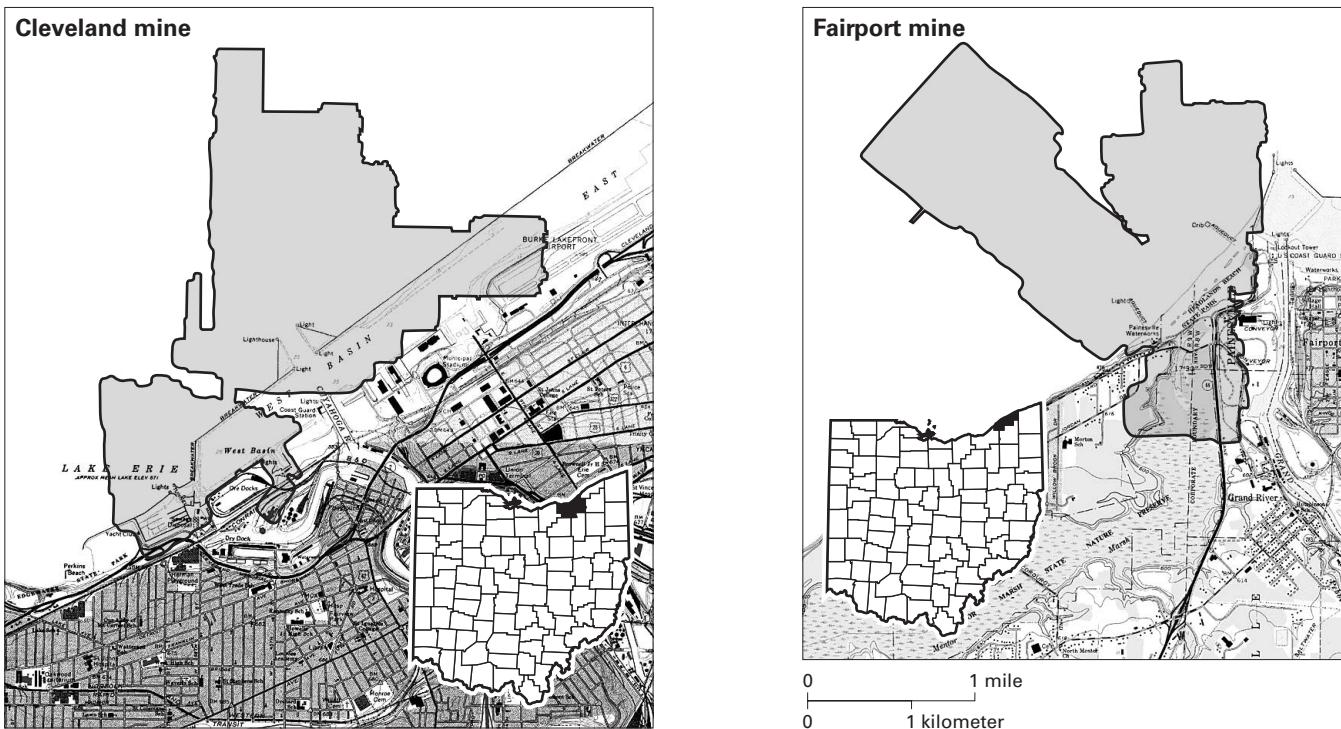
All the salt produced in Ohio prior to 1959 was from either natural brines or artificial brine produced by salt-solution mining (Kefauver, 1960). In 1959, the Morton Salt Company opened the Fairport mine, the



- 1 United Salt Company
- 2 Union Salt Company
- 3 Cleveland Salt Company
- 4 Diamond Shamrock Chemical Corporation
- 5 RMI Company
- 6 Wadsworth Salt Company
- 7 Cargill, Inc.
- 8 Morton Salt Division of Rohm and Haas, Inc.
- 9 PPG Industries, Inc.

Location of artificial-brining facilities that have operated in Ohio since 1889. Only the Cargill (7) and Morton (8) operations are still active.

first of two underground rock-salt mines beneath Lake Erie in northern Ohio. The Fairport mine is currently operated by the Morton Salt Division of Rohm and Haas, Inc.; its surface operation is on the shoreline of Lake Erie on the west side of the mouth of the Grand River in Fairport Harbor (Lake County). In 1961, the International Salt Company opened the Cleveland mine. Its surface operation is on Whiskey Island at the mouth of the Cuyahoga River along the Lake Erie shore in Cleveland. The Cleveland mine has had several owners and is currently owned and operated by Cargill, Inc. Both Morton and Cargill lease thousands of acres beneath the bed of Lake Erie (see illustration) from the State of Ohio and pay royalties to the State.



Location (left, Cleveland mine; right, Fairport mine) and extent of underground salt mines in Ohio. (Extent of mines from 7.5-minute maps of abandoned underground mines on file at the Division of Geological Survey.)

## GEOLOGY OF OHIO'S SALT DEPOSITS

Salt is classified as an evaporite, "a nonclastic sedimentary rock composed primarily of minerals produced from a saline solution as a result of extensive or total evaporation of the solvent" ( Jackson, 1997). Other common evaporite minerals in Ohio are gypsum (see Wolfe, 2001) and anhydrite.

In Ohio, bedded salt occurs within the Upper Sil-

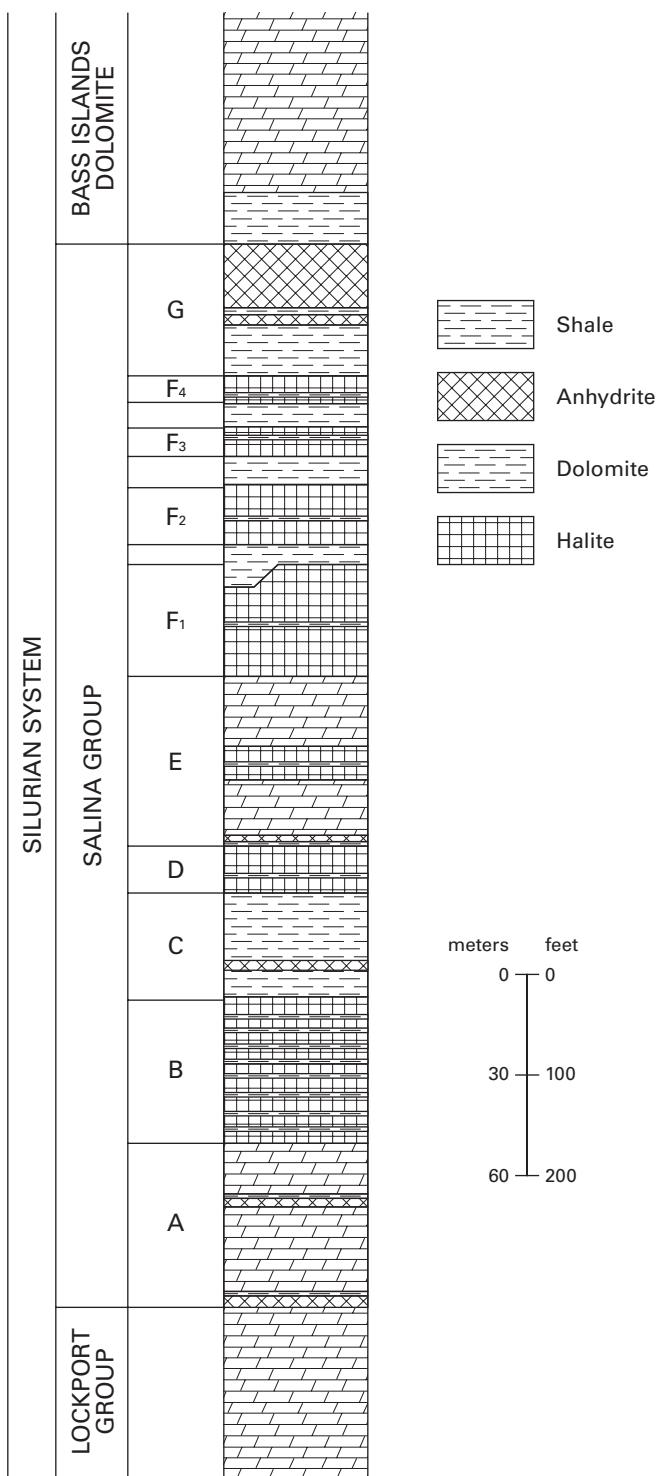
urian Salina Group. The Salina Group underlies most of the state, but the salt beds are restricted to the eastern one-third (Hall, 1963; Clifford, 1973; Hansen, 1983). The Salina Group is subdivided into seven units in Ohio, which are labeled A through G, in ascending order (see stratigraphic column). The G unit, the uppermost unit, is capped by a thick anhydrite but is predominantly shale. The C unit is composed principally of gray to green anhydritic and dolomitic shale. The A unit, the lowermost unit, commonly is composed of dolomite, bedded anhydrite, and shale. In 1996, a significant discovery was made in Ohio regarding the A unit. Janssens and Grubaugh (1996), while investigating the northern end of the Cambridge Arch, discovered salt in the A unit in parts of Cuyahoga, Lorain, and Medina Counties. This discovery is believed to be the first documented occurrence of salt in the A unit outside the Michigan Basin.

Salt is present in the B, D, and F units and also may be present to a minor extent in the E unit. Both underground salt mines in northeastern Ohio produce salt from the F unit, which is further subdivided in Ohio into four salt beds, F1 through F4. Depths to the top of the salt beds in Ohio range from 1,350 feet in Lorain County to more than 6,500 feet in Belmont County along the Ohio-Pennsylvania border (Clifford, 1973, p. 2). Individual salt beds rarely exceed 100 feet in thickness; cumulative salt thickness in the Salina Group generally ranges between 140 and 325 feet (Tomastik, 1997, p. 237).

Evaporites have been deposited in a wide variety of



Extent of the salt-bearing Salina Group in the Appalachian and Michigan Basins (from Hansen, 1983).



Generalized stratigraphic section of the Salina Group in Ohio (from Hansen, 1983).

geologic settings, including: (1) coastal intertidal and supratidal environments (sabkhas), (2) coastal lagoons, and (3) large basins in which brine levels fluctuated (Kendall, 1984). The term "sabkha" is defined as "a supratidal environment of sedimentation, formed under arid to semiarid conditions on restricted coastal plains just above normal high-tide level" (Jackson, 1997).

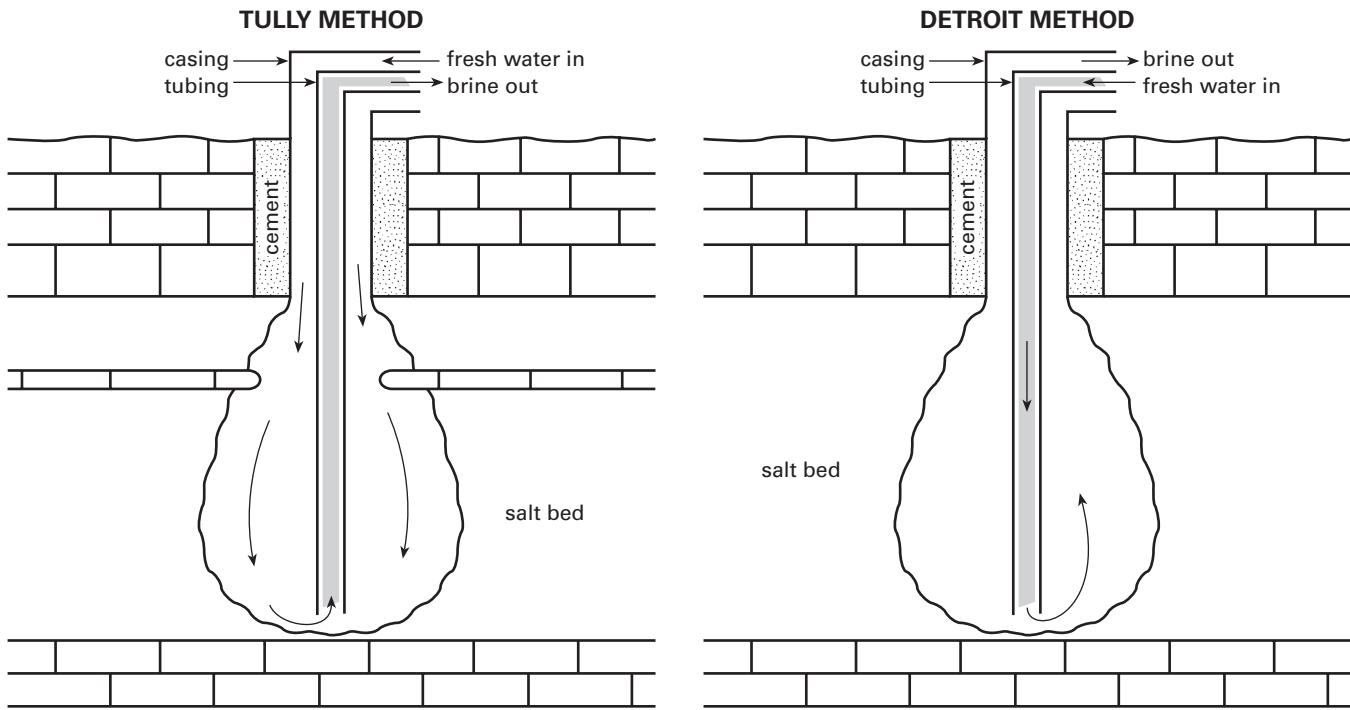
For a number of years, there has been a major controversy in regard to the origin and deposition of evaporite deposits in Ohio. Two schools of thought have developed on this issue: one group supports a moderate to deep-water barred-basin model; the other group believes evaporites are of shallow-water or sabkha origin. On the basis of sedimentological and diagenetic features observed in Ohio cores, Tomastik (1997) concluded that the Salina salt beds in Ohio were deposited in relatively shallow water that was indicative of sabkha environments.

## SOLUTION MINING OF SALT

In the solution-mining process, bedded salt deposits are dissolved by the injection of water, either under pressure or by gravity, into the salt beds (Bays and Associates, 1959). The saline water is then returned to the surface, where it is evaporated to extract the dissolved salt. As the injection process continues, an underground cavity or cavern is created in the salt beds (see illustrations). The first solution-mining wells in Ohio were of simple construction. Historically, at least until the 1930's or 1940's, the two primary methods used in the solution mining of bedded salt deposits were called the Tully plan and the Detroit plan (Trump, 1944). In the Tully plan, water is injected down the annular space between the casing and tubing placed inside the casing. The saline water is then forced to the surface through the tubing (Trump, 1944; Butler, 1949). The Tully plan is often referred to as "top-injection," "casing-injection," "direct-circulation," or "top-water-injection." The Detroit plan is the reverse of the Tully plan: water is injected down the tubing and the brine is brought to the surface through the annular space (Trump, 1944; Butler, 1949). This type of operation commonly is referred to as "bottom-water injection," "reverse-circulation," or "tubing injection."

In the top-injection method, after the solution-mining cavity has been created, water enters the cavity at or near the top, resulting in a greater driving force for dissolution of the salt near the top of the cavity (Solution Mining Research Institute, 1971). A very high percentage, perhaps 75 to 95 percent of dissolution, takes place in the upper 10 to 25 feet of the salt zone (Bays and Associates, 1959; Querio, 1986). Such a situation results in a "morning-glory" or inverted cone-shaped cavity (Bays and Associates, 1959; Solution Mining Research Institute, 1971; Querio, 1986). Although the top-injection method produces the greatest quantity of saturated brine, it also causes the most operating troubles, such as roof collapse and pipe shearing (Butler, 1949).

The bottom-injection method produces a more desirably shaped cavity, but in thin salt beds, the production rate is considerably reduced (Butler, 1949; Querio, 1986). In the initial stage of development,



Illustrations of salt-solution mining methods (modified from Clifford, 1973).

dissolution takes place very rapidly because the salt surface area and water volume is very high (Solution Mining Research Institute, 1971). Even in very early stages of bottom injection, water having low concentrations of salt rises rapidly along the tubing and gains most of its salt saturation by dissolution of the

salt near or at the roof on the up dip side of the solution-mining well in bedded salt deposits (Bays and Associates, 1959).

Historically, once individual solution-mining well cavities had coalesced into one another, they were then operated as a multiple-well system and tubing was re-

#### SOLUTION-MINING OPERATIONS IN OHIO

| Company name                              | Location                    | Operational dates           | Other information  |
|---|-----------------------------|-----------------------------|--|
| United Salt Company                       | Newburg, Cuyahoga County    | 1889-1902                   |  |
| Union Salt Company                        | Cleveland, Cuyahoga County  | 1890-1948                   |  |
| Wadsworth Salt Company                    | Wadsworth, Medina County    | 1892-1930's or early 1940's |  |
| Morton Salt Division, Rohm and Haas, Inc. | Rittman, Wayne County       | 1898-present                | originally operated as Ohio Salt Company   |
| PPG Industries, Inc.                      | Barberton, Summit County    | 1899-1983                   | originally operated as Columbia Chemical Company, then Southern Alkali Corporation, and Columbia-Southern Alkali Corporation |
| Cleveland Salt Company                    | Cleveland, Cuyahoga County  | 1900-1910's or early 1920's |  |
| Cargill, Inc.                             | Akron, Summit County        | 1901-present                | originally operated as Colonial Salt Company, then Diamond Crystal Salt Company, and Akzo Salt, Inc.                         |
| Diamond Shamrock Chemical Corporation     | Painesville, Lake County    | 1910-1976                   | originally operated as Diamond Alkali Company  |
| RMI Company                               | Ashtabula, Ashtabula County | 1984-1992                   |  |

moved from one of the wells. This well was then used as a "casing injector" to supply the water to the other producing wells now connected to a common cavity. Casing injection was not a good practice from an operating standpoint as it resulted in the equivalent of a top-injection operation (Butler, 1949). Today, salt-solution-mining wells normally are operated as two-well galleries and the wells are connected by hydraulic fracturing, natural coalescence, or horizontal drilling.

Of the nine solution-mining operations that have operated in Ohio, only Morton Salt and Cargill are currently active. A complete description and history of these projects can be reviewed in the Ohio Department of Natural Resources, Division of Mineral Resources Management 1993 publication entitled "Investigation of active and abandoned Class III salt solution-mining projects in Ohio."

## UNDERGROUND MINING OF SALT

Preliminary exploration for the underground mining of salt in Ohio began in the early 1950's, when the Morton Salt Company and the International Salt Company drilled exploration wells in Lake and Cuyahoga Counties, respectively. Core samples were taken of the Salina salt deposits to determine the quality and quantity of the salt. Morton and International then obtained mineral rights leases from the State of Ohio that extend approximately 2 miles out from the shoreline beneath the bed of Lake Erie.

The following information is from copies of brochures printed by the Morton Salt Company and on file at the Ohio Division of Geological Survey. Work began on the Fairport mine in June 1956 and continued 24 hours a day, six days a week for almost three years. The first 80 feet of the mine were excavated by crane, but the rest of the 2,025-foot-deep production shaft was excavated using dynamite. The production shaft is 16 feet in diameter, and a second service shaft is 12 feet in diameter. The shafts were lined with reinforced concrete. In the Fairport mine, the F1 salt (see photo) is mined by the room-and-pillar method (see photo); 50 percent of the salt is left in place to act as a support (pillar) for the overlying rock. The room height of the Fairport mine averages about 18 feet. Temperatures in this mine range between 63° and 78°F, depending on the season.

Most of the vehicles and mining machinery in the Fairport mine were disassembled at the surface and taken underground in pieces to be reassembled. All equipment repairs are performed underground. The working face in the mine is undercut with mining machinery, then the salt is broken up by blasting. The loose salt is gathered by a loading machine and hauled to a preliminary crushing and screening operation. After this process, the salt is dumped into a storage bin. Large containers called skips are filled with salt from the storage bins and are hoisted to the surface in

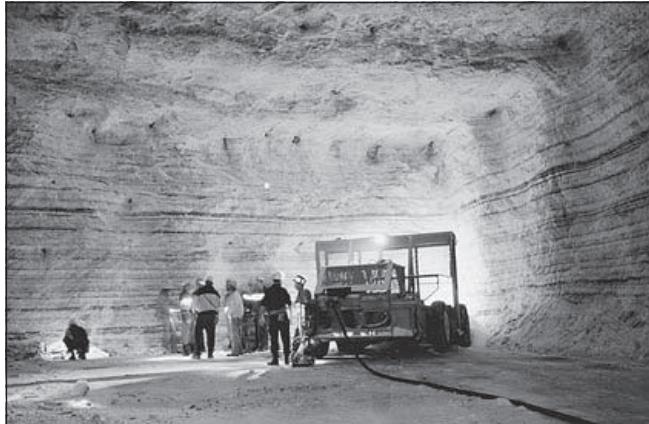


Close-up view of the Salina F unit salt.



View of a room and pillars in the Morton Salt Division Fairport mine.

the production shaft by steel cables that wind over pulleys and extend into the hoist house at the surface. After the salt reaches the surface, it is dumped into bins near the headframe for further processing. Salt was first shipped from the Fairport mine in 1959. Between 1990 and 2000, the Fairport mine averaged 1.2 million tons of salt in annual sales; 2001 sales totaled 1.5 million tons.



Undercutting of salt in the Cargill, Inc., Cleveland mine.

The International Salt Company began construction of the Cleveland mine on Whiskey Island in 1957, and salt shipments from Cleveland began in 1961. The Cleveland mine also uses the room-and-pillar method. The undercutting (see photo) and blasting techniques are very similar to the mining operations at the Morton Airport mine. The Cleveland mine has two, 16-foot-diameter shafts; the production shaft is 1,897 feet deep. Room height is about 20 feet. The International Salt Company was purchased by Akzo America in 1973. In 1989, the name was changed to Akzo-Nobel Salt (Gayle Petrick, Akzo-Nobel Salt, written commun., 1991). Cargill, Inc., purchased the Cleveland mine from Akzo-Nobel in 1997.

The Cleveland mine currently extracts Salina salt from what the company calls the B-bed of the three salt beds in the mine (Tim Harter, Cargill, Inc., written commun., 2002). The B-bed is 37 feet thick. All three salt beds correlate to the Salina F1 and F2 salt units. The upper A-bed is not mined due to poor quality. The lower C-bed is approximately 32 feet thick. In early 1994, Akzo started a continuous-mining operation in the C-bed. This operation ceased in the summer of 1998 (Tim Harter, personal commun., 2002). Between 1990 and 2000, the Cleveland mine sold an average of 2.0 million tons of salt annually; 2001 sales totaled 2.0 million tons.

## UNDERGROUND STORAGE IN SALT BEDS

Underground storage of hydrocarbon products in Ohio's salt deposits began in 1960. Only three underground storage areas have operated in Ohio (see map). A total of 30 wells have been permitted for hydrocarbon storage since 1960, but only 11 wells have actually been used. Of these 11 wells, only two wells at the Marathon-Ashland Petroleum facility remain in operation. Both the Standard Oil Company and Marathon-Ashland Petroleum wells were new wells drilled and completed in the Salina salt beds for



- 1 Standard Oil Company
- 2 Marathon-Ashland Petroleum LLC
- 3 Lake Underground Storage Corporation

Location of underground hydrocarbon-storage projects in the Salina Group in Ohio. Only the Marathon-Ashland operation (2) is still active.

hydrocarbon storage. The Lake Underground Storage operation converted existing Diamond Shamrock cavities and solution-mining wells to propane storage. In addition, in 1966, the Ohio Fuel Gas Company created an experimental storage site to study the feasibility of storing natural gas in a salt cavern. This site was located in Ohio Fuel Gas's conventional natural gas storage field in Medina County.

## USES OF SALT

Of all of our basic commodities, none surpasses salt in terms of its thousands of uses. The average person who thinks of salt just as a seasoning for food does not realize the many uses it really has. Salt is used for production of metallic sodium, chlorine, caustic soda, soda ash, and in many chemical processes. Salt is used as a domestic water softener, animal salt blocks, food preservative, de-icing agent, dust suppressant, stabilizing agent, carrier for trace minerals, in medicines, and for hide curing. However, the majority of salt produced in Ohio is used for snow and ice control.

## SALT PRODUCTION

In 2001, Ohio produced 4.5 million tons of salt (see p. 36), an increase of 6 percent from 2000. The value

## UNDERGROUND HYDROCARBON STORAGE FACILITIES IN OHIO

| Company name                         | Location                   | Operational dates | Storage product |
|--------------------------------------|----------------------------|-------------------|-----------------|
| Standard Oil Company                 | Cleveland, Cuyahoga County | 1960-1983         | propane         |
| Marathon-Ashland Petroleum LLC       | Canton, Stark County       | 1960-present      | butane          |
| Lake Underground Storage Corporation | Painesville, Lake County   | 1973-1983         | propane         |

of the salt sold in 2001 was \$89.8 million. Approximately 80 percent of the salt produced in Ohio in 2001 came from the two underground mines beneath Lake Erie. Nationally, Ohio ranks fourth in the production of salt. Salt will continue to be an important commodity in Ohio's and the nation's future.

## ACKNOWLEDGMENTS

I thank Tim Harter, manager of the Cargill, Inc., Cleveland mine, for providing historical information on the operations of the mine. I extend my sincere appreciation to Mark Wolfe and Ron Rea of the Ohio Division of Geological Survey for providing many interesting historical documents on the salt industry in Ohio.

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Donny Collins uses a Fletcher roof-bolter to bolt the 42-inch-thick roof (caprock) in the East Fairfield Coal Co. underground limestone mine in Mahoning County. Two rows of bolts are normally placed down the center of the entry, but the pattern will be expanded as needed to control the roof. The roof-bolter installs 8-foot-long fully grouted resin bolts. A combination grout-tension bolt up to 15 feet long can be used if severe roof problems are encountered.

## 2001 OHIO MINING ACTIVITIES IN BRIEF

Reports were filed in 2001 for 181 coal-mining operations, including 5 mines with their own coal-washing facility. Coal production was reported from 111 of these 181 operations. Reports also were filed for 26 separate coal-washing plants and associated facilities. Of 731 industrial-mineral-mining operations

<sup>1</sup>Includes reported and estimated values. Some operations reporting sales did not report a value for those sales. A countywide- or statewide-average price per ton was calculated for each industrial mineral commodity based on sales for which the value was reported. A countywide average price per ton was calculated for coal based on sales for which the value was reported and method of production. These calculated averages were used to estimate the value of the sales for which the actual values were not reported.

known to be operating in 2001, 495 operations were active. A total of 45 mines reported production of multiple mineral commodities. Of this total, 39 mines reported production of multiple industrial minerals, including 9 mines reporting production of multiple industrial minerals and coal; 6 mines reported production of coal and one industrial mineral. There were 600 new wells completed for oil and gas in 2001, of which 512 were productive and 88 were dry.

The total value<sup>1</sup> of coal was \$616,869,859 in 2001; the value of oil and gas was \$573,581,386; and the total value<sup>1</sup> of all nonfuel industrial minerals was \$802,217,295 in 2001.

TABLE 1.—2001 Mineral sales and production in Ohio

| Commodity                  | Sales <sup>1</sup> | Production <sup>2</sup>     | Value <sup>3</sup> | Change in value from 2000 (percent) |
|----------------------------|--------------------|-----------------------------|--------------------|-------------------------------------|
| Coal                       | 25,245,833 tons    | 25,790,543 tons             | \$616,869,859      | +9.5                                |
| Limestone and dolomite     | 80,998,236 tons    | 81,944,288 tons             | \$395,585,481      | +7.8                                |
| Sand and gravel            | 56,829,272 tons    | 56,848,867 tons             | \$263,845,940      | +4.5                                |
| Salt                       | 4,261,545 tons     | 4,518,513 tons              | \$89,840,924       | -8.1                                |
| Sandstone and conglomerate | 1,768,701 tons     | 1,940,869 tons              | \$38,460,128       | -14.7                               |
| Clay                       | 1,730,151 tons     | 1,730,172 tons              | \$7,648,956        | -24.4                               |
| Shale                      | 1,528,067 tons     | 1,494,767 tons              | \$5,366,308        | -28.8                               |
| Gypsum                     | 117,003 tons       | 117,003 tons                | \$1,469,558        | -27.5                               |
| Peat                       | 0 tons             | 0 tons                      | \$0                |                                     |
| Gas                        | <sup>4</sup>       | 98,255,015 MCF <sup>5</sup> | \$441,459,782      | +10.5                               |
| Oil                        | <sup>4</sup>       | 6,049,524 barrels           | \$132,121,604      | -24.9                               |

<sup>1</sup>Includes material for captive use.

<sup>2</sup>The production figures for the industrial minerals are estimates. Many operators do not know actual production. Some operators report estimates, other operators do not report any production. For those operators who do not report production, production is assumed to equal sales.

<sup>3</sup>The FOB value of industrial minerals sold was estimated for those mines which failed to report this information and for those producing material for captive use. These estimates were calculated using a countywide- or statewide-average price per ton calculated on reported FOB values.

<sup>4</sup>Figure not available.

<sup>5</sup>Thousand cubic feet.

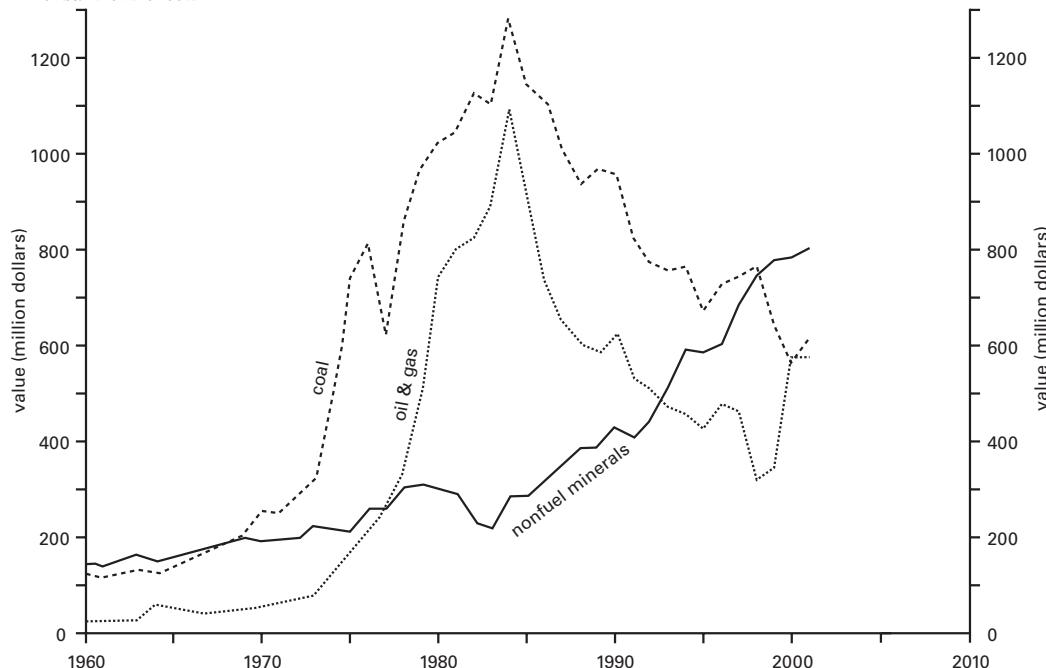


FIGURE 1.—Value of coal, nonfuel minerals, and oil and gas in Ohio.

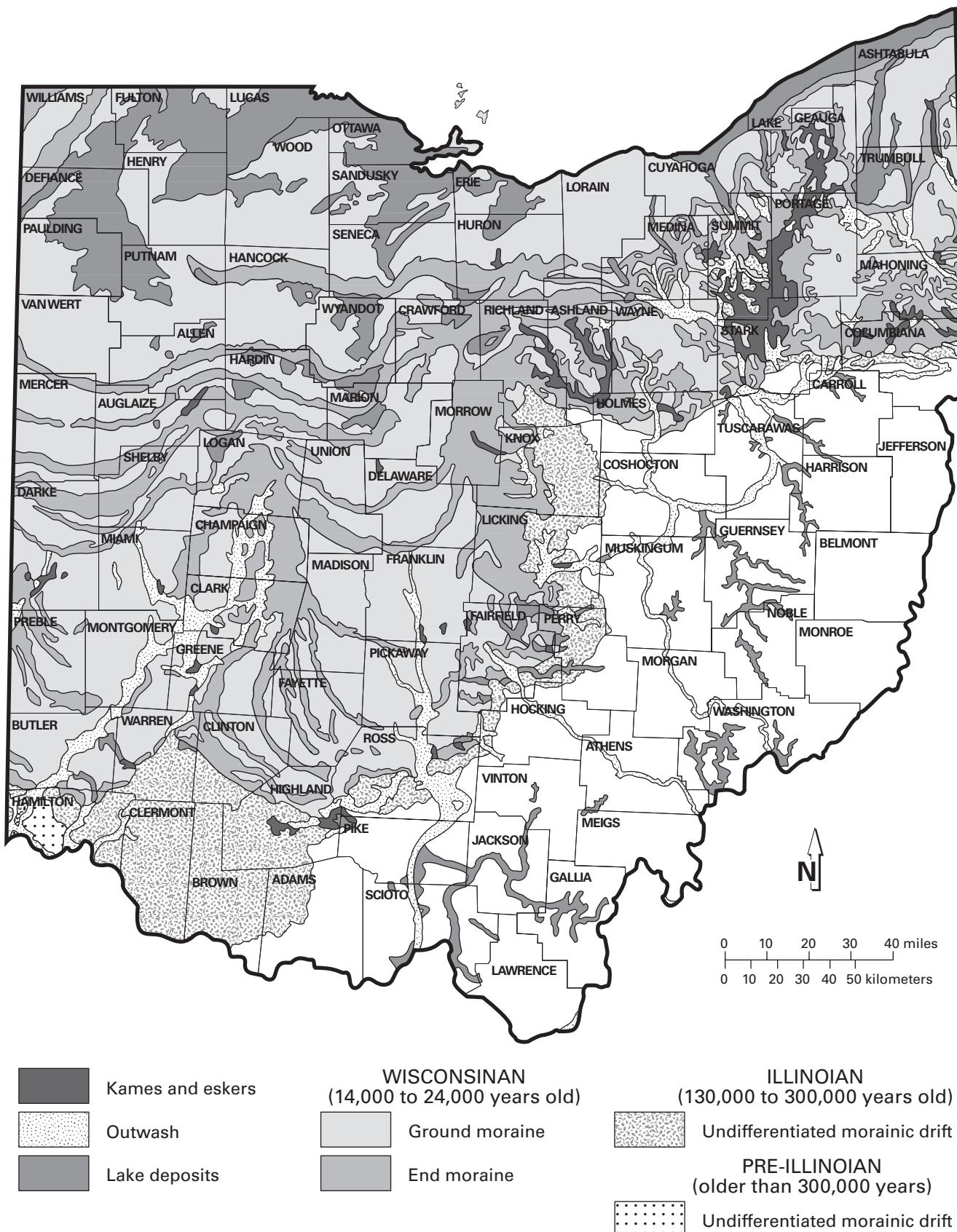


FIGURE 2.—Generalized map of the glacial deposits of Ohio. Continental glaciers advanced over the Ohio landscape several times during the Ice Age. These glaciers deposited unconsolidated materials on top of the bedrock over nearly two-thirds of the state. Most of Ohio's sand and gravel production comes from kames, eskers, and outwash, which were deposited by meltwater from the glaciers. Other glacially derived industrial minerals in Ohio include peat and clay.

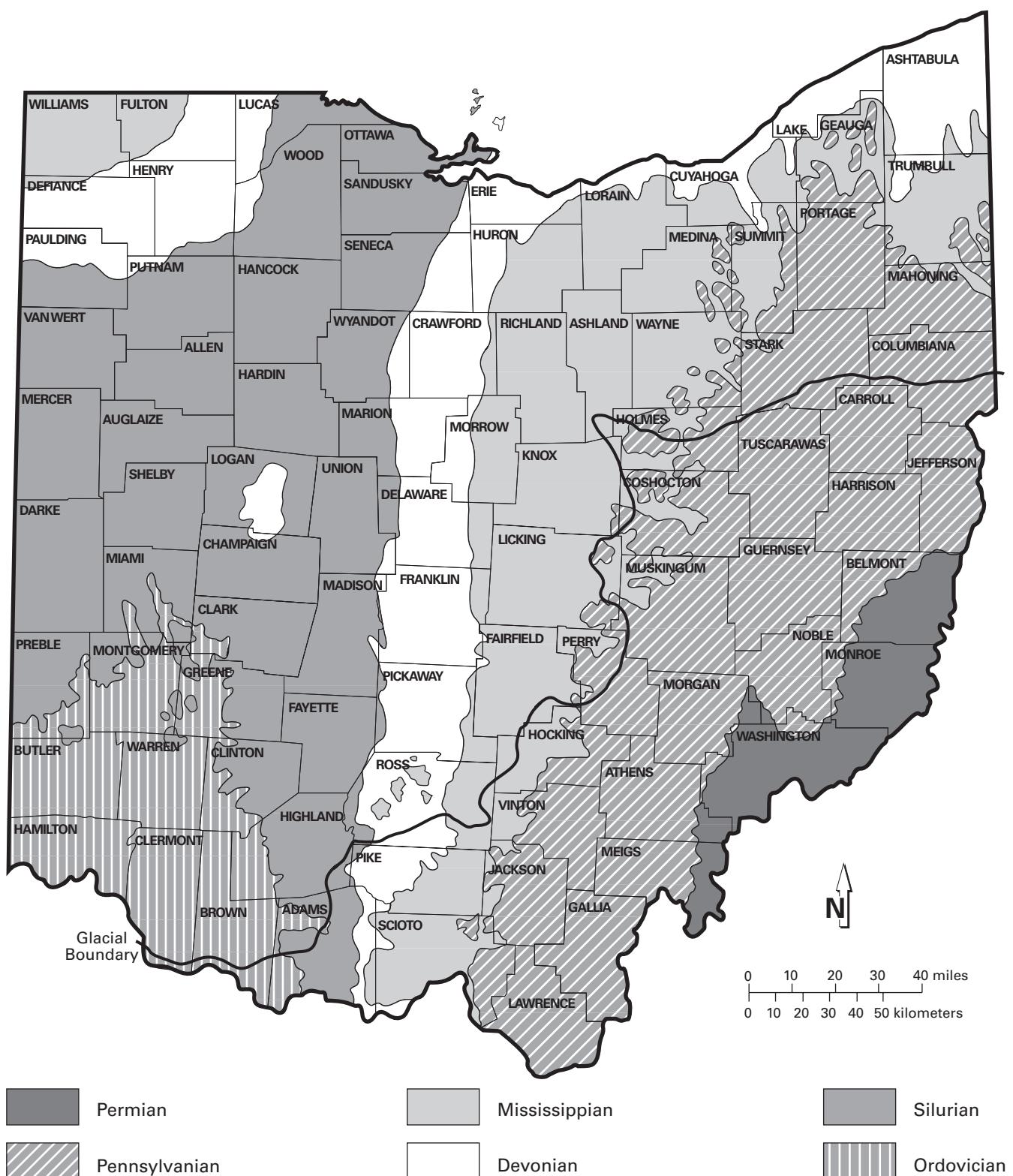


FIGURE 3.—Generalized geologic map of Ohio. Mineral production occurs throughout Ohio and from every geologic system from the Cambrian to the Permian. Coal, limestone and dolomite, sandstone and conglomerate, shale, clay, gypsum, salt, and oil and gas are produced from Ohio bedrock.

## COAL

Coal was produced by 41 companies at 111 mines in 21 Ohio counties during 2001. Production increased 14.7 percent from 2000, totaling 25,790,543 tons in 2001; 12,524,691 tons (48.6 percent of total production) were produced at 102 surface mines, and 13,265,852 tons (51.4 percent of total production) were produced at 10 underground mines. In 2001, tonnage from underground production exceeded tonnage from surface production, continuing a trend that began in 1995. Of 26 coal-producing states, Ohio ranked 14th in 2001. The top five states, in descending order of production, are Wyoming (366.3 million tons), West Virginia (160.6 million tons), Kentucky (129.3 million tons), Pennsylvania (74.5 million tons), and Texas (47.7 million tons). These five states produced 69.8 percent of the nation's coal in 2001. Ohio produced 2.3 percent of the nation's coal in 2001. The top five coal-consuming states, in descending order of consumption, are Texas, Indiana, Ohio, Missouri and Michigan. These five states used 28.1 percent of the total coal consumed by all 50 states in 2001.<sup>2</sup>

In comparison to 2000, 1 more mine reported production of greater than 1,000,000 tons, 3 more mine produced between 50,000 and 500,000 tons, and 5 fewer mines produced under 50,000 tons. There was a net decrease of 1 mine in 2001.

The five leading counties for 2001 production were Belmont, Meigs, Harrison, Vinton, and Jackson Counties; these counties produced 71.3 percent of the 2001 total production. A total of 25,245,833 tons of coal

<sup>2</sup>Information from U.S. Department of Energy, Energy Information Administration.

<sup>3</sup>Includes reported and estimated values. See footnote 1, p. 9.

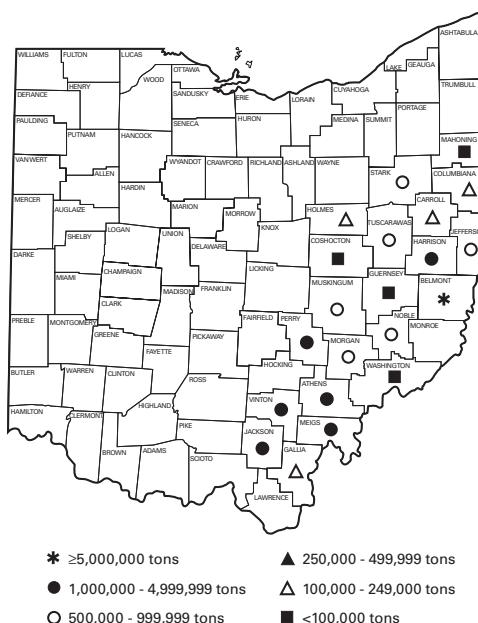


FIGURE 4.—Coal production in Ohio in 2001, by county.

were sold in 2001; total value<sup>3</sup> was \$616,869,859. The average price per ton of all coal sold was \$24.43; surface-mined coal averaged \$20.20 per ton and underground-mined coal averaged \$28.51.

In underground mining, 61.4 percent of the coal was produced by longwall mining and 38.6 percent was mined by continuous miner; no coal was produced by conventional mining in 2001. In surface operations, 94.0 percent of the coal was mined by conventional surface methods, and 6.0 percent was auger mined.

The Pittsburgh (No. 8) coal was the most heavily mined seam, followed by the Clarion (No. 4A), Middle Kittanning (No. 6), Meigs Creek (No. 9), and Lower Freeport (No. 6A) seams. Coal produced from these five seams constituted 84.8 percent of the total 2001 production.

A total of 14,863,125 tons of washed coal was reported in 2001. Reports from 11 coal-washing plants indicate an average 41.8 percent loss in washing.

Trucking was the primary means of coal disposition, carrying 49.0 percent of the total sales. Conveyor belts carried 22.9 percent, rail transported 22.7 percent, and water carried 5.3 percent of the coal sold in 2001. A total of 440,324 tons (1.7 percent) of the coal produced was reported as stored.

The total average annual employment reported in 2001 was 2,720 employees; 1,587 of these were production employees. Production employees worked an average of 173 days producing coal in 2001. The average annual wage earned by all production employees was \$47,086 based on those employees for whom wages were reported. The average annual wage for surface-mine production employees was \$44,314, and the average annual wage for underground-mine production employees was \$49,897. Wages earned by all employees totaled \$142,480,613 in 2001.

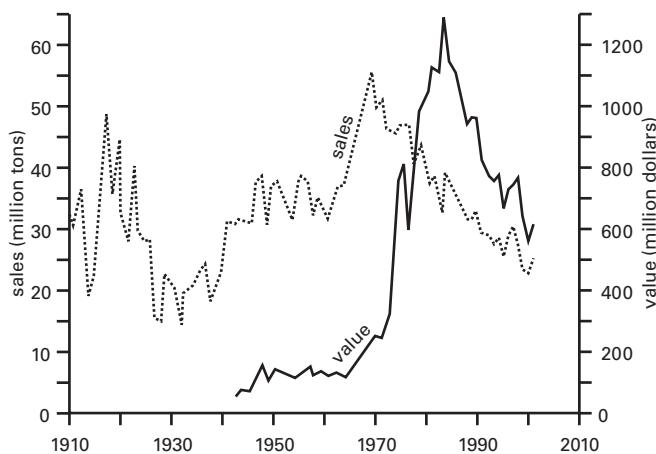


FIGURE 5.—Sales and value of coal in Ohio.

TABLE 2.—2001 Ohio coal production and sales by county, in descending order of production

| County      | Production<br>(short tons) | Sales<br>(short tons) |
|-------------|----------------------------|-----------------------|
| Belmont     | 7,629,057                  | 7,622,867             |
| Meigs       | 4,291,350                  | 4,245,535             |
| Harrison    | 3,544,834                  | 3,058,424             |
| Vinton      | 1,628,756                  | 1,628,756             |
| Jackson     | 1,305,575                  | 1,305,575             |
| Athens      | 1,248,192                  | 1,241,897             |
| Perry       | 1,052,138                  | 1,052,138             |
| Jefferson   | 912,273                    | 912,273               |
| Tuscarawas  | 784,425                    | 784,425               |
| Muskingum   | 701,248                    | 701,248               |
| Stark       | 696,906                    | 696,906               |
| Noble       | 578,262                    | 578,262               |
| Morgan      | 537,469                    | 537,469               |
| Gallia      | 221,057                    | 221,057               |
| Columbiana  | 215,778                    | 215,778               |
| Holmes      | 141,190                    | 141,190               |
| Carroll     | 114,263                    | 114,263               |
| Washington  | 98,752                     | 98,752                |
| Coshocton   | 63,816                     | 63,816                |
| Mahoning    | 16,875                     | 16,875                |
| Guernsey    | 8,327                      | 8,327                 |
| 21 counties | 25,790,543                 | 25,245,833            |

TABLE 3.—2001 Ohio coal production by production-size group and change from 2000

| Production-size group   | 2001                      |                         | Change from 2000 (short tons) |
|-------------------------|---------------------------|-------------------------|-------------------------------|
|                         | Number of mines reporting | Production (short tons) |                               |
| 1,000,000 tons and over | 6                         | 13,265,581              | +1,520,559                    |
| 500,000 to 999,999 tons | 5                         | 3,466,315               | +109,429                      |
| 250,000 to 499,999 tons | 11                        | 3,807,004               | +1,817,670                    |
| 100,000 to 249,999 tons | 21                        | 3,262,413               | +104,048                      |
| 50,000 to 99,999 tons   | 13                        | 980,382                 | -145,536                      |
| 25,000 to 49,999 tons   | 19                        | 679,815                 | +154,653                      |
| Under 25,000 tons       | 37                        | 329,033                 | -248,828                      |
| TOTAL                   | 112                       | 25,790,543              | +3,311,995                    |

TABLE 4.—2001 Ohio coal production by county and mining method

| County <sup>1</sup> | All methods<br>(short tons) | Total<br>number<br>of<br>mines | Underground                                    |                         |           | Surface                                    |                         |            |
|---------------------|-----------------------------|--------------------------------|--|-------------------------|-----------|--|-------------------------|------------|
|                     |                             |                                | Number of<br>underground<br>mines<br>reporting | Production (short tons) |           | Number of<br>surface<br>mines<br>reporting | Production (short tons) |            |
|                     |                             |                                |  | Total<br>underground    | Longwall  |  | Total<br>surface        | Strip      |
| Athens              | 1,248,192                   | 1                              | 1  | 1,248,192               | 1,248,192 | 21 <sup>2</sup>                            | 2,536,551               | 2,124,782  |
| Belmont             | 7,629,057                   | 23 <sup>2</sup>                | 2  | 5,092,506               | 4,122,158 | 3  | 114,263                 | 98,828     |
| Carroll             | 114,263                     | 3                              |  |                         | 1,900     | 5  | 213,878                 | 185,671    |
| Columbiana          | 215,778                     | 6                              | 1  | 1,900                   |           | 2  | 63,816                  | 63,816     |
| Coshocton           | 63,816                      | 2                              |  |                         |           |  |                         |            |
| Gallia              | 221,057                     | 2                              |  |                         |           | 2  | 221,057                 | 221,057    |
| Guernsey            | 8,327                       | 1                              |  |                         |           | 1  | 8,327                   | 4,445      |
| Harrison            | 3,544,834                   | 10                             | 1  | 2,062,614               | 2,062,614 | 9  | 1,482,220               | 1,399,162  |
| Holmes              | 141,190                     | 1                              |  |                         |           | 1  | 141,190                 | 141,190    |
| Jackson             | 1,305,575                   | 4                              |  |                         |           | 4  | 1,305,575               | 1,305,575  |
| Jefferson           | 912,273                     | 10                             | 3  | 569,290                 | 569,290   | 7  | 342,983                 | 323,696    |
| Mahoning            | 16,875                      | 3                              |  |                         |           | 3  | 16,875                  | 16,875     |
| Meigs               | 4,291,350                   | 2                              | 2  | 4,291,350               | 4,029,146 | 262,204                                    | 1 <sup>3</sup>          | 532,681    |
| Morgan              | 537,469                     | 1 <sup>3</sup>                 |  |                         |           |  | 701,248                 | 4,788      |
| Muskingum           | 701,248                     | 3                              |  |                         |           | 3  | 647,902                 | 53,346     |
| Noble               | 578,262                     | 6                              |  |                         |           | 6  | 578,262                 | 577,116    |
| Perry               | 1,052,138                   | 1                              |  |                         |           | 1  | 1,052,138               | 1,052,138  |
| Stark               | 696,906                     | 8                              |  |                         |           | 8  | 696,906                 | 696,906    |
| Tuscarawas          | 784,425                     | 19                             |  |                         |           | 19   | 784,425                 | 659,767    |
| Vinton              | 1,628,756                   | 6 <sup>2</sup>                 |  |                         |           | 6 <sup>3</sup>                             | 1,628,756               | 1,628,756  |
| Washington          | 98,752                      | 1                              |  |                         |           | 1  | 98,752                  | 98,752     |
| TOTAL               | 25,790,543                  | 112                            | 10   | 13,265,852              | 8,151,304 | 5,114,548                                  | 102                     | 12,524,691 |
|                     |                             |                                |  |                         |           |  |                         | 11,779,115 |
|                     |                             |                                |  |                         |           |  |                         | 745,576    |

<sup>1</sup>Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.<sup>2</sup>Does not include mines extending into this county from adjoining counties.<sup>3</sup>This mine extends into Morgan County from Noble County and is not included in the total number of mines.

## 2001 OHIO MINERAL INDUSTRIES REPORT

TABLE 5.—*2001 Ohio coal production by county and month*

| County <sup>1</sup> | Production (short tons) |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|---------------------|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                     | Total annual            | January          | February         | March            | April            | May              | June             | July             | August           | September        | October          | November         | December         |
| Athens              | 1,248,192               | 117,747          | 94,831           | 108,224          | 104,469          | 125,347          | 113,343          | 103,233          | 131,808          | 102,293          | 99,122           | 67,065           | 80,710           |
| Belmont             | 7,629,057               | 695,393          | 510,286          | 608,817          | 548,927          | 634,595          | 615,192          | 650,082          | 642,697          | 613,211          | 773,653          | 631,184          | 705,020          |
| Carroll             | 114,263                 | 6,652            | 5,650            | 6,464            | 6,855            | 5,320            | 7,921            | 5,611            | 6,582            | 11,117           | 21,098           | 19,539           | 11,454           |
| Columbiana          | 215,778                 | 20,004           | 14,410           | 21,312           | 14,674           | 15,140           | 18,530           | 16,727           | 22,732           | 18,372           | 18,372           | 18,824           | 16,681           |
| Coshcocton          | 63,816                  | 3,571            | 3,571            | 3,570            | 3,834            | 3,835            | 3,835            | 4,059            | 4,059            | 5,580            | 4,924            | 4,924            | 18,054           |
| Gallia              | 221,057                 | 17,002           | 14,488           | 9,470            | 19,442           | 10,490           | 21,093           | 27,125           | 26,237           | 24,655           | 14,008           | 17,533           | 19,514           |
| Guernsey            | 8,327                   |                  |                  |                  |                  |                  |                  | 52               | 1,099            | 1,542            | 1,704            | 1,973            | 1,957            |
| Harrison            | 3,544,834               | 260,407          | 280,373          | 300,004          | 261,893          | 272,577          | 310,555          | 304,418          | 302,881          | 306,340          | 354,008          | 292,379          | 298,999          |
| Holmes              | 141,190                 | 16,664           | 16,664           | 16,664           | 10,408           | 10,408           | 10,408           | 11,162           | 11,162           | 11,161           | 8,830            | 8,830            | 8,829            |
| Jackson             | 1,305,575               | 116,550          | 116,384          | 122,571          | 118,009          | 109,228          | 100,241          | 94,550           | 102,554          | 90,629           | 125,411          | 101,570          | 107,878          |
| Jefferson           | 912,273                 | 81,799           | 69,187           | 69,749           | 68,639           | 70,946           | 70,471           | 66,962           | 72,127           | 72,681           | 83,909           | 91,779           | 94,024           |
| Mahoning            | 16,875                  | 4,979            | 1,058            | 926              | 516              |                  |                  | 2,446            | 392              | 1,469            | 1,797            | 1,535            | 1,757            |
| Meigs               | 4,291,350               | 303,562          | 413,844          | 403,115          | 496,949          | 472,009          | 343,390          | 366,342          | 517,100          | 335,237          | 382,961          | 71,865           | 184,976          |
| Morgan              | 537,469                 | 38,288           | 88,356           |                  |                  |                  |                  | 72,977           | 61,004           | 73,400           | 74,776           | 85,075           | 43,593           |
| Muskingum           | 701,248                 | 62,444           | 55,575           | 58,488           | 54,922           | 57,148           | 52,461           | 56,058           | 66,800           | 63,052           | 74,308           | 62,210           | 37,782           |
| Noble               | 578,262                 | 53,499           | 62,587           | 37,788           | 42,805           | 33,830           | 38,870           | 54,238           | 54,376           | 46,622           | 56,620           | 55,820           | 41,207           |
| Perry               | 1,052,138               | 95,911           | 92,429           | 88,269           | 87,598           | 81,630           | 70,417           | 73,187           | 96,415           | 83,665           | 103,275          | 87,142           | 92,200           |
| Stark               | 696,906                 | 62,122           | 61,772           | 56,980           | 63,476           | 67,884           | 68,554           | 57,542           | 53,426           | 55,769           | 55,411           | 46,942           | 47,028           |
| Tuscarawas          | 784,425                 | 71,381           | 73,833           | 72,014           | 55,310           | 43,652           | 60,826           | 61,728           | 68,507           | 61,652           | 75,831           | 67,722           | 71,969           |
| Vinton              | 1,628,756               | 129,472          | 126,482          | 135,426          | 130,321          | 145,074          | 130,730          | 129,428          | 137,484          | 128,498          | 150,614          | 143,737          | 141,490          |
| Washington          | 98,752                  | 6,815            | 8,443            | 7,409            | 6,352            | 8,068            | 8,057            | 8,014            | 9,902            | 7,896            | 10,646           | 6,255            | 10,895           |
| <b>TOTAL</b>        | <b>25,790,543</b>       | <b>2,164,262</b> | <b>2,110,223</b> | <b>2,127,260</b> | <b>2,095,399</b> | <b>2,167,181</b> | <b>2,044,894</b> | <b>2,165,941</b> | <b>2,389,344</b> | <b>2,114,841</b> | <b>2,491,278</b> | <b>1,883,903</b> | <b>2,036,017</b> |

<sup>1</sup>Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 6.—*2001 Ohio coal production*

| County <sup>1</sup> | Production        |                       |                   |                    |                |                  |                          |                    |                           |           |
|---------------------|-------------------|-----------------------|-------------------|--------------------|----------------|------------------|--------------------------|--------------------|---------------------------|-----------|
|                     | Total             | Upper Mercer (No. 3A) | Tionesta (No. 3B) | Brookville (No. 4) | Winters        | Clarion (No. 4A) | Lower Kittanning (No. 5) | Strasburg (No. 5A) | Middle Kittanning (No. 6) |           |
| Athens              | 1,248,192         |                       |                   |                    |                |                  |                          |                    |                           | 1,248,192 |
| Belmont             | 7,629,057         |                       |                   |                    |                |                  |                          |                    |                           |           |
| Carroll             | 114,263           |                       |                   |                    |                |                  |                          |                    |                           | 2,059     |
| Columbiana          | 215,778           |                       |                   |                    |                |                  |                          |                    |                           | 63,816    |
| Coshcocton          | 63,816            |                       |                   |                    |                |                  |                          |                    |                           |           |
| Gallia              | 221,057           |                       |                   |                    |                |                  |                          |                    |                           | 205,564   |
| Guernsey            | 8,327             |                       |                   |                    |                |                  |                          |                    |                           | 8,327     |
| Harrison            | 3,544,834         |                       |                   |                    |                |                  |                          |                    |                           |           |
| Holmes              | 141,190           |                       |                   |                    |                |                  |                          |                    |                           | 141,190   |
| Jackson             | 1,305,575         |                       |                   |                    |                |                  |                          |                    |                           | 336,778   |
| Jefferson           | 912,273           |                       |                   |                    |                |                  |                          |                    |                           |           |
| Mahoning            | 16,875            |                       |                   |                    |                |                  |                          |                    |                           |           |
| Meigs               | 4,291,350         |                       |                   |                    |                |                  |                          |                    |                           |           |
| Morgan              | 537,469           |                       |                   |                    |                |                  |                          |                    |                           |           |
| Muskingum           | 701,248           |                       |                   |                    |                |                  |                          |                    |                           | 690,240   |
| Noble               | 578,262           |                       |                   |                    |                |                  |                          |                    |                           |           |
| Perry               | 1,052,138         |                       |                   |                    |                |                  |                          |                    |                           |           |
| Stark               | 696,906           |                       |                   |                    |                |                  |                          |                    |                           |           |
| Tuscarawas          | 784,425           | 980                   | 9,797             | 274,459            |                |                  |                          |                    |                           |           |
| Vinton              | 1,628,756         |                       |                   | 55,572             | 371,474        | 139,238          | 408,884                  | 200,303            | 5,452                     | 368,735   |
| Washington          | 98,752            |                       |                   |                    |                |                  |                          | 292,337            |                           | 238,135   |
| <b>TOTAL</b>        | <b>25,790,543</b> | <b>980</b>            | <b>9,797</b>      | <b>714,811</b>     | <b>139,238</b> | <b>5,207,460</b> | <b>1,241,855</b>         | <b>5,452</b>       | <b>4,458,117</b>          |           |

<sup>1</sup>Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.



Manufactured sand used in asphalt, concrete block, and pipe fill is being conveyed to storage at the processing facilities of the East Fairfield Coal Co. limestone mine in Mahoning County.

*by county and seam*

(short tons)

|           | Lower Freeport<br>(No. 6A) | Upper Freeport<br>(No. 7) | Mahoning<br>(No. 7A) | Harlem | Pittsburgh<br>(No. 8) | Pomeroy-<br>Redstone<br>(No. 8A) | Meigs Creek<br>(No. 9) | Waynesburg<br>(No. 11) | County <sup>1</sup>   |
|-----------|----------------------------|---------------------------|----------------------|--------|-----------------------|----------------------------------|------------------------|------------------------|---|
| 2,062,614 | 38,136                     | 15,493                    | 77,922               | 36,341 | 5,527,467             | 56,397                           | 1,674,405              | 370,788                | Athens<br>Belmont<br>Carroll<br>Columbiana<br>Coshocton       |
|           |                            |                           | 163,160              |        | 518,057               | 87,877                           | 876,286                |                        | Gallia<br>Guernsey<br>Harrison<br>Holmes<br>Jackson           |
|           | 11,797                     | 141,906                   | 427,384              |        | 279,097               | 52,408                           | 11,478                 |                        | Jefferson<br>Mahoning<br>Meigs<br>Morgan<br>Muskingum         |
|           |                            |                           |                      |        |                       |                                  | 537,469                |                        |   |
|           | 36,055                     | 138,948                   |                      |        |                       |                                  | 578,262                |                        | Noble<br>Perry<br>Stark<br>Tuscarawas<br>Vinton<br>Washington |
| 11,008    | 4,638                      | 178,688                   |                      | 36,341 | 6,324,621             | 196,682                          | 3,776,652              | 370,788                | TOTAL   |
|           |                            |                           |                      |        |                       |                                  |                        |                        |   |
| 2,114,315 | 524,968                    | 668,466                   |                      |        |                       |                                  |                        |                        |   |

TABLE 7.—*2001 Disposition of Ohio coal, by county*

| County <sup>1</sup> | Number of mines | Disposition <sup>1</sup> (short tons) |                  |                  |                   |                  |                   | Stored         |
|---------------------|-----------------|---------------------------------------|------------------|------------------|-------------------|------------------|-------------------|----------------|
|                     |                 | Total <sup>2</sup>                    | Rail             | Water            | Truck             | Conveyor         | Unspecified/other |                |
| Athens              | 1               | 1,241,897                             | 1,241,897        |                  |                   |                  |                   | 15,943         |
| Belmont             | 23 <sup>3</sup> | 7,622,867                             | 2,675,646        | 1,028,676        | 3,918,545         |                  |                   | 197,704        |
| Carroll             | 3               | 114,263                               |                  |                  | 114,263           |                  |                   |                |
| Columbiana          | 6               | 215,778                               |                  |                  | 215,778           |                  |                   |                |
| Coshocton           | 2               | 63,816                                |                  |                  | 63,816            |                  |                   |                |
| Gallia              | 2               | 221,057                               |                  | 5,939            | 44,074            | 171,044          |                   |                |
| Guernsey            | 1               | 8,327                                 |                  |                  | 8,327             |                  |                   |                |
| Harrison            | 10              | 3,058,424                             | 1,494,811        | 231,266          | 1,331,060         |                  | 1,287             | 180,862        |
| Holmes              | 1               | 141,190                               |                  |                  | 141,190           |                  |                   |                |
| Jackson             | 4               | 1,305,575                             |                  | 11,580           | 960,529           | 333,466          |                   |                |
| Jefferson           | 10              | 912,273                               |                  | 34,367           | 877,906           |                  |                   |                |
| Mahoning            | 3               | 16,875                                |                  |                  | 16,875            |                  |                   |                |
| Meigs               | 2               | 4,245,535                             |                  |                  |                   |                  | 4,245,535         | 45,815         |
| Morgan              | 1 <sup>4</sup>  | 537,469                               |                  |                  |                   |                  | 537,469           |                |
| Muskingum           | 3               | 701,248                               |                  |                  | 701,248           |                  |                   |                |
| Noble               | 6               | 578,262                               |                  |                  | 548,301           | 29,961           |                   |                |
| Perry               | 1               | 1,052,138                             | 314,894          |                  | 737,244           |                  |                   |                |
| Stark               | 8               | 696,906                               |                  |                  | 696,906           |                  |                   |                |
| Tuscarawas          | 19              | 784,425                               |                  |                  | 784,425           |                  |                   |                |
| Vinton              | 6 <sup>3</sup>  | 1,628,756                             |                  | 16,433           | 1,139,064         | 473,259          |                   |                |
| Washington          | 1               | 98,752                                |                  |                  | 98,752            |                  |                   |                |
| <b>TOTAL</b>        | <b>112</b>      | <b>25,245,833</b>                     | <b>5,727,248</b> | <b>1,328,261</b> | <b>12,398,303</b> | <b>5,790,734</b> | <b>1,287</b>      | <b>440,324</b> |

<sup>1</sup>Tonnage of coal shipped from mines operating in more than one county was evenly split between the counties involved and type(s) of disposition reported unless a by-county breakdown was provided by the operator.

<sup>2</sup>Does not reflect tonnage stored. Reflects tonnage sold and shipped from mine.

<sup>3</sup>Does not include mines extending into this county from adjoining counties.

<sup>4</sup>This mine extends into Morgan County from Noble County and is not included in the total number of mines.

TABLE 8.—*2001 Rail shipments of Ohio coal, by county of origin and carrier*

| County       | Number of mines | Shipments (short tons) |                |                      |                  |                  |
|--------------|-----------------|------------------------|----------------|----------------------|------------------|------------------|
|              |                 | Total                  | CSX            | Wheeling & Lake Erie | Norfolk Southern | Ohio Central     |
| Athens       | 1               | 1,241,897              |                |                      |                  | 1,241,897        |
| Belmont      | 1               | 2,675,646              |                |                      |                  |                  |
| Harrison     | 1               | 1,494,811              | 282,654        | 426,817              | 2,675,646        | 108,267          |
| Perry        | 1               | 314,894                |                |                      | 677,073          | 314,894          |
| <b>TOTAL</b> | <b>4</b>        | <b>5,727,248</b>       | <b>282,654</b> | <b>426,817</b>       | <b>2,783,913</b> | <b>2,233,864</b> |

TABLE 9.—2001 Washed Ohio coal

|                         |                           | Raw coal<br>(short tons) | Washed<br>coal <sup>1</sup><br>(short tons) | Loss in<br>washing<br>(short tons) | Loss in<br>washing<br>(percent) | Percent of<br>all washed<br>coals |
|-------------------------|---------------------------|--------------------------|---|------------------------------------|---------------------------------|-----------------------------------|
| By<br>type of<br>mining | From surface mines        | 3,703,148                | 3,098,275                                   | 604,873                            | 16.3                            | 20.8                              |
|                         | From underground mines    | 21,854,718               | 11,764,850                                  | 10,089,868                         | 46.2                            | 79.2                              |
|                         | TOTAL                     | 25,557,866               | 14,863,125                                  | 10,694,741                         | 41.8                            | 100.0                             |
| By<br>seam              | Upper Mercer (No. 3A)     | 10,776                   | 9,483                                       | 1,293                              | 12.0                            | <0.1                              |
|                         | Brookville (No. 4)        | 229,492                  | 184,492                                     | 45,000                             | 19.6                            | 1.2                               |
|                         | Winters                   | 159,689                  | 118,689                                     | 41,000                             | 25.7                            | 0.8                               |
|                         | Clarion (No. 4A)          | 10,785,820               | 4,776,240                                   | 6,009,580                          | 55.7                            | 32.1                              |
|                         | Lower Kittanning (No. 5)  | 503,890                  | 445,977                                     | 57,913                             | 11.5                            | 3.0                               |
|                         | Middle Kittanning (No. 6) | 1,874,819                | 1,499,439                                   | 375,380                            | 20.0                            | 10.1                              |
|                         | Lower Freeport (No. 6A)   | 1,391,249                | 1,044,220                                   | 347,029                            | 24.9                            | 7.0                               |
|                         | Upper Freeport (No. 7)    | 60,140                   | 48,691                                      | 11,449                             | 19.0                            | 0.3                               |
|                         | Mahoning (No. 7A)         | 177,048                  | 123,934                                     | 53,114                             | 30.0                            | 0.8                               |
|                         | Pittsburgh (No. 8)        | 9,091,750                | 5,519,919                                   | 3,571,831                          | 39.3                            | 37.1                              |
|                         | Meigs Creek (No. 9)       | 1,273,193                | 1,092,041                                   | 181,152                            | 14.2                            | 7.3                               |
| TOTAL                   |                           | 25,557,866               | 14,863,125                                  | 10,694,741                         | 41.8                            | 100.0                             |

<sup>1</sup>Total washed coal figures for 2001 reflect figures as reported by Ohio's coal preparation plants. These figures do not necessarily represent only 2001 production. In 2001, 25,790,543 tons of coal were produced, of which 14,339,541 tons (55.6%) were reported as washed by Ohio's mine operators. Coal not designated as washed or unwashed by Ohio's mine operators was assumed to be unwashed.

<sup>2</sup>The raw tonnage (before washing) and/or the clean tonnage (after washing) of coal was estimated for those mines which failed to report this information. These estimates were calculated using a statewide-average loss-in-washing percentage based on raw/washed coal values for type of mining and for seam deemed to be reliable.

TABLE 10.—2001 Dollar value of coal at mine by county and mining method

| County <sup>1</sup> | Total              |                                 |  |                                 | Underground        |                                 |  |                                 | Surface            |                                 |  |                                 |
|---------------------|--------------------|---------------------------------|--|---------------------------------|--------------------|---------------------------------|--|---------------------------------|--------------------|---------------------------------|--|---------------------------------|
|                     | No.<br>of<br>mines | Tonnage<br>sold<br>(short tons) | Value at<br>mine <sup>2</sup><br>(dollars) | Per ton<br>average<br>(dollars) | No.<br>of<br>mines | Tonnage<br>sold<br>(short tons) | Value at<br>mine <sup>2</sup><br>(dollars) | Per ton<br>average<br>(dollars) | No.<br>of<br>mines | Tonnage<br>sold<br>(short tons) | Value at<br>mine <sup>2</sup><br>(dollars) | Per ton<br>average<br>(dollars) |
| Athens              | 1                  | 1,241,897                       | \$21,733,192                               | \$17.50                         | 1                  | 1,241,897                       | \$21,733,192                               | \$17.50                         | 23 <sup>3</sup>    | 2,536,392                       | \$51,446,027                               | \$20.28                         |
| Belmont             | 23 <sup>3</sup>    | 7,622,867                       | 150,430,782                                | 19.73                           | 2                  | 5,086,475                       | 98,984,755                                 | 19.46                           |                    |                                 |  |                                 |
| Carroll             | 3                  | 114,263                         | 2,811,631                                  | 24.61                           |                    |                                 |  |                                 | 3                  | 114,263                         | 2,811,631                                  | 24.61                           |
| Columbiana          | 6                  | 215,778                         | 4,297,899                                  | 19.92                           | 1                  | 1,900                           | 40,000                                     | 21.05                           | 5                  | 213,878                         | 4,257,899                                  | 19.91                           |
| Coshcocton          | 2                  | 63,816                          | 1,340,000                                  | 21.00                           |                    |                                 |  |                                 | 2                  | 63,816                          | 1,340,000                                  | 21.00                           |
| Gallia              | 2                  | 221,057                         | 4,690,830                                  | 21.22                           |                    |                                 |  |                                 | 2                  | 221,057                         | 4,690,830                                  | 21.22                           |
| Guernsey            | 1                  | 8,327                           | 186,920                                    | 22.45                           |                    |                                 |  |                                 | 1                  | 8,327                           | 186,920                                    | 22.45                           |
| Harrison            | 10                 | 3,058,424                       | 72,680,713                                 | 23.76                           | 1                  | 1,723,078                       | 47,731,591                                 | 27.70                           | 9                  | 1,335,346                       | 24,949,122                                 | 18.68                           |
| Holmes              | 1                  | 141,190                         | 2,900,000                                  | 20.54                           |                    |                                 |  |                                 | 1                  | 141,190                         | 2,900,000                                  | 20.54                           |
| Jackson             | 4                  | 1,305,575                       | 27,984,183                                 | 21.43                           |                    |                                 |  |                                 | 4                  | 1,305,575                       | 27,984,183                                 | 21.43                           |
| Jefferson           | 10                 | 912,273                         | 20,519,532                                 | 22.49                           | 3                  | 569,290                         | 13,264,778                                 | 23.30                           | 7                  | 342,983                         | 7,254,754                                  | 21.15                           |
| Mahoning            | 3                  | 16,875                          | 366,980                                    | 21.75                           |                    |                                 |  |                                 | 3                  | 16,875                          | 366,980                                    | 21.75                           |
| Meigs               | 2                  | 4,245,535                       | 185,111,657                                | 43.60                           | 2                  | 4,245,535                       | 185,111,657                                | 43.60                           |                    |                                 |  |                                 |
| Morgan              | 1                  | 537,469                         | 12,899,256                                 | 24.00                           |                    |                                 |  |                                 | 1 <sup>4</sup>     | 537,469                         | 12,899,256                                 | 24.00                           |
| Muskingum           | 3                  | 701,248                         | 15,818,839                                 | 22.56                           |                    |                                 |  |                                 | 3                  | 701,248                         | 15,818,839                                 | 22.56                           |
| Noble               | 6                  | 578,262                         | 9,818,361                                  | 16.98                           |                    |                                 |  |                                 | 6                  | 578,262                         | 9,818,361                                  | 16.98                           |
| Perry               | 1                  | 1,052,138                       | 19,287,602                                 | 18.33                           |                    |                                 |  |                                 | 1                  | 1,052,138                       | 19,287,602                                 | 18.33                           |
| Stark               | 8                  | 696,906                         | 13,283,588                                 | 19.06                           |                    |                                 |  |                                 | 8                  | 696,906                         | 13,283,588                                 | 19.06                           |
| Tuscarawas          | 19                 | 784,425                         | 14,342,935                                 | 18.28                           |                    |                                 |  |                                 | 19                 | 784,425                         | 14,342,935                                 | 18.28                           |
| Vinton              | 6 <sup>3</sup>     | 1,628,756                       | 34,883,679                                 | 21.42                           |                    |                                 |  |                                 | 6 <sup>3</sup>     | 1,628,756                       | 34,883,679                                 | 21.42                           |
| Washington          | 1                  | 98,752                          | 1,481,280                                  | 15.00                           |                    |                                 |  |                                 | 1                  | 98,752                          | 1,481,280                                  | 15.00                           |
| TOTAL               | 112                | 25,245,833                      | \$616,869,859                              | \$24.43                         | 10                 | 12,868,175                      | \$366,865,973                              | \$28.51                         | 102                | 12,377,658                      | \$250,003,886                              | \$20.20                         |

<sup>1</sup>Sales reported from mines operating in more than one county were evenly split between the counties involved unless a by-county breakdown was provided by the operator.

<sup>2</sup>The FOB value of coal sold was estimated for those mines which failed to report this information. These estimates were calculated using a countywide-average price per ton by mining method based on reported FOB values deemed to be reliable.

<sup>3</sup>Does not include mines extending into this county from adjoining counties.

<sup>4</sup>This mine extends into Morgan County from Noble County and is not included in the total number of mines.

## 2001 OHIO MINERAL INDUSTRIES REPORT

TABLE 11.—*2001 Ohio coal-mine employment<sup>1</sup>, by occupational group and month*

| Occupational group                            | Number of employees |         |          |       |       |       |       |       |        |           |         |          |          |
|---|---------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|   | Total annual        | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| All production workers                        | 1,587               | 1,536   | 1,515    | 1,508 | 1,538 | 1,575 | 1,640 | 1,566 | 1,608  | 1,626     | 1,661   | 1,687    | 1,582    |
| Underground mines                             | 788                 | 806     | 798      | 790   | 812   | 840   | 862   | 735   | 730    | 763       | 787     | 808      | 728      |
| Surface mines                                 | 799                 | 730     | 717      | 718   | 726   | 735   | 778   | 831   | 878    | 863       | 874     | 879      | 854      |
| Supervisory, technical, and clerical          | 472                 | 502     | 504      | 504   | 501   | 506   | 513   | 417   | 435    | 436       | 439     | 490      | 420      |
| Central preparation plant, central shop, etc. | 390                 | 395     | 393      | 392   | 402   | 393   | 390   | 383   | 397    | 406       | 406     | 358      | 362      |
| Reclamation                                   | 47                  | 39      | 58       | 32    | 43    | 44    | 50    | 41    | 47     | 48        | 44      | 54       | 64       |
| Other <sup>2</sup>                            | 224                 | 246     | 249      | 216   | 223   | 223   | 230   | 221   | 216    | 217       | 222     | 211      | 210      |
| TOTAL   | 2,720               | 2,718   | 2,719    | 2,652 | 2,707 | 2,741 | 2,823 | 2,628 | 2,703  | 2,733     | 2,772   | 2,800    | 2,638    |

<sup>1</sup>Employment was estimated for mines not reporting employment.<sup>2</sup>"Other" includes all employees who are not categorized in any other employment category, such as mobile equipment operators, mechanics, or general outside workers.TABLE 12.—*2001 Ohio coal-mine production employment<sup>1</sup>, by county and month*

| County <sup>2</sup> | Number of employees |         |          |       |       |       |       |       |        |           |         |          |          |
|---------------------|---------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|                     | Monthly average     | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| Athens              | 43                  | 44      | 43       | 43    | 42    | 41    | 42    | 42    | 43     | 43        | 44      | 45       | 46       |
| Belmont             | 430                 | 323     | 337      | 351   | 393   | 402   | 429   | 441   | 456    | 485       | 508     | 516      | 512      |
| Carroll             | 11                  | 8       | 8        | 8     | 8     | 8     | 8     | 8     | 12     | 12        | 17      | 17       | 18       |
| Columbiana          | 16                  | 20      | 17       | 13    | 14    | 17    | 17    | 17    | 17     | 15        | 15      | 13       | 13       |
| Coshcocton          | 3                   | 1       | 1        | 1     | 1     | 1     | 1     | 4     | 4      | 4         | 4       | 6        | 6        |
| Gallia              | 13                  | 12      | 11       | 12    | 12    | 17    | 17    | 18    | 17     | 10        | 11      | 13       | 19       |
| Guernsey            | 1                   | 0       | 0        | 0     | 0     | 0     | 0     | 1     | 2      | 2         | 2       | 2        | 4        |
| Harrison            | 242                 | 210     | 210      | 212   | 221   | 248   | 258   | 251   | 252    | 251       | 252     | 259      | 272      |
| Holmes              | 10                  | 11      | 11       | 11    | 11    | 11    | 12    | 12    | 9      | 9         | 9       | 8        | 8        |
| Jackson             | 91                  | 83      | 84       | 83    | 81    | 81    | 82    | 96    | 100    | 103       | 102     | 100      | 99       |
| Jefferson           | 74                  | 66      | 66       | 70    | 72    | 72    | 69    | 73    | 77     | 78        | 80      | 81       | 87       |
| Mahoning            | 6                   | 6       | 5        | 4     | 5     | 5     | 7     | 6     | 6      | 4         | 5       | 10       | 6        |
| Meigs               | 276                 | 379     | 374      | 372   | 359   | 357   | 355   | 213   | 199    | 199       | 199     | 199      | 100      |
| Morgan              | 24                  | 40      | 18       | 0     | 2     | 1     | 15    | 35    | 35     | 35        | 35      | 35       | 35       |
| Muskingum           | 56                  | 52      | 54       | 54    | 54    | 53    | 58    | 58    | 59     | 59        | 62      | 65       | 43       |
| Noble               | 33                  | 35      | 30       | 27    | 27    | 26    | 27    | 36    | 37     | 36        | 37      | 40       | 40       |
| Perry               | 49                  | 46      | 47       | 44    | 45    | 46    | 47    | 47    | 50     | 53        | 55      | 56       | 56       |
| Stark               | 43                  | 40      | 40       | 41    | 44    | 44    | 43    | 40    | 44     | 41        | 47      | 48       | 47       |
| Tuscarawas          | 53                  | 57      | 55       | 58    | 41    | 39    | 45    | 49    | 62     | 58        | 59      | 60       | 56       |
| Vinton              | 106                 | 96      | 97       | 96    | 100   | 100   | 102   | 112   | 119    | 121       | 111     | 107      | 108      |
| Washington          | 7                   | 7       | 7        | 8     | 6     | 6     | 6     | 7     | 8      | 8         | 7       | 7        | 7        |
| TOTAL               | 1,587               | 1,536   | 1,515    | 1,508 | 1,538 | 1,575 | 1,640 | 1,566 | 1,608  | 1,626     | 1,661   | 1,687    | 1,582    |

<sup>1</sup>Employment was estimated for mines not reporting employment.<sup>2</sup>For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 13.—*2001 Ohio coal-mine employment<sup>1</sup> in central preparation plants, central shops, etc., by county and month*

| County <sup>2</sup> | Number of employees |            |            |            |            |            |            |            |            |            |            |            |            |
|---------------------|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                     | Monthly average     | January    | February   | March      | April      | May        | June       | July       | August     | September  | October    | November   | December   |
| Athens              | 5                   | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 5          |
| Belmont             | 70                  | 70         | 70         | 69         | 72         | 68         | 72         | 74         | 70         | 72         | 69         | 68         | 70         |
| Columbiana          | 11                  | 11         | 11         | 11         | 11         | 11         | 11         | 11         | 11         | 11         | 11         | 11         | 11         |
| Coshcocton          | 26                  | 25         | 25         | 26         | 26         | 26         | 26         | 28         | 25         | 25         | 25         | 25         | 25         |
| Gallia              | 2                   | 2          | 2          | 2          | 2          | 3          | 3          | 3          | 3          | 2          | 2          | 2          | 3          |
| Harrison            | 37                  | 37         | 39         | 38         | 40         | 37         | 32         | 32         | 30         | 39         | 40         | 40         | 42         |
| Jackson             | 29                  | 27         | 27         | 27         | 29         | 29         | 29         | 29         | 29         | 30         | 30         | 30         | 29         |
| Jefferson           | 3                   | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          |
| Mahoning            | 2                   | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          |
| Meigs               | 102                 | 108        | 108        | 108        | 109        | 109        | 109        | 92         | 115        | 115        | 116        | 67         | 67         |
| Morgan              | 12                  | 20         | 17         | 17         | 17         | 14         | 13         | 9          | 9          | 9          | 9          | 9          | 9          |
| Noble               | 7                   | 5          | 4          | 4          | 4          | 4          | 4          | 9          | 9          | 9          | 9          | 9          | 9          |
| Perry               | 5                   | 4          | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 4          | 3          | 5          | 5          |
| Scioto              | 28                  | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 28         |
| Tuscarawas          | 13                  | 12         | 12         | 12         | 11         | 11         | 11         | 14         | 14         | 14         | 16         | 16         | 16         |
| Vinton              | 38                  | 36         | 35         | 35         | 38         | 38         | 37         | 39         | 39         | 39         | 38         | 38         | 38         |
| <b>TOTAL</b>        | <b>390</b>          | <b>395</b> | <b>393</b> | <b>392</b> | <b>402</b> | <b>393</b> | <b>390</b> | <b>383</b> | <b>397</b> | <b>406</b> | <b>406</b> | <b>358</b> | <b>362</b> |

<sup>1</sup>Employment was estimated for mines not reporting employment.<sup>2</sup>For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.TABLE 14.—*2001 Ohio coal-mine employment<sup>1</sup> in supervisory, technical, and clerical positions, by county and month*

| County <sup>2</sup> | Number of employees |            |            |            |            |            |            |            |            |            |            |            |            |
|---------------------|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                     | Monthly average     | January    | February   | March      | April      | May        | June       | July       | August     | September  | October    | November   | December   |
| Athens              | 10                  | 10         | 10         | 10         | 10         | 10         | 10         | 10         | 10         | 10         | 10         | 10         | 10         |
| Belmont             | 165                 | 136        | 140        | 144        | 148        | 150        | 155        | 163        | 172        | 175        | 179        | 232        | 192        |
| Carroll             | 5                   | 5          | 5          | 5          | 5          | 5          | 5          | 5          | 6          | 6          | 6          | 6          | 6          |
| Columbiana          | 8                   | 8          | 8          | 8          | 7          | 8          | 8          | 8          | 8          | 8          | 8          | 8          | 8          |
| Coshcocton          | 16                  | 16         | 16         | 16         | 16         | 16         | 16         | 16         | 16         | 16         | 16         | 16         | 16         |
| Guernsey            | 1                   | 0          | 0          | 0          | 0          | 0          | 0          | 1          | 1          | 1          | 1          | 1          | 1          |
| Harrison            | 32                  | 27         | 27         | 27         | 26         | 28         | 36         | 35         | 35         | 34         | 33         | 36         | 37         |
| Holmes              | 1                   | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |
| Jackson             | 27                  | 26         | 26         | 26         | 26         | 27         | 27         | 27         | 27         | 27         | 28         | 27         | 27         |
| Jefferson           | 8                   | 8          | 8          | 9          | 9          | 9          | 9          | 9          | 8          | 8          | 8          | 8          | 8          |
| Mahoning            | 2                   | 1          | 1          | 1          | 1          | 1          | 2          | 2          | 2          | 2          | 2          | 2          | 2          |
| Meigs               | 113                 | 172        | 170        | 166        | 164        | 163        | 157        | 64         | 68         | 68         | 68         | 68         | 37         |
| Morgan              | 19                  | 24         | 24         | 24         | 24         | 24         | 24         | 15         | 15         | 15         | 15         | 15         | 15         |
| Muskingum           | 2                   | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 1          | 1          |
| Noble               | 9                   | 11         | 11         | 11         | 11         | 11         | 10         | 7          | 7          | 6          | 6          | 6          | 6          |
| Perry               | 3                   | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          | 3          |
| Scioto              | 8                   | 8          | 8          | 7          | 7          | 7          | 7          | 8          | 8          | 8          | 8          | 8          | 8          |
| Stark               | 8                   | 7          | 7          | 7          | 8          | 8          | 8          | 8          | 8          | 8          | 9          | 9          | 9          |
| Tuscarawas          | 10                  | 11         | 11         | 11         | 8          | 8          | 8          | 8          | 13         | 13         | 11         | 8          | 8          |
| Vinton              | 24                  | 25         | 25         | 25         | 24         | 24         | 24         | 24         | 24         | 24         | 24         | 24         | 24         |
| Washington          | 1                   | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |
| <b>TOTAL</b>        | <b>472</b>          | <b>502</b> | <b>504</b> | <b>504</b> | <b>501</b> | <b>506</b> | <b>513</b> | <b>417</b> | <b>435</b> | <b>436</b> | <b>439</b> | <b>490</b> | <b>420</b> |

<sup>1</sup>Employment was estimated for mines not reporting employment.<sup>2</sup>For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

## 2001 OHIO MINERAL INDUSTRIES REPORT

TABLE 15.—*2001 Ohio surface coal-mine reclamation employment<sup>1</sup>, by county and month*

| County <sup>2</sup> | Number of employees |         |          |       |       |     |      |      |        |           |         |          |          |
|---------------------|---------------------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
|                     | Monthly average     | January | February | March | April | May | June | July | August | September | October | November | December |
| Belmont             | 20                  | 17      | 15       | 17    | 18    | 17  | 19   | 19   | 17     | 19        | 20      | 31       | 39       |
| Columbiana          | 3                   | 2       | 2        | 2     | 3     | 3   | 3    | 3    | 3      | 3         | 3       | 3        | 3        |
| Guernsey            | 1                   | 2       | 2        | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| Harrison            | 2                   | 0       | 0        | 0     | 0     | 1   | 5    | 4    | 5      | 4         | 3       | 2        | 1        |
| Jackson             | 2                   | 3       | 3        | 3     | 3     | 3   | 3    | 1    | 1      | 1         | 1       | 1        | 1        |
| Jefferson           | 1                   | 0       | 0        | 0     | 0     | 0   | 1    | 1    | 1      | 1         | 1       | 1        | 3        |
| Morgan              | 9                   | 7       | 25       | 3     | 9     | 7   | 7    | 3    | 9      | 9         | 9       | 9        | 9        |
| Muskingum           | 1                   | 0       | 0        | 0     | 0     | 3   | 3    | 3    | 3      | 3         | 0       | 0        | 0        |
| Noble               | 2                   | 2       | 6        | 1     | 2     | 2   | 2    | 1    | 2      | 2         | 2       | 2        | 2        |
| Stark               | 2                   | 2       | 2        | 2     | 2     | 2   | 2    | 2    | 2      | 2         | 2       | 2        | 2        |
| Tuscarawas          | 2                   | 2       | 1        | 1     | 2     | 2   | 1    | 2    | 2      | 2         | 1       | 1        | 2        |
| Vinton              | 2                   | 2       | 2        | 2     | 3     | 3   | 3    | 2    | 2      | 2         | 2       | 2        | 2        |
| TOTAL               | 47                  | 39      | 58       | 32    | 43    | 44  | 50   | 41   | 47     | 48        | 44      | 54       | 64       |

<sup>1</sup>Employment was estimated for mines not reporting employment.<sup>2</sup>For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.TABLE 16.—*2001 Ohio coal-mine employment<sup>1</sup> in other positions<sup>2</sup>, by county and month*

| County <sup>3</sup> | Number of employees |         |          |       |       |     |      |      |        |           |         |          |          |
|---------------------|---------------------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
|                     | Monthly average     | January | February | March | April | May | June | July | August | September | October | November | December |
| Athens              | 8                   | 8       | 8        | 8     | 8     | 8   | 8    | 8    | 8      | 8         | 8       | 8        | 8        |
| Belmont             | 76                  | 74      | 77       | 71    | 76    | 75  | 79   | 81   | 74     | 74        | 80      | 78       | 79       |
| Columbiana          | 3                   | 3       | 3        | 3     | 3     | 3   | 3    | 3    | 3      | 3         | 3       | 3        | 3        |
| Harrison            | 28                  | 29      | 29       | 28    | 27    | 26  | 26   | 27   | 29     | 30        | 30      | 32       | 30       |
| Jackson             | 20                  | 19      | 19       | 19    | 20    | 20  | 20   | 21   | 21     | 21        | 19      | 19       | 19       |
| Jefferson           | 4                   | 4       | 4        | 4     | 4     | 4   | 4    | 4    | 4      | 4         | 4       | 4        | 4        |
| Meigs               | 38                  | 59      | 59       | 58    | 57    | 58  | 57   | 21   | 21     | 21        | 21      | 10       | 10       |
| Morgan              | 22                  | 25      | 25       | 6     | 7     | 8   | 10   | 30   | 30     | 30        | 30      | 30       | 30       |
| Noble               | 6                   | 8       | 8        | 2     | 2     | 2   | 4    | 8    | 8      | 8         | 8       | 8        | 8        |
| Scioto              | 6                   | 6       | 6        | 6     | 6     | 6   | 6    | 6    | 6      | 6         | 6       | 6        | 6        |
| Stark               | 4                   | 4       | 4        | 4     | 3     | 3   | 3    | 3    | 3      | 3         | 4       | 4        | 4        |
| Vinton              | 9                   | 7       | 7        | 7     | 10    | 10  | 10   | 9    | 9      | 9         | 9       | 9        | 9        |
| TOTAL               | 224                 | 246     | 249      | 216   | 223   | 223 | 230  | 221  | 216    | 217       | 222     | 211      | 210      |

<sup>1</sup>Employment was estimated for mines not reporting employment.<sup>2</sup>"Other positions" includes all employees who do not belong in any other employment category, such as mobile equipment operators, mechanics, or general outside workers.<sup>3</sup>For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 17.—2001 Wage and salary payments to Ohio coal-mine employees, by county and occupational group

| County <sup>1</sup> | Wage and salary payments (nearest whole dollar) <sup>2</sup> |                                  |                              |   |                                      |                    |                     |
|---------------------|--|----------------------------------|------------------------------|---|--------------------------------------|--------------------|---------------------|
|                     | All occupations  | Underground production employees | Surface production employees | Central preparation plant, central shop, etc. | Supervisory, technical, and clerical | Reclamation        | Other               |
| Athens              | \$3,801,578  | \$2,380,975                      |                              | \$290,556                                     | \$865,793                            |                    | \$264,254           |
| Belmont             | 40,834,311   | 13,230,967                       | \$6,242,779                  | 3,425,358                                     | 8,860,463                            | \$973,914          | 8,100,830           |
| Carroll             | 534,468  |                                  | 418,277                      |   | 116,191                              |                    |                     |
| Columbiana          | 1,762,494  | 25,000                           | 713,580                      | 475,947                                       | 336,739                              | 91,228             | 120,000             |
| Coshocton           | 2,365,333  |                                  | 192,987                      | 1,090,983                                     | 1,081,363                            |                    |                     |
| Gallia              | 687,018  |                                  | 574,634                      | 112,384                                       |                                      |                    |                     |
| Guernsey            | 80,077   |                                  | 44,118                       |   | 25,108                               | 10,851             |                     |
| Harrison            | 16,979,319   | 7,624,606                        | 4,326,402                    | 2,333,396                                     | 1,254,754                            | 44,039             | 1,396,122           |
| Holmes              | 353,961  |                                  | 310,000                      |   | 43,961                               |                    |                     |
| Jackson             | 8,075,029  |                                  | 4,522,740                    | 1,331,994                                     | 1,513,059                            | 50,000             | 657,236             |
| Jefferson           | 4,030,889  | 2,184,269                        | 1,066,123                    | 125,073                                       | 497,011                              | 23,391             | 135,022             |
| Mahoning            | 324,976  |                                  | 215,374                      | 77,128  | 32,474                               |                    |                     |
| Meigs               | 30,373,086   | 13,872,812                       |                              | 4,607,800                                     | 9,845,744                            |                    | 2,046,730           |
| Morgan              | 8,400,000  |                                  | 1,900,000                    | 650,000                                       | 2,800,000                            | 550,000            | 2,500,000           |
| Muskingum           | 2,771,844  |                                  | 2,658,141                    |   | 85,000                               | 28,703             |                     |
| Noble               | 3,280,146  |                                  | 1,740,000                    | 560,000                                       | 515,146                              | 115,000            | 350,000             |
| Perry               | 2,693,141  |                                  | 2,300,000                    | 200,000                                       | 193,141                              |                    |                     |
| Scioto              | 1,986,605  |                                  |                              | 982,240                                       | 453,676                              |                    | 550,689             |
| Stark               | 2,430,735  |                                  | 1,876,912                    |   | 395,910                              | 33,087             | 124,826             |
| Tuscarawas          | 2,548,596  |                                  | 1,789,580                    | 497,265                                       | 259,328                              | 2,423              |                     |
| Vinton              | 7,729,427  |                                  | 4,125,074                    | 1,720,307                                     | 1,513,060                            | 50,000             | 320,986             |
| Washington          | 437,580  |                                  | 390,000                      |   | 47,580                               |                    |                     |
| <b>TOTAL</b>        | <b>\$142,480,613</b>   | <b>\$39,318,629</b>              | <b>\$35,406,721</b>          | <b>\$18,480,431</b>                           | <b>\$30,735,501</b>                  | <b>\$1,972,636</b> | <b>\$16,566,695</b> |

<sup>1</sup>For those operations reporting activity in more than one county, wage and salary payments were evenly split between the counties involved unless a by-county breakdown was provided by the operator.

<sup>2</sup>For those operations reporting only a total wage and salary payment to all workers, an equal pay rate was assumed for all employees. In cases where quarterly employment was reported but wage and salary payments were not, wage and salary payments for that quarter were estimated from reported payments in the other quarters to arrive at the annual figure. For mines reporting employment and no wage and salary payments, wage and salary payments were estimated using a countywide or statewide average.



Plant Manager David Conrad (right) and Underground Foreman Tim Miller (left) discuss the underground feeder-crusher unit at the East Fairfield Coal Co. underground limestone mine in Mahoning County.

## INDUSTRIAL MINERALS

Industrial minerals, other than mineral fuels, were produced in a total of 86 Ohio counties in 2001. The combined value of all nonfuel industrial minerals sold in 2001 was \$802,217,295.

In 2001, 442 companies operated 731 industrial-mineral mining operations. Industrial minerals were produced or sold by 307 companies from 495 active operations. Thirty-three of the 307 companies produced more than one industrial mineral from 39 operations, including 7 companies that produced coal and more than one industrial mineral from 9 operations. The remaining 274 companies produced one industrial-mineral commodity.

Of the 39 multiple industrial-mineral operations (including those operations producing coal and more than one industrial-mineral commodity), 9 operations produced sand and gravel and clay; 5 operations produced clay and shale; 7 operations produced limestone and sand and gravel, 5 operations produced limestone and clay; 4 operations produced limestone, clay, and shale; 3 operations produced sandstone and

sand and gravel; 1 operation produced sandstone and clay; 1 operation produced limestone, sand and gravel, and clay; 1 operation produced limestone, sandstone, and shale; 1 operation produced sand and gravel and shale; and 1 operation produced sand and gravel, sandstone, and shale.

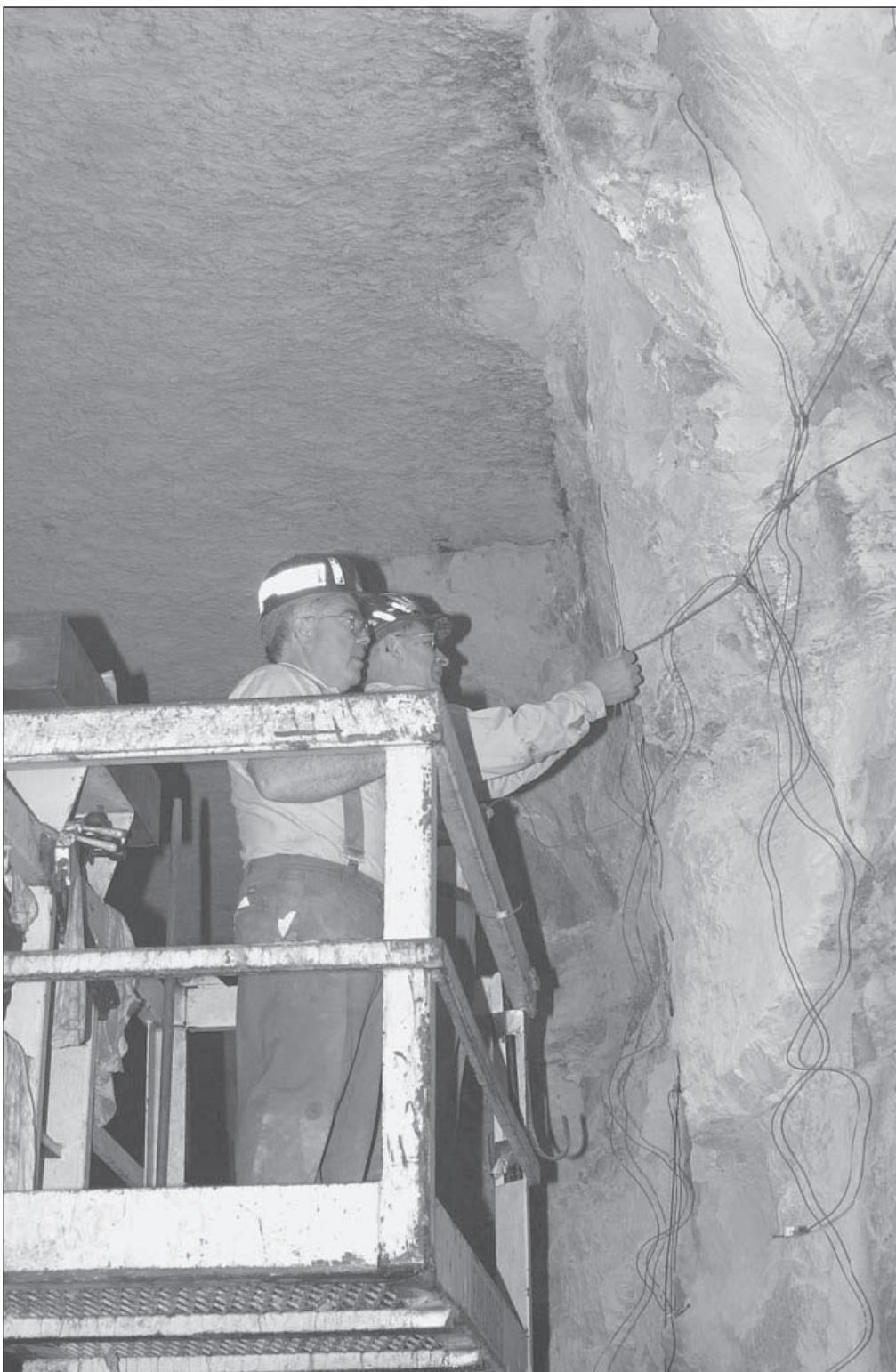
The 250 multiple industrial-mineral-commodity production employees worked an average of 191 days in 2001. Total wages of \$11,421,820 were paid to a total of 395 employees (250 production employees and 145 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$28,916.

The total average annual employment reported in 2001 for industrial mineral operations was 5,504 people (3,883 production employees and 1,621 non-production employees). Total wages for all employees at industrial mineral operations in 2001 were \$217,962,904. The average annual wage, based on those employees for whom wages were reported, was \$39,608.

TABLE 18.—2001 Value of Ohio industrial minerals

| Commodity                  | Sales (tons)       | Change from<br>2000<br>(tons/percent) | Value <sup>1</sup><br>(dollars) | Percent<br>of total<br>value |
|----------------------------|--------------------|---------------------------------------|---------------------------------|------------------------------|
| Limestone and dolomite     | 80,998,236         | +1,057,564/+1.3                       | \$395,585,481                   | 49.2                         |
| Sand and gravel            | 56,829,272         | +1,094,783/+2.0                       | \$263,845,940                   | 32.9                         |
| Salt                       | 4,261,545          | -823,278/-16.2                        | \$89,840,924                    | 11.2                         |
| Sandstone and conglomerate | 1,768,701          | -810,741/-31.4                        | \$38,460,128                    | 4.8                          |
| Clay                       | 1,730,151          | -344,501/-16.6                        | \$7,648,956                     | 1.0                          |
| Shale                      | 1,528,067          | -1,007,158/-39.7                      | \$5,366,308                     | 0.7                          |
| Gypsum                     | 117,003            | -113,134/-49.2                        | \$1,469,558                     | 0.2                          |
| Peat                       | 0                  | -2,004/-100.0                         | \$0                             | 0.0                          |
| <b>TOTAL</b>               | <b>147,232,975</b> | <b>-948,469/-0.6</b>                  | <b>\$802,217,295</b>            | <b>100.0</b>                 |

<sup>1</sup>The FOB value of industrial minerals sold was estimated for those mines which failed to report this information and for those producing material for captive use. These estimates were calculated using a countywide- or statewide-average price per ton based on reported FOB values.



Bob McIntyre and Harold Oesch wire up a shot at the East Fairfield Coal Co. underground limestone mine in Mahoning County. Six to eight faces are shot per day.

**USER HINT:**  
To rotate this page use the "View"  
menu or the rotate buttons  
in the tool bar above.

TABLE 19.—2001 Employment at Ohio industrial mineral operations, by county and commodity

| County <sup>1</sup> | Total employees <sup>3</sup> | Number of employees <sup>2</sup> |                        |                              |                            |                |            |                |            |                      |  |
|---------------------|------------------------------|----------------------------------|------------------------|------------------------------|----------------------------|----------------|------------|----------------|------------|----------------------|--|
|                     |                              | Total <sup>3</sup>               | Limestone and dolomite | Sand and gravel <sup>4</sup> | Sandstone and conglomerate | Clay           | Salt       | Gypsum         | Peat       | Multiple commodities |  |
|                     | Production                   | Non-production                   | Production             | Non-production               | Production                 | Non-production | Production | Non-production | Production | Non-production       |  |
| Adams               | 52                           | 45                               | 7                      | 45                           | 7                          | 1              |            |                |            |                      |  |
| Allen               | 48                           | 36                               | 12                     | 33                           | 11                         | 3              |            |                |            |                      |  |
| Ashland             | 42                           | 23                               | 7                      | 10                           | 5                          | 7              |            |                |            |                      |  |
| Ash Hubbard         | 33                           | 21                               | 16                     | 12                           | 8                          | 6              |            |                |            |                      |  |
| Athens              | 37                           | 21                               | 16                     | 12                           | 8                          | 5              |            |                |            |                      |  |
| Auglaize            | 38                           | 28                               | 10                     | 21                           | 7                          | 6              |            |                |            |                      |  |
| Belmont             | 39                           | 31                               | 8                      | 17                           | 3                          | 2              |            |                |            |                      |  |
| Brown               | 25                           | 23                               | 2                      | 20                           |                            |                |            |                |            |                      |  |
| Butler              | 126                          | 90                               | 36                     |                              |                            |                |            |                |            |                      |  |
| Carroll             | 7                            | 4                                | 3                      |                              |                            |                |            |                |            |                      |  |
| Champaign           | 22                           | 17                               | 5                      |                              |                            |                |            |                |            |                      |  |
| Clark               | 61                           | 48                               | 13                     |                              |                            |                |            |                |            |                      |  |
| Clemont             | 17                           | 10                               | 7                      |                              |                            |                |            |                |            |                      |  |
| Clinton             | 53                           | 31                               | 22                     |                              |                            |                |            |                |            |                      |  |
| Columbiana          | 54                           | 33                               | 21                     |                              |                            |                |            |                |            |                      |  |
| Coshocton           | 88                           | 49                               | 39                     |                              |                            |                |            |                |            |                      |  |
| Crawford            | 37                           | 37                               | 0                      |                              |                            |                |            |                |            |                      |  |
| Cuyahoga            | 262                          | 159                              | 103                    |                              |                            |                |            |                |            |                      |  |
| Darke               | 14                           | 10                               | 4                      |                              |                            |                |            |                |            |                      |  |
| Delaware            | 80                           | 71                               | 9                      |                              |                            |                |            |                |            |                      |  |
| Erie                | 168                          | 131                              | 37                     |                              |                            |                |            |                |            |                      |  |
| Fairfield           | 19                           | 9                                | 10                     |                              |                            |                |            |                |            |                      |  |
| Fayette             | 5                            | 4                                | 1                      |                              |                            |                |            |                |            |                      |  |
| Franklin            | 376                          | 300                              | 76                     |                              |                            |                |            |                |            |                      |  |
| Fulton              | 6                            | 5                                | 1                      |                              |                            |                |            |                |            |                      |  |
| Gallia              | 14                           | 6                                | 8                      |                              |                            |                |            |                |            |                      |  |
| Geauga              | 93                           | 32                               | 61                     |                              |                            |                |            |                |            |                      |  |
| Greene              | 142                          | 98                               | 44                     |                              |                            |                |            |                |            |                      |  |
| Guernsey            | 10                           | 5                                | 5                      |                              |                            |                |            |                |            |                      |  |
| Hamilton            | 194                          | 101                              | 93                     |                              |                            |                |            |                |            |                      |  |
| Hancock             | 32                           | 30                               | 2                      |                              |                            |                |            |                |            |                      |  |
| Hardin              | 12                           | 10                               | 2                      |                              |                            |                |            |                |            |                      |  |
| Harrison            | 4                            | 4                                | 0                      |                              |                            |                |            |                |            |                      |  |
| Highland            | 75                           | 47                               | 28                     |                              |                            |                |            |                |            |                      |  |
| Hocking             | 26                           | 13                               | 13                     |                              |                            |                |            |                |            |                      |  |
| Holmes              | 32                           | 20                               | 12                     |                              |                            |                |            |                |            |                      |  |
| Huron               | 1                            | 1                                | 0                      |                              |                            |                |            |                |            |                      |  |
| Jackson             | 22                           | 16                               | 6                      |                              |                            |                |            |                |            |                      |  |
| Jefferson           | 5                            | 4                                | 1                      |                              |                            |                |            |                |            |                      |  |
| Knox                | 68                           | 46                               | 22                     |                              |                            |                |            |                |            |                      |  |

## INDUSTRIAL MINERALS

<sup>11</sup>For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties unless a by-county breakdown was provided by the operator.

<sup>2</sup>Employment is not included for mines which were owner operated.

<sup>3</sup>Any tally inconsistencies are due to computer rounding.

<sup>4</sup>Employment for Lake Erie sand and gravel dredging operations is included in the total employment figure for the county in which the operation is based.

## LIMESTONE AND DOLOMITE

Limestone and dolomite were sold or produced by 65 companies at 121 operations in 49 Ohio counties during 2001. Sales of limestone and dolomite totaled 80,998,236 tons (+1.3 percent from 2000); Erie, Ottawa, Delaware, Franklin, and Seneca Counties accounted for 39.1 percent of those sales. Reported known production totaled 81,944,288 tons.

Lime produced from Ohio limestone and dolomite totaled 1,360,157 tons in 2001 and came from five operations in Ottawa, Sandusky, Seneca, and Wyandot Counties. Ohio ranks 3rd nationally in the production of lime out of 32 producing states. The top five states, in descending order of lime production, are Missouri, Alabama, Ohio, Kentucky, and Texas. Ohio ranks 5th in the production of crushed stone (which includes crushed sandstone) out of 49 producing states. The top five states in the production of crushed stone, in

descending order, are Texas, Pennsylvania, Florida, Missouri, and Ohio.<sup>4</sup>

The total value<sup>5</sup> of limestone and dolomite sold in 2001 was \$395,585,481. Average price per ton was \$4.88.

An annual average of 1,867 employees worked an average of 219 days to produce limestone and dolomite. Total wages of \$101,971,722 were paid to a total of 2,422 employees (1,867 production employees and 555 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$42,102. An additional 149 people (113 production employees and 36 nonproduction employees) were employed by operations mining limestone and dolomite along with one or more other mineral commodities.

The primary use for crushed and broken limestone and dolomite was road construction/resurfacing. Other major uses for various forms of limestone and dolomite included stone for portland cement concrete and asphaltic concrete, commercial building, and the production of lime.

<sup>4</sup>Information from U.S. Geological Survey.

<sup>5</sup>Includes reported and estimated values. See footnote 1, p. 9.

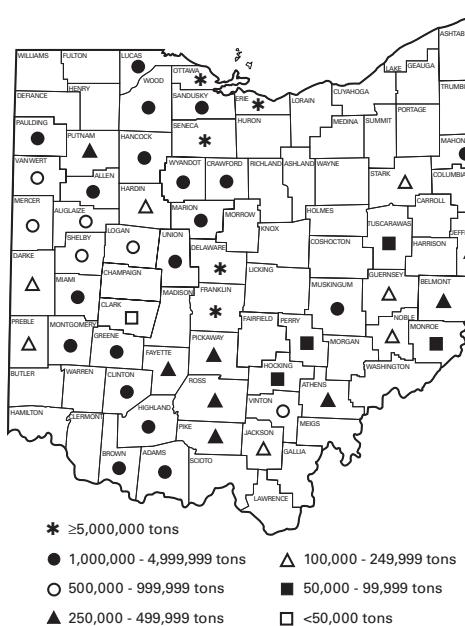


FIGURE 6.—Sales of limestone and dolomite in Ohio in 2001, by county.

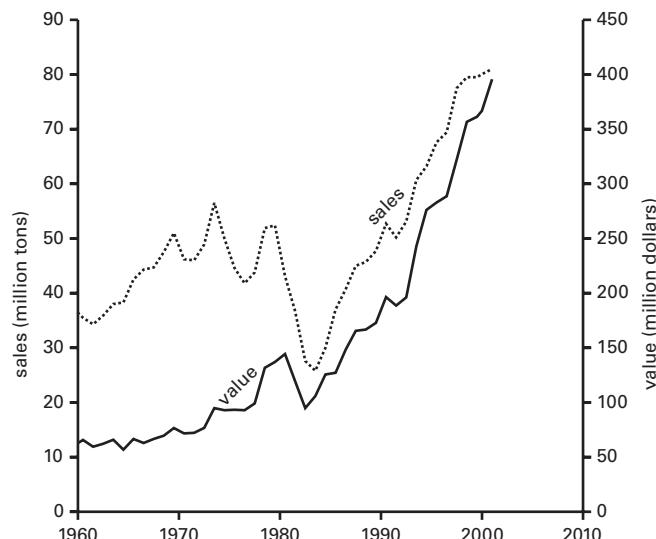


FIGURE 7.—Sales and value of limestone and dolomite in Ohio. Value line dashed where data not available.

TABLE 20.—2001 Production of lime from Ohio stone, by county and type

| County   | Total tons <sup>1</sup> | Building (tons) | Chemical and industrial (tons) | Refractory (tons) | Other (tons) |
|----------|-------------------------|-----------------|--------------------------------|-------------------|--------------|
| Ottawa   | 144,626                 |                 | 102,426                        | 42,200            |              |
| Sandusky | 832,071                 |                 | 782,055                        | 50,016            |              |
| Seneca   | 310,460                 |                 | 310,460                        |                   |              |
| Wyandot  | 73,000                  |                 | 73,000                         |                   |              |
| TOTAL    | 1,360,157               |                 | 1,267,941                      | 92,216            |              |

<sup>1</sup>Burning produced a 55.5 percent weight loss.

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## LIMESTONE AND DOLOMITE

TABLE 21.—*2001 Ohio limestone and dolomite sales, by county and type*

| County     | Total all types | Tons sold |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
|------------|-----------------|-----------|-----------|------------|------------------------------------|------------------------------|--------------------------------|---------------------|------------------|--------------------|--------------------|-----------------|---------------------------------------|-----------------------------|-----------------------|
|            |                 | Total     | Rippap    | Flux stone | Stone for portland cement concrete | Stone for asphaltic concrete | Road construction/ resurfacing | Commercial building | Railroad ballast | Extenders/ fillers | Unspecified/ other | Dimension stone | Stone for portland cement manufacture | Agricultural stone (aglime) | Raw stone for burning |
| Adams      | 1,864,897       | 1,864,897 | 1,190,773 | 1,184,979  | 2,229                              |                              | 233,711                        | 339,040             | 90,546           | 43,971             | 13,000             | 1,650           | 1,864,897                             | 2,900                       | 2,894                 |
| Allen      | 2,73,244        | 2,73,244  | 763,185   | 761,185    | 10,835                             |                              | 158,000                        | 103,346             | 218,004          | 439,695            |                    |                 | 460,832                               | 279,244                     | 2,000                 |
| Auglaize   |                 |           | 450,116   | 450,116    | 10,421                             |                              |                                |                     |                  |                    |                    |                 | 271,000                               |                             |                       |
| Belmont    |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Brown      | 1,284,471       | 1,284,471 | 20,823    | 20,823     | 61,074                             |                              | 300,000                        | 375,000             | 20,823           | 250,000            | 650,000            |                 | 1,284,471                             |                             |                       |
| Clark      | 1,817,706       | 1,800,343 | 2,724,000 | 2,633,000  | 21,000                             | 183,000                      | 704,000                        | 545,000             | 190,000          |                    | 227,000            |                 | 164,269                               | 151                         | 17,212                |
| Clinton    |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    | 953,000         |                                       | 91,000                      |                       |
| Crawford   |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Darke      | 190,000         | 190,000   |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Delaware   | 6,331,624       | 6,326,624 | 27,260    | 23,254     | 700,899                            | 1,210,000                    | 520,923                        | 921,632             | 126,762          |                    |                    | 3,520,047       |                                       |                             |                       |
| Erie       | 8,579,568       | 8,579,568 | 5,173,877 | 5,173,877  | 36,879                             | 452,002                      | 1,120,269                      | 5,243,401           | 230,000          | 19,818             |                    | 1,241,927       |                                       |                             |                       |
| Franklin   |                 |           |           |            |                                    |                              | 501,924                        | 2,320,869           | 1,354,360        |                    |                    | 507,843         |                                       |                             |                       |
| Greene     | 2,073,397       | 1,447,164 | 152,088   |            |                                    | 140,425                      | 10,820                         | 120,919             | 76,044           |                    |                    | 1,175,000       |                                       |                             |                       |
| Gurnsey    |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    | 626,233         |                                       |                             |                       |
| Hancock    | 1,401,000       | 1,401,000 | 1,000     | 1,000      | 153,000                            | 211,000                      | 32,214                         | 169,675             |                  |                    |                    |                 |                                       |                             |                       |
| Hardin     | 2,064,838       | 2,052,042 | 82,786    | 82,786     | 2,934                              | 27,043                       | 401,663                        | 82,786              |                  |                    |                    |                 |                                       |                             |                       |
| Highland   |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Hocking    |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Jackson    | 209,577         | 209,577   |           |            |                                    |                              |                                |                     |                  |                    |                    | 243,000         | 793,000                               | 8,037                       |                       |
| Jefferson  | 112,617         | 112,617   | 14,640    |            | 244,954                            | 150,856                      | 79,984                         | 11,262              | 1,100            |                    |                    | 1,582,348       |                                       | 12,796                      |                       |
| Logan      | 932,696         | 932,696   | 26,240    |            | 117,698                            | 219,475                      | 206,295                        | 206,295             |                  |                    |                    | 209,577         |                                       |                             |                       |
| Lucas      | 3,151,834       | 3,151,834 | 5,870     |            |                                    | 338,127                      | 152,938                        |                     |                  |                    |                    | 565,274         |                                       |                             |                       |
| Mahoning   | 2,233,355       | 1,668,081 |           |            |                                    | 662,177                      |                                |                     |                  |                    |                    | 578,396         |                                       |                             |                       |
| Marion     | 1,172,606       | 1,169,100 | 12,624    |            | 358,809                            | 196,984                      | 22,287                         |                     |                  |                    |                    | 3,506           |                                       |                             |                       |
| Mercer     | 605,358         | 605,358   |           |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Miami      | 1,557,805       | 1,492,899 | 7,209     | 20,515     | 201,541                            | 63,256                       | 806,322                        | 295,255             |                  |                    |                    | 605,358         |                                       |                             |                       |
| Monroe     | 65,174          | 65,174    | 65,174    |            |                                    | 119,599                      | 119,598                        | 491,231             | 119,598          |                    |                    | 249,216         |                                       |                             |                       |
| Montgomery | 1,573,435       | 1,195,250 | 4,019     |            |                                    | 100,000                      | 1,075,747                      | 195,642             |                  |                    |                    | 300,573         |                                       |                             |                       |
| Muskingum  | 2,118,597       | 1,998,999 | 119,599   |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Noble      | 206,177         | 206,177   | 82,956    |            |                                    |                              |                                |                     |                  |                    |                    |                 |                                       |                             |                       |
| Ottawa     | 6,596,975       | 6,280,874 | 32,196    |            |                                    | 771,687                      | 578,907                        | 123,221             | 928,023          | 276,777            | 269,777            | 272,054         |                                       |                             |                       |
| Paulding   | 1,775,302       | 1,018,187 | 82,786    |            |                                    |                              |                                |                     |                  |                    |                    | 1,018,187       |                                       |                             |                       |
| Perry      |                 |           |           |            |                                    |                              |                                |                     |                  |                    |                    | 757,115         |                                       |                             |                       |
| Pickaway   | 405,036         | 405,036   | 1,300     |            |                                    | 75,000                       | 80,000                         | 133,736             | 5,000            |                    |                    | 50,000          |                                       |                             |                       |

TABLE 21.—*2001 Ohio limestone and dolomite sales, by county and type (cont.)*

| County     | Total<br>all<br>types | Tons sold  |         |               |   |                                    |                                      |                        |                     |                       |                            |                    |   |                             |
|------------|-----------------------|------------|---------|---------------|---|------------------------------------|--------------------------------------|------------------------|---------------------|-----------------------|----------------------------|--------------------|---|-----------------------------|
|            |                       | Total      | Riprap  | Flux<br>stone | Stone for<br>portland<br>cement<br>concrete | Stone for<br>asphaltic<br>concrete | Road<br>construction/<br>resurfacing | Commercial<br>building | Railroad<br>ballast | Extenders/<br>fillers | Un-<br>specified/<br>other | Dimension<br>stone | Stone for<br>Portland<br>cement<br>manufac-<br>ture | Raw stone<br>for<br>burning |
| Pike       | 284,125               | 279,881    | 12,606  |               |   |                                    | 267,275                              | 91,135                 |                     |                       |                            | 6,501              |   | 4,244                       |
| Preble     | 111,296               | 104,795    | 13,660  |               |   |                                    | 22,000                               | 205,556                |                     |                       |                            | 139,000            |   |                             |
| Putnam     | 459,712               | 459,712    | 232     |               |   |                                    | 40,000                               | 80,000                 | 266,545             | 2,000                 |                            | 50,000             |   |                             |
| Ross       | 438,545               | 438,545    |         |               |   |                                    | 50,000                               | 820,140                |                     |                       |                            | 158,263            |   |                             |
| Sandusky   | 3,209,191             | 1,108,403  |         |               |   |                                    |                                      |                        |                     |                       |                            | 3,172,278          | 2,802   | 51,361                      |
| Seneca     | 5,048,365             | 4,500,896  | 1,687   |               |   |                                    |                                      | 1,326,931              |                     |                       |                            | 8,145              |   | 2,049,427                   |
| Shelby     | 889,909               | 889,909    | 11,944  |               |   |                                    |                                      | 869,820                |                     |                       |                            |                    |   | 544,667                     |
| Stark      | 207,237               | 207,237    | 15,426  |               |   |                                    |                                      | 191,811                |                     |                       |                            |                    |   |                             |
| Tuscarawas | 81,588                | 81,588     | 42,539  |               |   |                                    |                                      | 37,860                 |                     |                       |                            |                    |   |                             |
| Union      | 2,500,975             | 2,500,975  |         |               |   |                                    |                                      | 875,341                | 325,127             |                       |                            |                    | 175,068   |                             |
| Van Wert   | 676,734               | 676,734    |         |               |   |                                    |                                      | 750,292                |                     |                       |                            |                    |   |                             |
| Vinton     | 531,287               | 531,287    |         |               |   |                                    |                                      | 31,750                 |                     |                       |                            |                    |   |                             |
| Wood       | 2,304,340             | 2,249,485  | 6,860   |               |   |                                    |                                      | 100,000                |                     |                       |                            |                    |   |                             |
| Wyandot    | 4,771,253             | 4,478,368  | 14,482  |               |   |                                    |                                      | 31,750                 |                     |                       |                            |                    |   |                             |
| TOTAL      | 80,998,236            | 74,998,586 | 691,136 | 254,515       | 7,424,281                                   | 7,341,496                          | 22,897,582                           | 6,358,808              | 460,927             | 1,030,228             | 28,539,613                 | 143,966            | 2,249,195   | 549,664                     |
|            |                       |            |         |               |   |                                    |                                      |                        |                     |                       |                            | 3,056,825          |   |                             |

### SAND AND GRAVEL

Sand and gravel were sold or produced by 218 companies at 302 operations in 64 Ohio counties plus Lake Erie during 2001. Sales<sup>6</sup> of sand and gravel totaled 56,829,272 tons (+2.0 percent from 2000). Sand accounted for 31,342,674 tons of the total sand and gravel sold, and gravel accounted for 25,486,498 tons. Butler, Franklin, Hamilton, Stark, and Portage Counties led in sales, accounting for 46.1 percent of the total. Reported known production<sup>6</sup> of sand and gravel totaled 56,848,867 tons in 2001. Ohio ranks 4th nationally in the production of construction sand and gravel out of 50 producing states and Puerto Rico. The top five states, in descending order of production, are California, Texas, Michigan, Ohio, and Arizona. Ohio ranks 9th nationally in the production of industrial sand and gravel out of 37 states. The states leading Ohio in the production of industrial sand and gravel, in descending order, are Illinois, Michigan,

<sup>6</sup>Please note—Sales and production figures for sand include material dredged from Lake Erie.

<sup>7</sup>Information from U.S. Geological Survey.

<sup>8</sup>Includes reported and estimated values. See footnote 1, p. 9.

Wisconsin, California, Texas, New Jersey, North Carolina, and Oklahoma. Ohio ranks 3rd nationally in the production of aggregates, including crushed stone. The top five states, in descending order of aggregate production, are California, Texas, Ohio, Michigan, and Pennsylvania.<sup>7</sup>

A total of 178,012 tons of sand were dredged from Lake Erie in 2001. The Maumee Bay and Maumee River areas are no longer producing sand or gravel.

The total value<sup>8</sup> of sand and gravel sold in 2001 was \$263,845,940. Average price per ton was \$4.64.

An annual average of 1,296 employees worked an average of 184 days in 2001 to produce sand and gravel. Total wages of \$75,837,098 were paid to a total of 1,905 employees (1,296 production employees and 609 non-production employees). The average annual wage, based on those employees for whom wages were reported, was \$39,810. An additional 82 people (61 production employees and 21 nonproduction employees) were employed by operations mining sand and gravel along with one or more other mineral commodities.

Building, asphaltic concrete, portland cement concrete, and road construction/resurfacing were the major uses for Ohio sand and gravel in 2001.

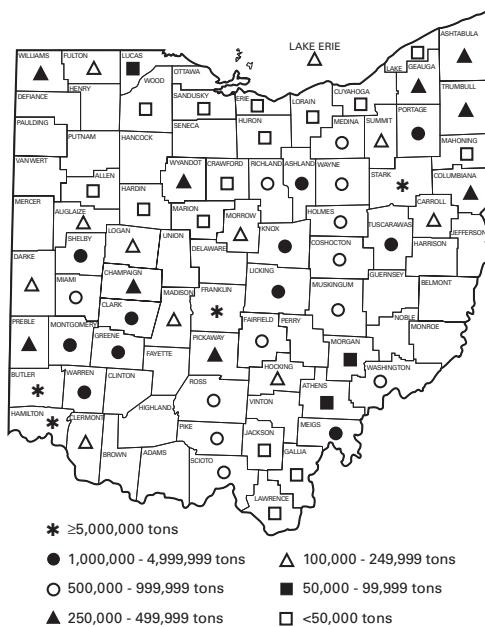


FIGURE 8.—Sales of sand and gravel in Ohio in 2001, by county.

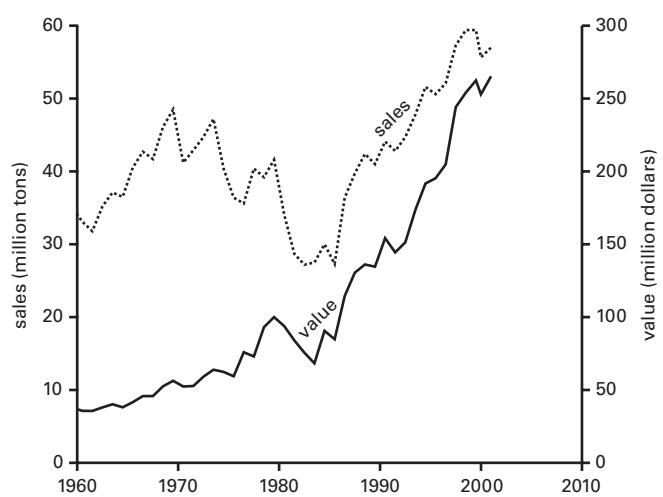


FIGURE 9.—Sales and value of sand and gravel in Ohio. Value line dashed where data not available. Figures from 1984 to 2001 include Lake Erie dredged material.

TABLE 22.—2001 Ohio sand and gravel sales, by county and type

## 2001 OHIO MINERAL INDUSTRIES REPORT

| County     | Total sand and gravel | Total sand | Total gravel | Building  |         |           |           | Portland cement concrete |         | Asphaltic concrete |         | Road construction/ resurfacing |        | Filtration |        | Foundry industrial sand |           | Other/unspecified |        |
|------------|-----------------------|------------|--------------|-----------|---------|-----------|-----------|--------------------------|---------|--------------------|---------|--------------------------------|--------|------------|--------|-------------------------|-----------|-------------------|--------|
|            |                       |            |              | Sand      | Gravel  | Sand      | Gravel    | Sand                     | Gravel  | Sand               | Gravel  | Sand                           | Gravel | Sand       | Gravel | Sand                    | Gravel    | Sand              | Gravel |
| Allen      | 33,482                | 29,718     | 3,764        | 2,740     | 20,422  | 6,386     | 3,266     | 2,065                    | 283,379 | 651,475            | 9,925   | 29,576                         | 7,299  | 5,981      |        |                         | 845       | 1,024             |        |
| Ashland    | 1,755,015             | 561,842    | 1,193,173    | 231,477   | 424,364 | 133,010   | 121,127   | 90,000                   | 6,689   |                    |         |                                |        |            |        | 46,986                  | 114,068   |                   |        |
| Ashtabula  | 405,683               | 244,149    | 161,534      | 133,010   | 121,127 | 10,339    | 12,685    | 5,592                    |         |                    |         |                                |        |            |        | 4,525                   | 10,831    |                   |        |
| Athens     | 51,530                | 38,062     | 13,468       | 43,561    | 1,474   | 3,026     | 18,511    |                          |         |                    |         |                                |        |            |        | 25,377                  | 3,129     |                   |        |
| Auglaize   | 242,805               | 199,244    |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 8,960                   | 28,962    |                   |        |
| Butler     | 6,015,341             | 3,427,974  | 2,587,367    | 428,460   | 692,322 | 80,366    | 55,364    | 78,903                   | 34,371  | 76,151             | 199,679 | 29,719                         |        |            |        | 2,840,245               | 1,605,631 |                   |        |
| Carroll    | 105,870               | 76,151     | 29,719       | 282,177   | 2,200   | 24,276    | 58,632    | 122,422                  | 146,664 | 31,091             | 116,118 | 11,548                         | 14,664 | 13,645     |        | 124,688                 | 257,901   |                   |        |
| Champaign  | 409,065               | 126,888    | 973,891      | 980,662   | 68,010  |           |           |                          |         |                    |         |                                |        |            |        | 736,553                 | 641,337   |                   |        |
| Clark      | 1,954,553             | 139,158    | 71,148       |           |         |           |           |                          |         |                    |         |                                |        |            |        | 71,148                  | 68,010    |                   |        |
| Clermont   |                       |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Columbiana | 284,810               | 131,969    | 152,841      | 38,191    | 62,321  | 28,336    | 39,485    | 63,552                   | 47,159  | 73,418             | 46,728  | 69,420                         | 35,649 | 4,880      | 8,016  | 42,170                  | 46,855    |                   |        |
| Coshocton  | 501,182               | 181,190    | 319,992      | 17,313    | 648     |           |           |                          |         |                    |         |                                |        | 140,509    | 1,397  | 6,416                   | 11,287    |                   |        |
| Crawford   | 648                   |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Cuyahoga   | 22,000                | 22,000     |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 22,000                  |           |                   |        |
| Darke      | 101,925               | 61,000     | 40,925       |           |         |           |           |                          |         |                    |         |                                |        |            |        | 61,000                  | 40,925    |                   |        |
| Erie       | 1,873                 | 1,008      | 865          | 279,041   | 95,371  | 41,873    | 190,742   | 81,746                   |         | 222,532            | 95,371  | 82,655                         | 865    |            |        | 1,008                   |           |                   |        |
| Fairfield  | 922,907               | 643,866    | 2,492,244    | 3,036,502 | 186,678 | 1,125,106 | 1,200,391 | 100,000                  | 876,305 | 801,605            |         |                                | 35,423 | 12,716     | 4,450  | 39,850                  | 20,178    |                   |        |
| Franklin   | 5,528,746             | 2,492,244  | 183,652      | 4,789     | 3,705   |           |           |                          |         |                    |         |                                |        |            |        | 228,870                 | 990,986   |                   |        |
| Fulton     | 183,652               |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 13,268                  |           |                   |        |
| Gallia     | 8,494                 |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 4,789                   |           |                   |        |
| Geauga     | 351,093               | 271,014    | 80,079       | 17,662    | 7,233   | 171,471   |           | 221                      |         | 75,203             |         |                                |        |            |        | 79,520                  | 29,175    |                   |        |
| Greene     | 2,705,023             | 1,514,504  | 1,190,519    | 3,386     | 134,376 | 127,847   | 963,058   | 951,727                  | 151,581 | 151,579            |         |                                |        |            |        | 1,383,271               | 678,289   |                   |        |
| Hamilton   | 5,086,136             | 3,169,242  | 1,916,894    |           |         |           |           |                          |         |                    |         |                                |        |            |        | 1,902,897               | 883,270   |                   |        |
| Hardin     | 100                   |            | 100          |           |         |           |           |                          |         |                    |         |                                |        |            |        | 100                     |           |                   |        |
| Hocking    | 239,416               | 139,016    | 100,400      |           |         |           |           | 8                        | 40,000  | 15,000             | 46,786  | 54,887                         | 13,252 |            |        | 38,978                  | 19,459    |                   |        |
| Holmes     | 648,048               | 371,595    | 276,453      | 8,238     | 104,121 | 243,911   |           | 53,662                   | 36,920  | 29,701             | 34,963  | 52,662                         | 34,254 |            |        | 13,309                  | 17,115    |                   |        |
| Huron      | 56                    | 56         | 56           | 56        | 56      |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Jackson    | 1,066,400             | 506,260    | 560,140      | 110,603   | 141,145 | 179,780   |           | 75,000                   | 185,218 | 163,500            |         | 27,569                         |        |            |        | 30,659                  | 152,926   |                   |        |
| Knox       | 7,494                 | 7,494      | 7,494        | 1,471     |         |           |           |                          |         |                    |         |                                |        |            |        | 5,000                   | 1,471     |                   |        |
| Lake       | 6,471                 | 5,000      |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Lake Erie  | 178,012               | 178,012    | 3,683        | 62,812    | 2,459   | 659,877   | 603,205   | 42,428                   | 6,006   | 22,069             | 76,393  |                                |        |            |        | 8,488                   |           |                   |        |
| Lawrence   | 3,683                 |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Licking    | 1,431,505             | 808,810    | 622,695      | 6,851     |         |           |           |                          |         |                    |         |                                |        |            |        | 8,250                   |           |                   |        |
| Logan      | 170,796               | 94,116     | 76,680       | 9,100     |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Lorain     | 9,100                 |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Lucas      | 53,569                | 53,569     | 51,285       | 135,944   | 911     |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |
| Madison    | 187,229               |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 52,658                  |           |                   |        |
| Mahoning   | 1,380                 | 1,380      |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 51,285                  | 135,944   |                   |        |
| Marion     | 36,369                | 30,164     | 6,205        |           |         |           |           |                          |         |                    |         |                                |        |            |        | 1,380                   |           |                   |        |
| Medina     | 557,431               | 281,182    | 124,714      | 107,192   | 22,791  | 380,085   |           | 16,000                   |         |                    |         |                                |        |            |        | 7,373                   | 6,205     |                   |        |
|            |                       |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 79,357                  | 73,655    |                   |        |
|            |                       |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        | 36,428                  |           |                   |        |
|            |                       |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         | 18,687    |                   |        |
|            |                       |            |              |           |         |           |           |                          |         |                    |         |                                |        |            |        |                         |           |                   |        |

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## SAND AND GRAVEL

|            |             |            |            |           |           |           |           |           |           |           |           |         |         |         |            |           |
|------------|-------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|------------|-----------|
| Meigs      | 1,565,375   | 996,917    | 568,458    | 58,940    | 39,845    | 110,104   | 73,760    | 280,703   | 200,611   | 90,765    | 76,352    | 27,340  | 19,933  | 429,065 | 157,957    |           |
| Miami      | 666,382     | 389,400    | 276,982    |           |           |           |           |           |           |           |           |         |         | 389,400 | 276,982    |           |
| Montgomery | 1,491,080   | 524,511    | 966,569    | 13,658    | 44,599    | 166,216   | 258,400   | 85,882    | 90,997    | 482       | 60,390    | 20,865  | 5,700   | 491,318 |            |           |
| Morgan     | 73,227      | 40,854     | 32,373     | 700       | 1,500     | 1,816     | 3,000     | 800       | 400       |           | 59,427    | 6,233   | 6,894   | 37,538  | 15,773     |           |
| Morrow     | 245,438     | 76,095     | 169,343    | 69,862    | 99,798    |           |           |           |           |           |           |         |         | 3,224   |            |           |
| Muskingum  | 695,810     | 382,705    | 313,105    | 54,695    | 40,649    | 70,362    | 76,225    | 105,257   | 108,096   | 30,490    | 33,812    | 4,691   | 10,081  | 117,210 | 44,242     |           |
| Pickaway   | 420,347     | 210,342    | 210,005    | 12,186    | 50,742    | 100,000   | 50,340    | 62,000    | 60        | 90        | 26,500    | 25,020  | 137     | 47,726  | 70,626     |           |
| Pike       | 559,515     | 432,191    | 127,324    | 338       | 997       | 14,541    |           |           |           |           | 16,884    | 40,039  | 11,085  | 360,389 | 90,222     |           |
| Portage    | 4,499,652   | 3,142,842  | 1,356,810  | 958,423   | 567,483   | 602,739   | 2,360     | 581,439   | 388,611   | 104,793   | 68,840    | 2,000   | 43,225  | 893,448 | 286,291    |           |
| Preble     | 392,248     | 108,543    | 283,705    | 77,177    | 262,431   |           |           |           |           |           | 24        |         |         | 31,366  | 21,250     |           |
| Richland   | 871,823     | 295,281    | 576,542    | 57,498    | 226,459   |           |           |           |           |           |           |         |         |         |            |           |
| Ross       | 564,140     | 309,705    | 254,435    | 58,362    | 48,746    | 54,710    | 32,009    | 140,841   | 58,294    | 116       | 247,041   | 96,826  | 43,602  |         |            |           |
| Sandusky   | 43,800      | 43,000     | 800        |           |           |           |           | 94,799    | 86,234    | 15,073    | 33,743    | 2,312   | 84,449  | 30,039  |            |           |
| Scioto     | 666,860     | 528,035    | 138,825    | 16,516    | 50,046    | 37,904    | 6,781     |           |           |           |           |         |         |         |            |           |
| Shelby     | 1,133,036   | 567,833    | 565,203    | 100,000   | 152,655   |           |           |           |           |           |           |         |         |         |            |           |
| Stark      | 5,041,761   | 2,789,581  | 2,252,180  | 14,677    | 135,816   | 350,767   | 182,732   | 510,608   | 716,061   | 957,081   | 776,485   |         |         | 956,448 | 441,086    |           |
| Summit     | 116,980     | 87,333     | 29,647     | 9,995     |           |           |           |           |           |           |           | 12      |         | 35,314  | 13,087     |           |
| Trumbull   | 274,945     | 251,265    | 23,680     | 98,347    | 23,680    | 100,447   | 322,721   | 147,553   | 137,415   | 33,441    | 181,237   |         |         | 19,030  |            |           |
| Tuscarawas | 2,099,936   | 1,077,352  | 1,022,584  | 350,640   | 990,287   | 21,753    | 70,188    |           |           |           |           |         |         |         | 24,475     | 97,693    |
| Warren     | 1,453,148   | 462,861    |            |           |           |           |           |           |           |           |           |         |         | 441,108 | 920,099    |           |
| Washington | 826,720     | 487,092    | 339,628    | 2,131     |           |           |           |           |           |           |           |         |         |         |            |           |
| Wayne      | 555,723     | 206,787    | 348,936    | 76,773    | 296,385   | 54,800    | 16,129    | 45,909    | 12,864    | 14,454    | 28,782    | 527     | 12,405  | 469,980 | 297,982    |           |
| Williams   | 448,013     | 354,209    | 93,804     | 15,372    | 31,045    | 251,782   |           |           |           |           |           |         |         | 87,055  | 31,070     |           |
| Wood       | 33,260      | 31,700     | 1,560      |           |           |           |           |           |           |           |           |         |         | 62,759  |            |           |
| Wyandot    | 400,721     | 310,570    | 90,151     | 66,517    | 45,606    | 205,330   |           |           |           |           |           |         |         | 2,261   | 17,000     |           |
| TOTAL      | 56,892,9272 | 31,342,674 | 25,486,498 | 5,463,176 | 7,157,492 | 5,669,764 | 1,587,938 | 4,076,946 | 3,355,641 | 2,673,789 | 3,413,164 | 201,982 | 352,627 | 12,405  | 13,221,471 | 9,619,636 |

TABLE 23.—2001 Ohio Lake Erie sand and gravel production

| Area                 | Production <sup>1</sup> |            |            |
|----------------------|-------------------------|------------|------------|
|                      | Cubic yards             | Short tons | Short tons |
| Lake Erie            |                         |            |            |
| Fairport             | 125,750                 | 169,762    |            |
| Vermilion-Lorain "A" | 6,111                   | 8,250      |            |
| Vermilion-Lorain "B" | 0                       | 0          |            |
| TOTAL                | 131,861                 | 178,012    |            |

<sup>1</sup>Production reported in cubic yards; converted to tons in the ratio of 1 cubic yard equals 1.35 short tons.

### SANDSTONE AND CONGLOMERATE

Sandstone and conglomerate were sold or produced by 21 companies at 30 operations in 17 Ohio counties during 2001. Sales totaled 1,768,701 tons (-31.4 percent from 2000). Geauga, Perry, Trumbull, Knox, and Pike Counties accounted for 83.6 percent of the total sales. Crushed sandstone and conglomerate accounted for 1,718,504 tons of the total sales, and dimension stone accounted for 50,197 tons. Reported known production of sandstone and conglomerate was 1,940,869 tons in 2001. Ohio ranks 12th nationally in production of all dimension stone out of 33 producing states. Ohio ranks 3rd in the production of sandstone dimension stone. The top five states, in descending order of total dimension-stone production, are Indiana, Vermont, Minnesota, South Dakota and North

Carolina.<sup>9</sup> National standings for crushed stone are included with Limestone and Dolomite.

The total value<sup>10</sup> of sandstone and conglomerate sold in 2001 was \$38,460,128. Average price per ton was \$20.05 for crushed stone and \$79.63 for dimension stone.

An annual average of 139 employees worked an average of 148 days in 2001 to produce sandstone and conglomerate. Total wages of \$8,035,440 were paid to a total of 240 employees (139 production employees and 101 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$33,481. An additional 15 people (10 production employees and 5 nonproduction employees) were employed by operations mining sandstone and conglomerate along with one or more other mineral commodities.

Crushed stone was used primarily for glass sand, construction, aggregate, foundry sand, and silica flour. Dimension stone was used primarily for rough construction purposes.

<sup>9</sup>Information from U.S. Geological Survey.

<sup>10</sup>Includes reported and estimated values. See footnote 1, p. 9.

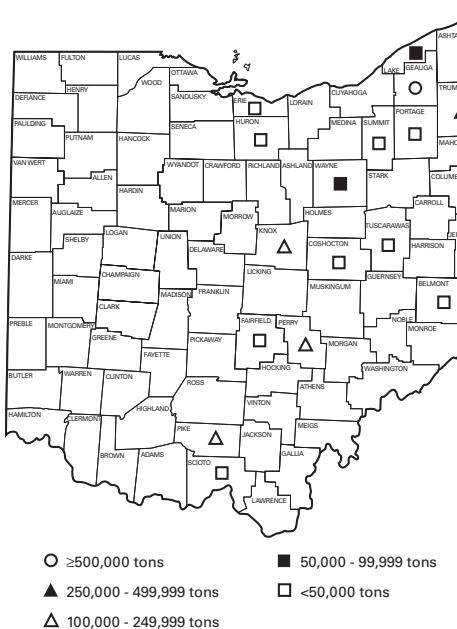


FIGURE 10.—Sales of sandstone and conglomerate in Ohio in 2001, by county.

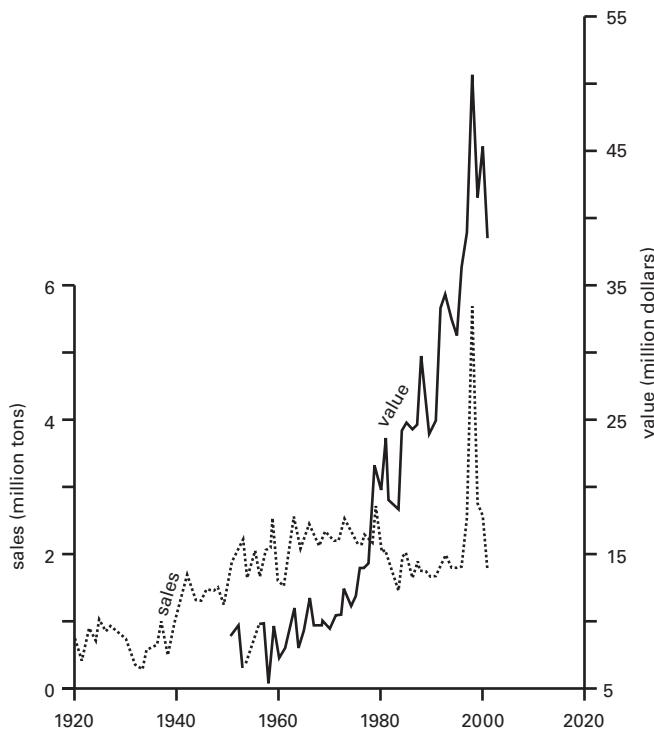


FIGURE 11.—Sales and value of sandstone and conglomerate. Value line dashed where data not available.

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## SANDSTONE AND CONGLOMERATE

TABLE 24.—*2001 Ohio sales of crushed sandstone and conglomerate, by county and type*

| County       | Total            | Foundry sand   | Glass sand     | Metallurgical pebble | Refractory    | Riprap        | Aggregate      | Tons sold                |               |                       |              |                |               |                 |                   |         |
|--------------|------------------|----------------|----------------|----------------------|---------------|---------------|----------------|--------------------------|---------------|-----------------------|--------------|----------------|---------------|-----------------|-------------------|---------|
|              |                  |                |                |                      |               |               |                | Polishing/ grinding sand | Silica flour  | Fire and furnace sand | Engine sand  | Frac sand      | Construction  | Industrial sand | Other/unspecified |         |
| Belmont      | 10,219           |                |                |                      |               | 10,219        | 12,487         | 15,487                   | 48,700        | 8,529                 | 30,017       | 4,284          | 5,216         | 680             | 27,000            |         |
| Columbiana   | 28,654           |                |                |                      |               |               |                |                          |               |                       |              | 6,564          | 126           | 98,636          | 33,891            | 346,478 |
| Fairfield    | 27,000           |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Geauga       | 849,263          | 71,083         | 191,938        | 1,583                | 17,437        |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Knox         | 122,116          |                | 52,347         |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Lake         | 84,352           |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Perry        | 186,340          |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Pike         | 120,378          | 24,931         | 90,207         | 645                  | 1,321         | 5,241         | 4,055          |                          | 50,532        | 89,481                | 53           | 1,055          | 1,411         | 1,752           | 9,296             | 77,270  |
| Portage      | 35,639           |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Summit       | 3,196            |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Trumbull     | 160,524          |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Tuscarawas   | 14,250           | 12,750         |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| Wayne        | 76,573           |                |                |                      |               |               |                |                          |               |                       |              |                |               |                 |                   |         |
| <b>TOTAL</b> | <b>1,718,504</b> | <b>108,764</b> | <b>335,137</b> | <b>2,904</b>         | <b>26,733</b> | <b>25,902</b> | <b>194,719</b> | <b>98,010</b>            | <b>30,070</b> | <b>11,903</b>         | <b>6,753</b> | <b>293,485</b> | <b>97,737</b> | <b>486,387</b>  |                   |         |

TABLE 25.—*2001 Ohio sales of dimension sandstone, by county and type*

| County       | Total         | Refractory | Rough construction | Rubble    | Grindstones | Rough architectural | Finished | Tons sold    |          |                   |
|--------------|---------------|------------|--------------------|-----------|-------------|---------------------|----------|--------------|----------|-------------------|
|              |               |            |                    |           |             |                     |          | Curbings     | Flagging | Other/unspecified |
| Coshocton    | 23,919        |            | 23,919             | 1,134     | 44          |                     |          |              |          |                   |
| Erie         | 6,878         |            |                    | 3,716     |             |                     |          |              |          |                   |
| Huron        | 3,716         |            |                    | 2,243     |             |                     |          |              |          |                   |
| Knox         | 2,243         |            |                    | 13,440    |             |                     |          |              |          |                   |
| Scioto       | 13,440        | 1          |                    |           |             |                     |          |              |          |                   |
| Trumbull     |               |            |                    |           |             |                     |          |              |          |                   |
| <b>TOTAL</b> | <b>50,197</b> |            | <b>44,452</b>      | <b>44</b> |             |                     |          | <b>5,700</b> |          | <b>1</b>          |

## CLAY

Clay was sold or produced by 40 companies at 50 operations in 27 Ohio counties during 2001. Clay sales (including material for captive use) totaled 1,730,151 tons (-16.6 percent from 2000); Tuscarawas, Columbiana, Ottawa, Stark, and Paulding Counties accounted for 57.5 percent of the total sales. National rankings for clay are included with Shale.

<sup>11</sup>Includes reported and estimated values. See footnote 1, p. 9.



FIGURE 12.—Clay sales in Ohio in 2001, by county.

Reported known production of clay was 1,730,172 tons. The total value<sup>11</sup> of clay sold (including material for captive use) in 2001 was \$7,648,956. Average price per ton was \$4.42.

An annual average of 25 employees worked an average of 118 days in 2001 mining clay. Total wages of \$866,371 were paid to a total of 41 employees (25 production employees and 16 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$21,131. An additional 93 people (62 production employees and 31 nonproduction employees) were employed by operations mining clay along with one or more other mineral commodities.

Clay mined in Ohio in 2001 was used largely for captive use in the landfill industry and the production of common clay products.

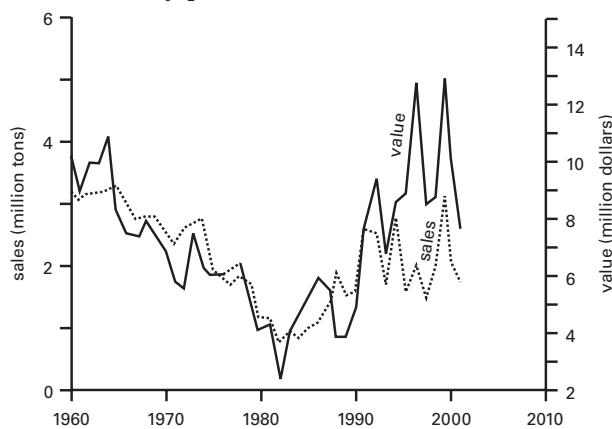


FIGURE 13.—Sales and value of clay in Ohio.  
Value line dashed where data not available.

TABLE 26.—2001 Ohio clay sales, by county and type

| County       | Tons sold        |                      |           |                    |                    |              |               |                  |                    |
|--------------|------------------|----------------------|-----------|--------------------|--------------------|--------------|---------------|------------------|--------------------|
|              | Total            | Common clay products | Stoneware | Vitrified products | Cement manufacture | Refractories | Construction  | Landfill use     | Other/ unspecified |
| Ashtabula    | 9,505            |                      |           |                    |                    |              | 9,505         |                  |                    |
| Athens       | 1,060            |                      |           |                    |                    |              | 1,060         |                  |                    |
| Auglaize     | 5,554            | 5,554                |           |                    |                    |              |               |                  |                    |
| Brown        | 51,161           |                      |           |                    |                    |              |               |                  |                    |
| Columbiana   | 246,609          | 77,531               |           | 117,655            | 3,138              |              | 285           | 51,161<br>48,000 |                    |
| Cuyahoga     | 30,489           | 30,489               |           |                    |                    |              |               |                  |                    |
| Fairfield    | 33,335           |                      |           |                    |                    |              |               | 33,335           |                    |
| Geauga       | 728              |                      |           |                    |                    |              | 728           |                  |                    |
| Greene       | 89,954           |                      |           |                    | 396                |              |               |                  | 89,558             |
| Holmes       | 3,119            | 3,119                |           |                    |                    |              |               |                  |                    |
| Jackson      | 48,105           | 44,989               |           |                    |                    |              |               |                  | 3,116              |
| Licking      | 60,650           |                      |           |                    |                    |              |               | 60,650           |                    |
| Logan        | 120,923          |                      |           |                    |                    |              |               | 120,923          |                    |
| Lucas        | 69,255           |                      |           |                    |                    |              |               | 69,255           |                    |
| Madison      | 32               |                      |           |                    |                    |              |               |                  | 32                 |
| Mahoning     | 84,328           |                      |           |                    |                    |              |               |                  |                    |
| Mercer       | 20,725           |                      |           |                    |                    |              |               | 20,725           |                    |
| Muskingum    | 67,086           | 32,586               |           |                    |                    |              |               | 34,500           |                    |
| Ottawa       | 153,177          |                      |           |                    |                    |              |               | 153,177          |                    |
| Paulding     | 132,036          |                      |           |                    |                    |              |               |                  |                    |
| Perry        | 31,903           | 31,903               |           |                    |                    |              |               |                  |                    |
| Portage      | 2,186            |                      |           |                    |                    |              | 2,186         |                  |                    |
| Preble       | 1,696            |                      |           |                    |                    |              | 1,696         |                  |                    |
| Stark        | 140,942          | 20,265               |           | 11,590             |                    |              |               |                  |                    |
| Tuscarawas   | 321,293          | 282,873              |           | 38,420             |                    |              |               |                  |                    |
| Wayne        | 4,155            |                      |           |                    |                    |              | 4,155         |                  |                    |
| Williams     | 145              | 145                  |           |                    |                    |              |               |                  |                    |
| <b>TOTAL</b> | <b>1,730,151</b> | <b>529,454</b>       |           | <b>167,665</b>     | <b>152,434</b>     | <b>4,428</b> | <b>18,555</b> | <b>700,813</b>   | <b>156,802</b>     |

### SHALE

Shale was sold or produced by 23 companies at 30 operations in 19 Ohio counties during 2001. Shale sales (including material for captive use) totaled 1,528,067 tons (-39.7 percent from 2000); Hamilton, Tuscarawas, Cuyahoga, Marion, and Mahoning Counties accounted for 83.2 percent of the total sales. Reported known production of shale in 2001 was 1,494,767 tons. Ohio ranks 5th nationally in the production of common clay and shale out of 42 producing states. The top five states, in descending order of production, are North Carolina, Texas, Alabama,

<sup>12</sup>Information from U.S. Geological Survey.

<sup>13</sup>Includes reported and estimated values. See footnote 1, p. 9.

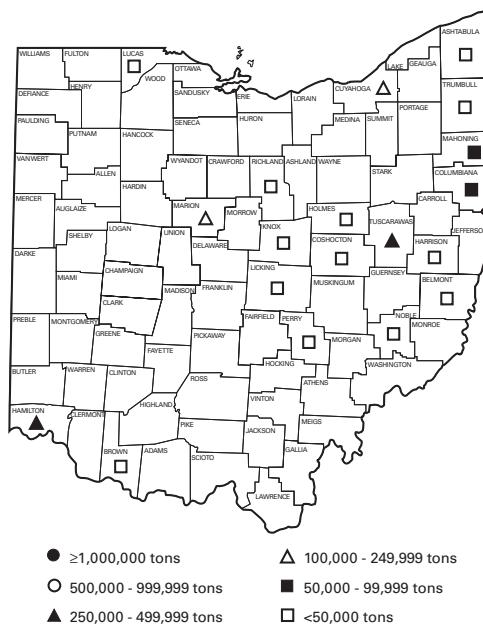


FIGURE 14.—Shale sales in Ohio in 2001, by county.

Georgia, and Ohio.<sup>12</sup> The total value<sup>13</sup> of shale sold (including material for captive use) in 2001 was \$5,366,308. Average price per ton was \$3.51.

An annual average of 25 employees worked an average of 181 days in 2001 mining shale. Total wages of \$1,904,705 were paid to a total of 55 employees (25 production employees and 30 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$34,631. An additional 72 people (45 production employees and 27 nonproduction employees) were employed by operations mining shale along with one or more other mineral commodities.

Shale mined in Ohio was largely for captive use in the landfill industry, in the production of common clay products, and for lightweight aggregate.

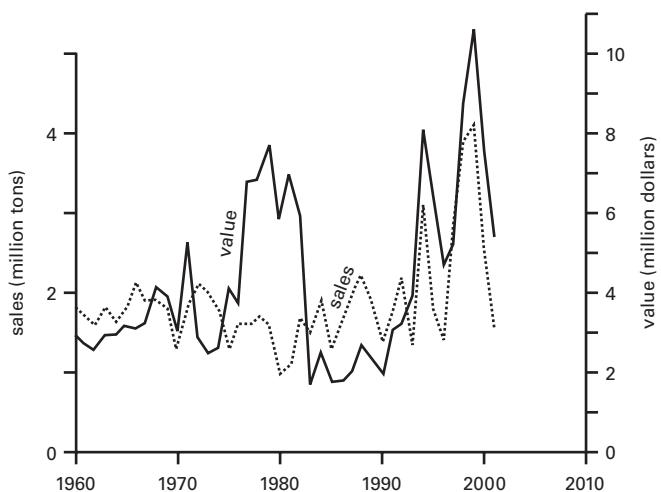


FIGURE 15.—Sales and value of shale in Ohio.  
Value line dashed where data not available.

TABLE 27.—2001 Ohio shale sales, by county and type

| County       | Tons sold        |                      |                    |                    |                       |               |                |                   |
|--------------|------------------|----------------------|--------------------|--------------------|-----------------------|---------------|----------------|-------------------|
|              | Total            | Common clay products | Vitrified products | Cement manufacture | Lightweight aggregate | Construction  | Landfill use   | Other/unspecified |
| Ashtabula    | 200              |                      |                    |                    | 200                   |               |                |                   |
| Belmont      | 171              |                      |                    |                    |                       | 171           |                |                   |
| Brown        | 49,113           |                      |                    |                    |                       |               | 49,113         |                   |
| Columbiana   | 64,433           |                      |                    |                    |                       |               |                | 28,253            |
| Coshocton    | 561              |                      |                    |                    |                       |               |                |                   |
| Cuyahoga     | 245,658          |                      |                    |                    |                       |               |                |                   |
| Hamilton     | 442,201          |                      |                    |                    |                       |               |                |                   |
| Harrison     | 30,512           |                      |                    |                    |                       |               |                |                   |
| Holmes       | 5,059            |                      |                    |                    |                       |               |                |                   |
| Knox         | 2,700            |                      |                    |                    |                       |               |                |                   |
| Licking      | 20,723           |                      |                    |                    |                       |               |                |                   |
| Lucas        | 852              |                      |                    |                    |                       |               |                |                   |
| Mahoning     | 66,174           |                      |                    |                    |                       |               |                |                   |
| Marion       | 207,762          |                      |                    |                    |                       |               |                |                   |
| Noble        | 160              |                      |                    |                    |                       |               |                |                   |
| Perry        | 41,710           |                      |                    |                    |                       |               |                |                   |
| Richland     | 15,189           |                      |                    |                    |                       |               |                |                   |
| Trumbull     | 25,000           |                      |                    |                    |                       |               |                |                   |
| Tuscarawas   | 309,889          |                      |                    |                    |                       |               |                |                   |
| <b>TOTAL</b> | <b>1,528,067</b> | <b>659,978</b>       | <b>5,500</b>       | <b>66,174</b>      | <b>271,419</b>        | <b>13,023</b> | <b>483,720</b> | <b>28,253</b>     |

## SALT

Salt was produced by 3 companies at 5 operations in 5 Ohio counties during 2001. Total tonnage of salt sold in 2001 amounted to 4,261,545 tons (-16.2 percent from 2000). Rock salt sales totaled 3,432,102 tons from 2 underground mines, one each in Cuyahoga and Lake Counties. Three brining operations, one each in Licking, Summit, and Wayne Counties, sold a total of 6,144 tons of salt in brine and 823,299 tons of evaporated salt. Reported known production of salt was 4,518,513 tons in 2001. The top five salt-producing states nationally are Louisiana, Texas, New York, Ohio, and Kansas.<sup>14</sup>

The total value<sup>15</sup> of the salt sold in 2001 was \$89,840,924. Average price per ton of rock salt was \$19.17 and of salt in brine and evaporated salt was \$27.79. The average price per ton of all salt sold was \$21.08.

An annual average of 270 employees worked an average of 268 days in 2001 to produce salt. Total wages of \$17,729,768 were paid to a total of 434 employees (270 production employees and 164 non-production employees). The average annual wage,

based on those employees for whom wages were reported, was \$40,852. The primary use for Ohio salt was ice control. Salt also was used as an additive in animal feed, for cattle blocks, and as a commercial and residential water-softening agent.

## GYPSUM

Gypsum was produced by 1 company at 1 operation in Ottawa County during 2001. Gypsum production and sales (all material was for captive use) totaled 117,003 tons (-49.2 percent from 2000). The reported value<sup>16</sup> of the gypsum sold was \$1,469,558. Average price per ton was \$12.56. Ohio ranks 16th nationally in the production of gypsum out of 19 producing states. The top five states, in descending order of production, are Oklahoma, Iowa, Nevada, Michigan, and Texas.<sup>14</sup>

An annual average of 3 employees worked 180 days in 2001 producing gypsum. Total wages of \$195,980 were paid to a total of 4 employees (3 production employees and 1 nonproduction employee). The average annual wage in 2001 was \$48,995. The sole use of gypsum from this operation is for the manufacture of wallboard. The quarry and wallboard plant were closed July 31, 2001.

## PEAT

No peat was produced or sold in Ohio during 2001.

<sup>14</sup>Information from U.S. Geological Survey.

<sup>15</sup>Includes reported and estimated values. See footnote 1, p. 9.

<sup>16</sup>Includes estimated values only. See footnote 1, p. 9.

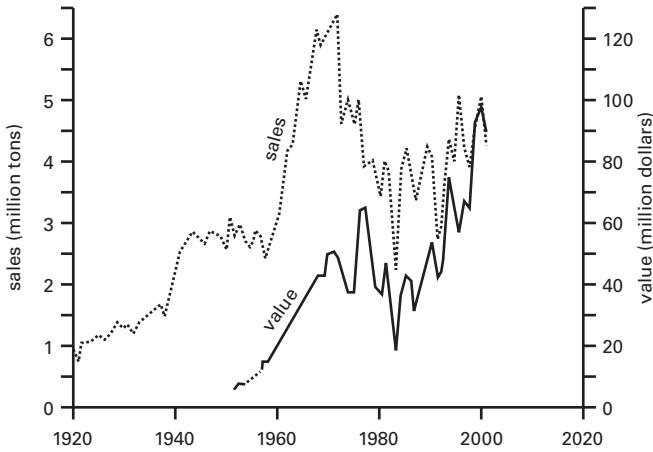


FIGURE 16.—Sales and value of salt in Ohio. Value line dashed where data not available.

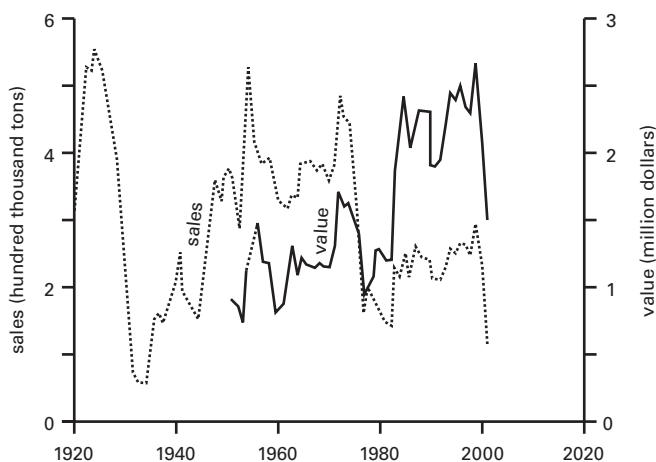


FIGURE 17.—Sales and value of gypsum in Ohio. Value line dashed where data not available. Some figures were calculated because actual figures were not reported in order to maintain confidentiality.

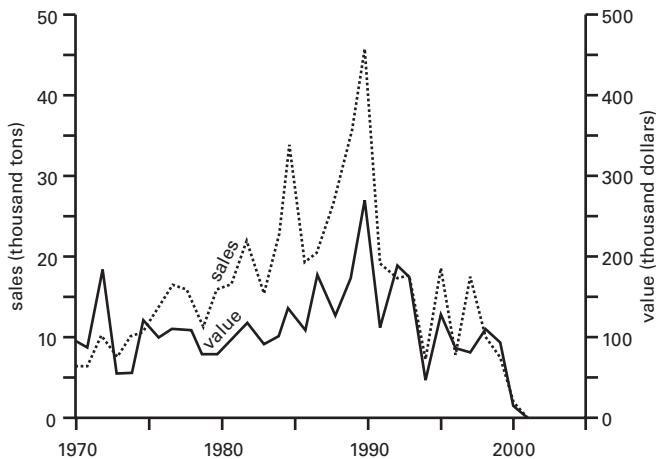


FIGURE 18.—Sales and value of peat in Ohio.



FIGURE 19.—Counties producing salt and gypsum in Ohio in 2001, and their ranking in sales. There was no peat production in Ohio in 2001.



A Gradall XL 5110 scaler is operated by Jason Julian at the East Fairfield Coal Co. underground limestone mine in Mahoning County. The face, ribs, and roof are scaled to remove the loose rock. The scaler follows after the loader has "mucked out" a shot face and the operator has made sure that the room is safe to enter for drilling and loading. The scaler and the roof-bolter make sure that there is no loose rock that may be a hazard to workers.

## OIL AND GAS

*This information is summarized from the 2001 Ohio Department of Natural Resources, Division of Mineral Resources Annual Report.*

The Division of Mineral Resources Management estimates that 677 wells were drilled in 2001, an increase of 113 wells from 2000. Wells were drilled in 42 of Ohio's 88 counties, an increase of 4 counties from 2000. The top 10 counties in number of new wells drilled in 2001 were Muskingum (64), Noble (50), Stark (46), Wayne (46), Ashtabula (40), Coshocton (40), Washington (39), Tuscarawas (34), Lawrence (31), and Mahoning (28). The Division received 600 well completion reports; 512 wells were productive and 88 were dry holes for a completion rate of 85.3 percent.

The total reported crude oil production in Ohio in 2001 was 6,049,524 barrels, an 8.0 percent decrease from 2000. Through 2001, Ohio wells have produced 1,087,214,722 barrels of crude oil. The dollar value of crude oil produced in Ohio in 2001 was \$132,121,604,

a decrease of 24.9 percent. Average price per barrel in 2001 was \$21.84, an 18.4 percent decrease from the 2000 price.

Natural gas production in Ohio in 2001 was 98,255,015 MCF, a 0.3 percent decrease from 2000. This production figure includes an estimated 1,982,550 MCF of gas used on the lease. Through 2001, Ohio wells have produced 7,728,654,086 MCF of natural gas. The dollar value of natural gas produced in Ohio in 2001 was \$441,459,782 an increase of 10.5 percent from 2000. The value of the estimated volume of gas used on the lease was not used in computing the total dollar value. The average price per MCF in 2001 was \$4.43, an increase of \$0.43 per MCF from 2000.

The combined total value of Ohio oil and gas production in 2001 was \$573,581,386, a decrease of 0.3 percent from 2000.

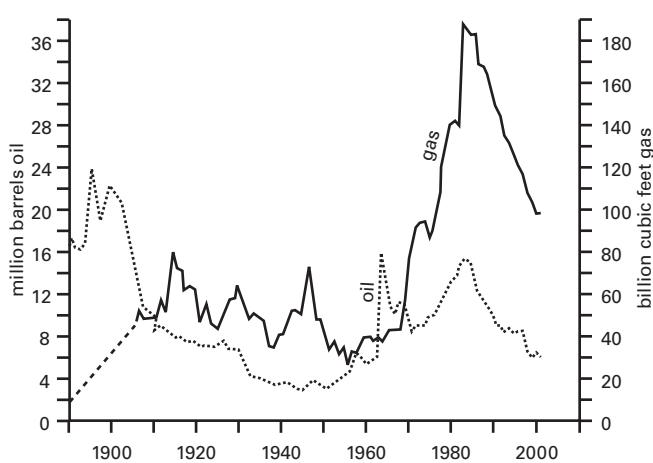


FIGURE 20.—Production of oil and gas in Ohio.

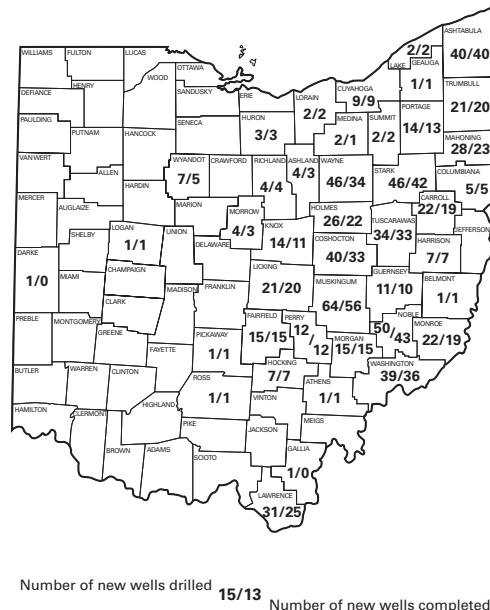


FIGURE 21.—New wells drilled for oil and gas in 2001, by county.

TABLE 28.—2001 Ohio summary of new oil and gas well completions by county

| County <sup>1</sup> | Development wells |     | Exploratory wells |     | Total wells | Percent productive | Drilled footage |         |           |
|---------------------|-------------------|-----|-------------------|-----|-------------|--------------------|-----------------|---------|-----------|
|                     | Productive        | Dry | Productive        | Dry |             |                    | Productive      | Dry     | Total     |
| Ashland             | 2                 | 1   | 0                 | 0   | 3           | 66.67              | 3,602           | 2,981   | 6,583     |
| Ashtabula           | 24                | 7   | 7                 | 2   | 40          | 77.50              | 138,715         | 50,226  | 188,941   |
| Athens              | 1                 | 0   | 0                 | 0   | 1           | 100.00             | 1,665           | 0       | 1,665     |
| Belmont             | 1                 | 0   | 0                 | 0   | 1           | 100.00             | 2,300           | 0       | 2,300     |
| Carroll             | 16                | 0   | 2                 | 1   | 19          | 94.74              | 88,460          | 1,024   | 89,484    |
| Columbiana          | 5                 | 0   | 0                 | 0   | 5           | 100.00             | 4,202           | 0       | 4,202     |
| Coshocton           | 25                | 4   | 3                 | 1   | 33          | 84.85              | 120,558         | 30,644  | 151,202   |
| Cuyahoga            | 9                 | 0   | 0                 | 0   | 9           | 100.00             | 30,133          | 0       | 30,133    |
| Fairfield           | 9                 | 5   | 0                 | 1   | 15          | 60.00              | 35,807          | 23,493  | 59,300    |
| Geauga              | 0                 | 1   | 0                 | 0   | 1           | 0.00               | 0               | 4,205   | 4,205     |
| Guernsey            | 5                 | 3   | 2                 | 0   | 10          | 70.00              | 45,828          | 15,076  | 60,904    |
| Harrison            | 6                 | 1   | 0                 | 0   | 7           | 85.71              | 29,219          | 5,600   | 34,819    |
| Hocking             | 2                 | 2   | 2                 | 1   | 7           | 57.14              | 15,317          | 14,187  | 29,504    |
| Holmes              | 16                | 4   | 1                 | 1   | 22          | 77.27              | 70,905          | 28,807  | 99,712    |
| Huron               | 2                 | 0   | 1                 | 0   | 3           | 100.00             | 11,958          | 0       | 11,958    |
| Knox                | 8                 | 0   | 1                 | 2   | 11          | 81.82              | 29,348          | 10,526  | 39,874    |
| Lake                | 1                 | 0   | 0                 | 1   | 2           | 50.00              | 2,950           | 5,807   | 8,757     |
| Lawrence            | 25                | 0   | 0                 | 0   | 25          | 100.00             | 55,889          | 0       | 55,889    |
| Licking             | 11                | 2   | 5                 | 2   | 20          | 80.00              | 55,072          | 20,246  | 75,318    |
| Logan               | 0                 | 0   | 0                 | 1   | 1           | 0.00               | 0               | 1,800   | 1,800     |
| Lorain              | 0                 | 0   | 0                 | 2   | 2           | 0.00               | 0               | 9,250   | 9,250     |
| Mahoning            | 23                | 0   | 0                 | 0   | 23          | 100.00             | 124,160         | 0       | 124,160   |
| Medina              | 0                 | 0   | 0                 | 1   | 1           | 0.00               | 0               | 5,855   | 5,855     |
| Monroe              | 19                | 0   | 0                 | 0   | 19          | 100.00             | 50,694          | 0       | 50,694    |
| Morgan              | 15                | 0   | 0                 | 0   | 15          | 100.00             | 75,313          | 0       | 75,313    |
| Morrow              | 1                 | 2   | 0                 | 0   | 3           | 33.33              | 3,203           | 7,416   | 10,619    |
| Muskingum           | 42                | 6   | 6                 | 2   | 56          | 85.71              | 245,095         | 49,551  | 294,646   |
| Noble               | 43                | 0   | 0                 | 0   | 43          | 100.00             | 240,049         | 0       | 240,049   |
| Perry               | 7                 | 3   | 0                 | 2   | 12          | 58.33              | 16,707          | 20,913  | 37,620    |
| Pickaway            | 0                 | 0   | 0                 | 1   | 1           | 0.00               | 0               | 2,686   | 2,686     |
| Portage             | 13                | 0   | 0                 | 0   | 13          | 100.00             | 70,286          | 0       | 70,286    |
| Richland            | 1                 | 2   | 1                 | 0   | 4           | 50.00              | 5,842           | 6,903   | 12,745    |
| Ross                | 0                 | 0   | 0                 | 1   | 1           | 0.00               | 0               | 3,317   | 3,317     |
| Stark               | 41                | 1   | 0                 | 0   | 42          | 97.62              | 226,422         | 7,532   | 233,954   |
| Summit              | 2                 | 0   | 0                 | 0   | 2           | 100.00             | 8,439           | 0       | 8,439     |
| Trumbull            | 20                | 0   | 0                 | 0   | 20          | 100.00             | 99,441          | 0       | 99,441    |
| Tuscarawas          | 26                | 2   | 4                 | 1   | 33          | 90.91              | 164,609         | 21,982  | 186,591   |
| Washington          | 36                | 0   | 0                 | 0   | 36          | 100.00             | 178,877         | 0       | 178,877   |
| Wayne               | 20                | 11  | 0                 | 3   | 34          | 58.82              | 88,392          | 72,830  | 161,222   |
| Wyandot             | 0                 | 0   | 0                 | 5   | 5           | 0.00               | 0               | 10,859  | 10,859    |
| TOTAL               | 477               | 57  | 35                | 31  | 600         | 85.33              | 2,339,457       | 433,716 | 2,773,173 |

<sup>1</sup> One well was drilled but not completed in both Darke and Gallia Counties in 2001. No wells were drilled in these counties in 2001: Adams, Allen, Auglaize, Brown, Butler, Campaign, Clark, Clermont, Clinton, Crawford, Defiance, Delaware, Erie, Fayette, Franklin, Fulton, Greene, Hamilton, Hancock, Hardin, Henry, Highland, Jackson, Jefferson, Lucas, Madison, Marion, Meigs, Mercer, Miami, Montgomery, Ottawa, Paulding, Pike, Preble, Putnam, Sandusky, Scioto, Seneca, Shelby, Union, Van Wert, Vinton, Warren, Williams, Wood.

## 2001 OHIO MINERAL INDUSTRIES REPORT

TABLE 29.—*2001 Ohio summary of new oil and gas well completions by geologic unit*

| Geologic unit                         | No. of producing wells | No. of dry holes | Total no. of wells | Percent productive | Total footage |
|---------------------------------------|------------------------|------------------|--------------------|--------------------|---------------|
| Pennsylvanian undifferentiated        | 15                     | 0                | 15                 | 100.00             | 12,931        |
| Upper Mississippian undifferentiated  | 2                      | 0                | 2                  | 100.00             | 2,840         |
| Lower Mississippian "1st & 2nd Berea" | 28                     | 2                | 30                 | 93.33              | 42,611        |
| Devonian                              |                        |                  |                    |                    |               |
| Ohio Shale                            | 25                     | 0                | 25                 | 100.00             | 65,686        |
| Oriskany                              | 5                      | 2                | 7                  | 71.43              | 26,139        |
| Silurian                              |                        |                  |                    |                    |               |
| Bass Islands                          | 2                      | 0                | 2                  | 100.00             | 3,692         |
| "Clinton-Medina"                      | 330                    | 7                | 337                | 97.92              | 1,614,850     |
| Lower Ordovician                      |                        |                  |                    |                    |               |
| "Utica"-“Gull River”                  | 5                      | 4                | 9                  | 55.56              | 35,208        |
| Beekmantown                           | 20                     | 3                | 23                 | 86.96              | 152,995       |
| Cambrian-Ordovician                   |                        |                  |                    |                    |               |
| Rose Run                              | 60                     | 44               | 104                | 57.69              | 596,835       |
| Cambrian                              |                        |                  |                    |                    |               |
| Trempealeau                           | 20                     | 22               | 42                 | 47.62              | 205,951       |
| Kerbel-Mt. Simon                      | 0                      | 4                | 4                  | 0.00               | 13,435        |
| TOTAL                                 | 512                    | 88               | 600                | 85.33              | 2,773,173     |

TABLE 30.—*Ohio counties<sup>1</sup> and their state mine number abbreviations<sup>2</sup>*

| <i>County</i> | <i>Abbreviation</i> | <i>County</i> | <i>Abbreviation</i> | <i>County</i> | <i>Abbreviation</i> |
|---------------|---------------------|---------------|---------------------|---------------|---------------------|
| Adams         | Ads                 | Hamilton      | Hmn                 | Noble         | Ne                  |
| Allen         | An                  | Hancock       | Hk                  | Ottawa        | Oa                  |
| Ashland       | Ald                 | Hardin        | Hdn                 | Paulding      | Pg                  |
| Ashtabula     | Asa                 | Harrison      | Hn                  | Perry         | Py                  |
| Athens        | As                  | Henry         | Hy                  | Pickaway      | Pky                 |
| Auglaize      | Ae                  | Highland      | Hd                  | Pike          | Pke                 |
| Belmont       | Bt                  | Hocking       | Hg                  | Portage       | Pe                  |
| Brown         | Bn                  | Holmes        | Hs                  | Preble        | Pre                 |
| Butler        | Br                  | Huron         | Hrn                 | Putnam        | Pm                  |
| Carroll       | Cl                  | Jackson       | Jkn                 | Richland      | Rd                  |
| Champaign     | Cpn                 | Jefferson     | Jfn                 | Ross          | Rs                  |
| Clark         | Ck                  | Knox          | Kx                  | Sandusky      | Sy                  |
| Clermont      | Ct                  | Lake          | Lke                 | Scioto        | So                  |
| Clinton       | Cln                 | Lawrence      | Le                  | Seneca        | Sa                  |
| Columbiana    | Ca                  | Licking       | Lg                  | Shelby        | Shy                 |
| Coshocton     | Cn                  | Logan         | Lgn                 | Stark         | Sk                  |
| Crawford      | Cd                  | Lorain        | Ln                  | Summit        | St                  |
| Cuyahoga      | Cya                 | Lucas         | Ls                  | Trumbull      | Tl                  |
| Darke         | Dke                 | Madison       | Mdn                 | Tuscarawas    | Ts                  |
| Defiance      | De                  | Mahoning      | Mg                  | Union         | Un                  |
| Delaware      | Del                 | Marion        | Mn                  | Van Wert      | Vt                  |
| Erie          | Ee                  | Medina        | Ma                  | Vinton        | Vn                  |
| Fairfield     | Fd                  | Meigs         | Ms                  | Warren        | Wan                 |
| Fayette       | Fe                  | Mercer        | Mr                  | Washington    | Wn                  |
| Franklin      | Fn                  | Miami         | Mi                  | Wayne         | We                  |
| Fulton        | Ftn                 | Monroe        | Me                  | Williams      | Ws                  |
| Gallia        | Ga                  | Montgomery    | My                  | Wood          | Wd                  |
| Geauga        | Gea                 | Morgan        | Mon                 | Wyandot       | Wt                  |
| Greene        | Ge                  | Morrow        | Mw                  |               |                     |
| Guernsey      | Gy                  | Muskingum     | Mum                 |               |                     |

<sup>1</sup>Defiance and Henry Counties reported no production or sales of mineral commodities in 2001.<sup>2</sup>As used for state mine numbers.

## 2001 COAL COMPANIES WITH SALES OR PRODUCTION

| Company                               | Number of mines | Production (tons) | Sales (tons)      |
|---------------------------------------|-----------------|-------------------|-------------------|
| AEP Ohio Coal, L.L.C.                 | 1 <sup>1</sup>  | 271,604           | 226,905           |
| American Energy Corp.                 | 1               | 481,219           | 468,346           |
| Anthony Mining Co., Inc.              | 1               | 140,081           | 140,081           |
| B & N Coal, Inc.                      | 6               | 549,855           | 549,855           |
| Belden Brick Co.                      | 3               | 37,117            | 37,117            |
| Bennoc, Inc.                          | 1               | 27,845            | 27,485            |
| Blue Jay Enterprises of Ts. Co., Inc. | 1               | 1,769             | 1,769             |
| Buckeye Industrial Mining Co.         | 9               | 578,903           | 578,903           |
| Buckingham Coal Co., Inc.             | 1               | 1,248,192         | 1,241,897         |
| C & E Coal, Inc.                      | 1               | 28,764            | 28,764            |
| CONSOL Energy, Inc.                   | 5               | 2,839,529         | 2,673,564         |
| Central Ohio Coal Co.                 | 1 <sup>2</sup>  | 156,605           | 156,605           |
| Cravat Coal Co.                       | 4               | 648,099           | 647,954           |
| D. & D. Mining Co.                    | 1               | 423               | 423               |
| Daron Coal Co., Inc.                  | 1               | 429,544           | 427,919           |
| ENZ, Inc.                             | 1               | 266,134           | 266,134           |
| ESSROC Cement Corp.                   | 1               | 3,569             | 3,569             |
| East Fairfield Coal Co.               | 1               | 3,219             | 3,219             |
| F. & M. Coal Co.                      | 1               | 23,756            | 23,756            |
| Franklin Mineral                      | 1               | 7,604             | 7,604             |
| Harrison Mining Corp.                 | 1               | 1,791,010         | 1,496,173         |
| Holmes Limestone Co.                  | 8               | 661,084           | 661,084           |
| K.C.C.I.                              | 1               | 5,174             | 5,174             |
| Kimble Clay & Limestone Co.           | 8 <sup>3</sup>  | 417,108           | 417,108           |
| L & M Mineral Co.                     | 1               | 9,382             | 9,382             |
| Marietta Coal Co.                     | 11              | 594,648           | 594,152           |
| Myers Mining                          | 1               | 36,341            | 36,341            |
| Ohio River Collieries, Inc.           | 1               | 2,611             | 3,093             |
| Ohio Valley Coal Co.                  | 1               | 4,611,287         | 4,618,129         |
| Oxford Mining Co., Inc                | 10              | 3,128,508         | 3,128,508         |
| Sands Hill Coal Co., Inc.             | 8               | 1,263,668         | 1,263,668         |
| Schaney Mining                        | 2               | 10,961            | 10,961            |
| Schiappa Coal Co., Inc.               | 1               | 120,422           | 120,422           |
| Sidwell Materials, Inc.               | 2               | 27,188            | 27,188            |
| Southern Ohio Coal Co.                | 2 <sup>4</sup>  | 2,432,869         | 2,407,770         |
| State Line Resources, Inc.            | 2               | 23,431            | 23,431            |
| Sterling Mining Co.                   | 3               | 465,404           | 465,404           |
| Thompson Bros. Mining Co.             | 1               | 10,087            | 10,087            |
| Valley Mining, Inc.                   | 5               | 539,425           | 539,425           |
| Varkony Mining Co.                    | 1               | 4,384             | 4,384             |
| Waterloo Coal Co., Inc.               | 4               | 1,891,720         | 1,891,720         |
| <b>TOTAL: 41 companies</b>            | <b>111</b>      | <b>25,790,543</b> | <b>25,245,473</b> |

<sup>1</sup>This mine was operated by Harrison Mining Corp. January through October 2001 and is not included in the total number of mines.

<sup>2</sup>This mine was operated by CONSOL Energy, Inc., July through December 2001 and is not included in the total number of mines.

<sup>3</sup>One of these mines was operated by Marietta Coal Co. January through May 2001 and is not included in the total number of mines.

<sup>4</sup>These mines were operated by CONSOL Energy, Inc., July through December 2001 and are not included in the total number of mines.

**2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS***For those mines for which a state mine number has not been assigned, a letter designation is used (example: Bt-C).**The designation (u) following the map-location number indicates an underground mine.**To convert short tons to metric tons, multiply the given tonnage by 0.907185.*

| Name, address, telephone number, and president/ owner/ manager of company  | Name of mine (and map location number)   | County  | 2001 production (tons)   | State mine number   | Mining and reclamation permit number   |
|--|--|---|--|---|--|
| AEP Ohio Coal, L.L.C.<br>P.O. Box 176<br>Cadiz, OH 43907<br>740-942-8220<br>C. A. Ebetino, Jr., pres.                  | Nelms Mine-Cadiz Portal (580) (u)  | Harrison  | 271,604  | Hn-710 <sup>1</sup>   | D-0426   |
| American Energy Corp.<br>43521 Mayhugh Hill Rd., TR 88<br>Beallsville, OH 43950<br>740-926-9152<br>Robert Moore, pres. | Century Mine (890) (u)   | Belmont   | 481,219  | Bt-67   | D-0425   |
| Anthony Mining Co., Inc.<br>P.O. Box 1298<br>Steubenville, OH 43952<br>740-765-4185<br>Albert Carapellotti, pres.      | Lions Club (844)   | Jefferson   | 140,081  | Jfn-AN  | D-1173   |
| B & N Coal, Inc.<br>P.O. Box 100<br>Dexter City, OH 45727<br>740-783-3575<br>Carl Baker, Jr., pres.                    | Ullman (514)<br>Lee (627)<br>Estadt (760)<br>Barnes Ridge (799)<br>Friday (866)<br>Shilling (493)  | Noble<br>Noble<br>Noble<br>Noble<br>Noble<br>Washington                                       | 104,291<br>35,819<br>16,904<br>257,926<br>36,163<br>98,752                           | Ne-151<br>Ne-155<br>Ne-BN<br>Ne-BN2<br>Ne-BN3<br>Ne-1008                        | D-0807<br>D-0958<br>D-1038<br>D-1122<br>D-1194<br>D-0706                               |
| Belden Brick Co.<br>P.O. Box 20910<br>Canton, OH 44701<br>330-852-2424<br>Robert F. Belden, pres.                      | Moomaw Pit (667)<br>Belden Pit (261)<br>Wallick Pit (720)  | Tuscarawas<br>Tuscarawas<br>Tuscarawas  | 16,096<br>2,121<br>18,900  | Ts-1517<br>Ts-1646<br>Ts-1841   | IM-46<br>IM-44<br>IM-45  |
| Bennoc, Inc.<br>P.O. Box 208<br>Morristown, OH 43759<br>740-782-1330<br>Larry Conway, pres.                            | Bennoc, Inc. (832)   | Belmont   | 27,845   | Bt-BE   | D-1159   |
| Blue Jay Enterprises of Ts. Co., Inc.<br>P.O. Box 641<br>Zoar, OH 44697<br>330-874-2048<br>Leland D. Ervin, pres.      | Blue Jay #1 (828)  | Tuscarawas  | 1,769  | Ts-BJ   | IM-1285  |
| Buckeye Industrial Mining Co.<br>P.O. Box 389<br>Lisbon, OH 44432<br>330-337-9511<br>John C. Grisham, pres.            | Starkey (897)<br>Mountain Spring #11 (790) (u)<br>Ingledue (856)<br>Snyder Deep Mine #10 (876) (u)<br>Close (802)<br>Anthony (877)<br>Finnie (878)<br>Baird (907)<br>Henning (908) | Carroll<br>Columbiana<br>Columbiana<br>Jefferson<br>Stark<br>Stark<br>Stark<br>Stark<br>Stark | 39,902<br>1,900<br>161,260<br>141,906<br>8,325<br>28,074<br>89,210<br>107,624<br>702 | Cl-B2<br>Ca-1003<br>Ca-B1<br>Jfn-BI<br>Sk-B<br>Sk-B2<br>Sk-B3<br>Sk-B5<br>Sk-B6 | D-2103<br>D-0928<br>D-2003<br>D-1180<br>D-1123<br>D-2048<br>D-2062<br>D-2096<br>D-2129 |
| Buckingham Coal Co., Inc.<br>P.O. Box 157<br>Glouster, OH 45732-0157<br>740-767-9902<br>James F. Graham, pres.         | Buckingham Mine No. 2 (851) (u)  | Athens  | 1,248,192  | As-B  | D-1163   |

<sup>1</sup>This mine was operated January through October 2001 by Harrison Mining Corp. and November and December 2001 by AEP Ohio Coal, L.L.C.

**2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/ owner/ manager of company  | Name of mine (and map location number)   | County  | 2001 production (tons)                               | State mine number  | Mining and reclamation permit number  |
|--|--|---|--|--|---|
| C & E Coal, Inc.<br>P.O. Box 333<br>Lisbon, OH 44432<br>330-424-3739<br>Amos L. Rawson, pres.  | Dailey Pit (895)   | Columbiana  | 28,764   | Ca-CE2   | D-2097  |
| CONSOL Energy, Inc.<br>1800 Washington Rd.<br>Pittsburgh, PA 15241-1421<br>412-831-4000<br>J. Brett Harvey, pres. & CEO              | Mahoning Valley Mine 937 (150)<br>Dozer Pit (899)<br>Meigs Mine #31 (300) (u)<br>Meigs Mine #2 (213) (u)<br>Muskingum Mine (228) | Harrison<br>Harrison<br>Meigs<br>Meigs<br>Morgan, Noble | 377,299<br>95,726<br>748,057<br>1,110,424<br>508,023 | Hn-700<br>Hn-CON<br>Ms-293 <sup>2</sup><br>Ms-294 <sup>2</sup><br>Ne-41 <sup>3</sup> | D-51, D-54, D-334,<br>D-414, D-784<br>D-2100<br>D-0354, D-0463<br>D-0355<br>D-0678, D-1034,<br>D-1084, D-2047 |
| Central Ohio Coal Co.<br>P.O. Box 98<br>Cumberland, OH 43732-0098<br>740-962-2013<br>Gary Dimmerling, gen. mgr.                      | Muskingum Mine (228)   | Morgan, Noble   | 156,605  | Ne-41 <sup>3</sup>   | D-0678, D-1034,<br>D-1084, D-2047   |
| Cravat Coal Co.<br>40580 Cadiz-Piedmont Rd.<br>Cadiz, OH 43907<br>740-942-4656<br>Michael T. Puskarich, pres.                        | Hendrysburg (884)<br>Johnen (891)<br>Poplar Ridge (900)<br>Prokes (903)  | Belmont<br>Belmont<br>Harrison<br>Jefferson             | 284,852<br>326,368<br>2,512<br>34,367                | Bt-C2<br>Bt-C3<br>Hn-C4<br>Jfn-C   | D-2028<br>D-2087<br>D-2131<br>D-2095  |
| D. & D. Mining Co.<br>3379 E. Garfield Rd.<br>New Springfield, OH 44443<br>330-549-3127<br>Donald Thompson, pres.                    | D. & D. Strip (441)  | Columbiana  | 423  | Ca-348   | D-1002  |
| Daron Coal Co., Inc.<br>42600 Deersville Ridge Rd.<br>Cadiz, OH 43907<br>740-942-8223<br>Chuck Ungurean, pres.                       | Standingstone Mine (860)   | Harrison  | 429,544  | Hn-D   | D-1181  |
| ENZ, Inc.<br>P.O. Box 405<br>Magnolia, OH 44643<br>330-866-4510<br>James R. Demuth, pres.  | Sickafoose Pit (246)   | Stark   | 266,134  | Sk-208   | D-1015  |
| ESSROC Cement Corp.<br>P.O. Box 779<br>Bessemer, PA 16112<br>724-667-7702<br>George Gregory, pres.                                   | Bessemer Pit (625)   | Mahoning  | 3,569  | Mg-608   | IM-4  |
| East Fairfield Coal Co.<br>10900 South Ave.<br>P.O. Box 217<br>North Lima, OH 44452-0217<br>330-549-2165<br>W. Thomas Mackall, pres. | Withers-Petersburg (846)   | Mahoning  | 3,219  | Mg-E   | IM-1103   |
| F & M. Coal Co.<br>3925 County Rd. 56<br>Toronto, OH 43964<br>740-544-5203<br>Edward Fiala, partner                                  | F. & M. Strip (826)  | Jefferson   | 23,756   | Jfn-FM   | D-1147  |

<sup>2</sup>This mine was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.<sup>3</sup>This mine was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

## 2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)   | County  | 2001 production (tons)  | State mine number  | Mining and reclamation permit number   |
|--|--|---|---|--|--|
| Franklin Mineral<br>P.O. Box 207<br>Dundee, OH 44624<br>330-827-3135<br>Thomas Flynn, pres.                            | Franklin Mineral Kohl Pit 1 (880)  | Tuscarawas  | 7,604   | Ts-F   | D-1189   |
| Harrison Mining Corp.<br>P.O. Box 176<br>Cadiz, OH 43907<br>740-942-8220<br>Donn A. Chichering, pres.                  | Nelms Mine-Cadiz Portal (580) (u)  | Harrison  | 1,791,010   | Hn-710 <sup>4</sup>  | D-0426   |
| Holmes Limestone Co.<br>P.O. Box 295<br>Berlin, OH 44610<br>330-893-2721<br>Merle Mullet, pres.                        | Plainfield (898)<br>Miley-Patterson (874)<br>Walnut Creek (841)<br>Bolivar (363)<br>E. Canton-Thomas (879)<br>Dennison-R & F (723)<br>Stone Creek-Spring (850)<br>Stone Creek-Costain (881)  | Coshocton<br>Coshocton<br>Holmes<br>Stark<br>Stark<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas  | 14,653<br>49,163<br>141,190<br>57,405<br>139,432<br>96,547<br>1,302<br>161,392                            | Cn-H2<br>Cn-HL1<br>Hs-H1<br>Sk-235<br>Sk-H1<br>Ts-2043<br>Ts-H4<br>Ts-H5   | D-2115<br>D-2019<br>D-1176<br>D-0865<br>D-2011<br>D-1047<br>D-1149<br>D-0533                                       |
| K.C.C.I.<br>P.O. Box 1298<br>Steubenville, OH 43952<br>740-543-4389<br>David Krulock, pres.                            | Apex (796)   | Jefferson   | 5,174   | Jfn-K  | IM-1164  |
| Kimble Clay & Limestone Co.<br>3596 State Route 39 W<br>Dover, OH 44622-9801<br>330-343-1226<br>Keith B. Kimble, pres. | Kimble Clay & Limestone Co. (262)<br>Kimble Clay & Limestone Co. (598)<br>Kimble Clay & Kimestone Co. (888)<br>Kimble Clay & Limestone Co. (784)<br>Kimble Clay & Limestone Co. (830)<br>Kimble Clay & Limestone Co. (868)<br>Kimble Clay & Limestone Co. (909)<br>Kimble Clay & Limestone Co. (910) | Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas                        | 33,265<br>6,179<br>54,089<br>1,377<br>1,823<br>89,165<br>214,356<br>16,854                                | Ts-1727<br>Ts-2019<br>Ts-H6<br>Ts-K4<br>Ts-K5<br>Ts-K6<br>Ts-K7<br>Ts-M <sup>5</sup>                             | IM-9<br>D-0852<br>D-1188<br>D-1079<br>D-1133<br>D-1183<br>D-2079<br>D-2066   |
| L & M Mineral Co.<br>5205 State Route 39<br>Millersburg, OH 44654<br>330-893-2227<br>John E. Ling, Jr., pres.          | Luikart (267)  | Tuscarawas  | 9,382   | Ts-1914  | D-0701   |
| Marietta Coal Co.<br>67705 Friends Church Rd.<br>St. Clairsville, OH 43950<br>740-695-2197<br>Michael Jamison, pres.   | Refuse Site (424)<br>Hostettler-Hapapuro (810)<br>Fairpoint (892)<br>Johnson-Wozniak (812)<br>McGraw (833)<br>Senakiewich (852)<br>Mauersberger (870)<br>St. Joe (871)<br>Krulock-Hannan (872)<br>Cochran/SWAD (57)<br>Linden Valley (910)   | Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont<br>Tuscarawas | 499<br>112,793<br>31,502<br>53,627<br>157,182<br>17,008<br>46,224<br>43,120<br>31,046<br>86,801<br>14,846 | Bt-1150<br>Bt-1171<br>Bt-M10<br>Bt-M4<br>Bt-M7<br>Bt-M8<br>Bt-M9<br>Bt-MC<br>Bt-MC1<br>Bt-P<br>Ts-M <sup>5</sup> | D-0478, D-0597<br>D-0674<br>D-2124<br>D-1135<br>D-1171<br>D-1190<br>D-2075<br>D-2055<br>D-2077<br>D-0500<br>D-2066 |
| Myers Mining<br>P.O. Box 218<br>Carrollton, OH 44615<br>330-739-2009<br>Benjamin A. Erb, owner                         | Harlem #7 (854)  | Carroll   | 36,341  | Cl-M2  | D-2014   |

<sup>4</sup>This mine was operated January through October 2001 by Harrison Mining Corp. and November and December by AEP Ohio Coal, L.L.C.<sup>5</sup>This mine was operated January through May 2001 by Marietta Coal Company and June through December 2001 by Kimble Clay & Limestone Co.

**2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/ owner/ manager of company   | Name of mine (and map location number)  | County  | 2001 production (tons)   | State mine number   | Mining and reclamation permit number   |
|---|---|---|--|---|--|
| Ohio River Collieries, Inc.<br>P.O. Box 128<br>Bannock, OH 43972<br>740-968-3582<br>Anthony Gentile, pres.                                  | 7400 Sulek (27)   | Belmont   | 2,611  | Bt-1074   | D-0340   |
| Ohio Valley Coal Co.<br>56854 Pleasant Ridge Rd.<br>Alledonia, OH 43902<br>740-926-1351<br>John Forrelli, pres.                             | Powhatan No. 6 (3) (u)  | Belmont   | 4,611,287  | Bt-68   | D-0360   |
| Oxford Mining Co., Inc.<br>544 Chestnut St.<br>P.O. Box 427<br>Coshocton, OH 43812<br>740-622-6302<br>Charles C. Ungurean, pres.            | Jeffco (567)<br>Boswell (885)<br>Egypt Valley East (893)<br>Oxford Mining Co., Inc. (894)<br>Martin (901)<br>McConnell (886)<br>Camp (887)<br>Adamsville (905)<br>Adamsville East (906)<br>Z-Mack (764) | Belmont<br>Belmont<br>Belmont<br>Belmont<br>Belmont, Harrison<br>Harrison<br>Muskingum<br>Muskingum<br>Muskingum<br>Perry | 207,729<br>364,265<br>22,902<br>274,796<br>119,348<br>386,082<br>550,388<br>115,961<br>34,899<br>1,052,138 | Bt-1186<br>Bt-OX<br>Bt-OX1<br>Bt-OX2<br>Hn-O<br>Hn-OX<br>Mum-OX<br>Mum-OX1<br>Mum-OX2<br>Py-O | D-0877<br>D-0676<br>D-0680<br>D-2122<br>D-2121<br>D-2022<br>D-1196<br>D-2008<br>D-2110<br>D-1086 |
| Sands Hill Coal Co., Inc.<br>P.O. Box 650<br>Hamden, OH 45634-0650<br>740-384-4211<br>Alan C. Arthur, pres.                                 | Coal Valley (787)<br>Coal Valley (875)<br>Sands Hill Rockcamp II (843)<br>Lincoln (825)<br>Pearce (862)<br>Elk (869)<br>Elk (883)<br>Big Valley (911)   | Gallia<br>Gallia<br>Jackson, Vinton<br>Jackson<br>Jackson<br>Vinton<br>Vinton<br>Vinton                                   | 166,404<br>54,653<br>539,974<br>22,245<br>138,739<br>69,186<br>241,113<br>31,354                           | Ga-629<br>Ga-SH<br>Jkn-S2<br>Jkn-S3<br>Jkn-S4<br>Vn-S2<br>Vn-S3<br>Vn-S4                      | D-1095<br>D-2018<br>D-1087<br>D-1137<br>D-2009<br>D-1193<br>D-2058<br>D-2114                     |
| Schaney Mining<br>47134 Giacobbi Rd.<br>Jewett, OH 43986<br>740-937-2515<br>Melvin Schaney, owner   | Melvin Schaney (902)<br>Melvin Schaney (861)  | Harrison<br>Harrison  | 7,159<br>3,802   | Hn-SC<br>Hn-SM  | D-1151<br>D-1186   |
| Schiappa Coal Co., Inc.<br>State Route 43 Canton Rd.<br>P.O. Box 728<br>Steubenville, OH 43952<br>740-282-5301<br>Teresa C. Schiappa, pres. | Cherry Valley (795)   | Harrison  | 120,422  | Hn-767  | D-1124   |
| Sidwell Materials, Inc.<br>4620 Limestone Valley Rd.<br>Zanesville, OH 43701<br>740-849-2394<br>Jeffrey R. Sidwell, pres.                   | Bellaire Stone (603)<br>Uniontown (683)   | Belmont<br>Belmont  | 19,073<br>8,115  | Bt-1190<br>Bt-B   | IM-1089, D-1061<br>D-0998  |
| Southern Ohio Coal Co.<br>P.O. Box 490<br>Athens, OH 45701<br>740-286-5051<br>Charles A. Ebetino, gen. mgr.                                 | Meigs Mine #31 (300) (u)<br>Meigs Mine #2 (213) (u)   | Meigs<br>Meigs  | 1,087,521<br>1,345,348   | Ms-293 <sup>6</sup><br>Ms-294 <sup>6</sup>  | D-0354, D-0463<br>D-0355   |
| State Line Resources, Inc.<br>P.O. Box 419<br>Negley, OH 44441<br>330-426-9611<br>Charles H. Muse, Jr., pres.                               | State Line Resources, Inc. (855)<br>Grimm Mine (896)  | Columbiana<br>Columbiana  | 14,059<br>9,372  | Ca-505<br>Ca-S1   | IM-13, IM-936<br>D-2063  |

<sup>6</sup>This mine was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

**2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number)   | County  | 2001 production (tons)                         | State mine number                             | Mining and reclamation permit number   |
|---|--|---|--|---|--|
| Sterling Mining Co.<br>10900 South Ave.<br>P.O. Box 217<br>North Lima, OH 44452<br>330-549-2165<br>W. Thomas Mackall, pres. | Carroll Hollow (873)<br>Sterling North (657) (u)<br>Sterling South (758) (u)                   | Carroll<br>Jefferson<br>Jefferson                           | 38,020<br>193,512<br>233,872                   | Cl-S<br>Jfn-823<br>Jfn-ST                     | D-2070<br>D-0949<br>D-1019   |
| Thompson Bros. Mining Co.<br>3379 E. Garfield Rd.<br>New Springfield, OH 44443<br>330-549-3979<br>J. E. Thompson, owner     | North Lima Mine (864)  | Mahoning  | 10,087   | Mg-T  | D-1168   |
| Valley Mining, Inc.<br>4412 Pleasant Valley Rd. SE<br>Dennison, OH 44621<br>740-922-3942<br>Mary J. Brown, pres.            | Egypt Valley (732)<br>Snyder-Bush (696)<br>Piergallini (709)<br>Hamilton (904)<br>Braver (889) | Belmont<br>Guernsey<br>Jefferson<br>Jefferson<br>Tuscarawas | 358,519<br>8,327<br>53,899<br>81,322<br>37,358 | Bt-VM<br>Gy-318<br>Jfn-831<br>Jfn-V1<br>Ts-V2 | D-1059<br>D-1025<br>D-1026<br>D-1156<br>D-2013   |
| Varkony Mining Co.<br>P.O. Box 427<br>Hopedale, OH 43976<br>740-937-2777<br>Stephen & William Varkony, partners             | JWP (863)  | Jefferson   | 4,384  | Jfn-V2  | D-1185   |
| Waterloo Coal Co., Inc.<br>P.O. Box 626<br>Jackson, OH 45640<br>740-682-7787<br>T. L. Darlington, Jr., pres.                | Bowman Strip (165)<br><br>Mitchell Hollow Pit (357)<br>Allied Pit (420)<br>Dundas Pit (602)    | Jackson<br><br>Vinton<br>Vinton<br>Vinton                   | 874,604<br><br>36,589<br>143,806<br>836,721    | Jkn-367<br><br>Vn-172<br>Vn-184<br>Vn-191     | D-0594, D-968,<br>D-1083, D-1167,<br>D-2059<br>D-0445<br>D-0609<br>D-0867, D-0957,<br>D-1004 |

**2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND  
ASSOCIATED FACILITIES, BY COUNTY**

*For those mines that have not been assigned a state mine number, a letter designation is used (example: Bt-C).*

| County     | Name, address, telephone number, and president/owner/manager of company  | Name of plant (and map location number for coal-preparation plants) | Township             | State mine number | Mining and reclamation permit number | Type of facility  |
|------------|--|---|----------------------|-------------------|--------------------------------------|---|
| Belmont    | Cravat Coal Co.<br>40580 Cadiz-Piedmont Rd.<br>Cadiz, OH 43907<br>740-942-4656<br>Michael Puskarich, pres.                       | Bellaire Dock   | Pultney              | Bt-876            | D-0687                               | loading dock  |
|            | Marietta Coal Co.<br>67705 Friends Church Rd.<br>St. Clairsville, OH 43950<br>740-695-2197<br>George Nicolozakes, pres.          | Loading Dock (3)  | Pultney              | Bt-936            | D-0216                               | loading dock, prep plant—jig, flotation, centrifugal dryer, crushers, screens   |
|            | Ohio River Collieries, Inc.<br>P.O. Box 128<br>Bannock, OH 43972<br>740-968-3582<br>Tony Gentile, pres.                          | Lafferty Tipple<br>Lafferty Truck Shop                              | Union<br>Union       | Bt-947<br>Bt-1093 | D-0773<br>D-0773                     | tipple<br>shop  |
|            | Ohio Valley Coal Co.<br>56854 Pleasant Ridge Rd.<br>Alledonia, OH 43902<br>740-926-1351<br>John Forelli, pres.                   | Powhatan #6 (4)   | Smith,<br>Washington | Bt-68             | D-0360                               | prep plant—jigs, cyclones, centrifuges, thickeners, filters, screens            |
|            | Ohio Valley Transloading Co.<br>56854 Pleasant Ridge Rd.<br>Alledonia, OH 43902<br>216-765-1240<br>Robert E. Murray, pres.       | Harbour Facility  | York                 | Bt-1198           |                                      | dock  |
|            | Rayle River Coal<br>67705 Friends Church Rd.<br>St. Clairsville, OH 43950<br>740-695-2197<br>George Nicolozakes, pres.           | Rayle River Terminal  | Pultney              | Bt-1191           |                                      | coal transfer facility  |
| Columbiana | Buckeye Industrial Mining Co.<br>P.O. Box 389<br>Lisbon, OH 44432<br>330-337-9511<br>John C. Grisham, pres.                      | Kensington Preparation Plant (5)                                    | West                 | Ca-879            | D-0806                               | prep plant—heavy-media washer, cyclone, centrifuges, breaker                    |
|            | State Line Resources, Inc.<br>P.O. Box 419<br>Negley, OH 44441<br>330-426-9611<br>Charles H. Muse, Jr., pres.                    | State Line Resources, Inc. (33)                                     | Middleton            | Ca-505            | D-0223                               | prep plant—crushers, cyclones, screens  |
| Coshocton  | Conesville Coal Preparation Co.<br>14561 Twp. Rd. 263<br>Conesville, OH 43811<br>740-829-2392<br>H. D. Leppla, gen. mgr.         | Conesville Coal Preparation Co. (7)                                 | Franklin             | Cn-810            |                                      | prep plant—jig, cyclones, froth cells, flotation, filter press, screens, dryers |
|            | Oxford Mining Co., Inc.<br>544 Chestnut St.<br>P.O. Box 427<br>Coshocton, OH 43812<br>740-622-6302<br>Charles C. Ungurean, pres. | Lori Tipple   | Franklin             | Cn-736            | D-0671                               | tipple  |

**2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND  
ASSOCIATED FACILITIES, BY COUNTY (cont.)**

| County   | Name, address, telephone number, and president/owner/manager of company  | Name of plant (and map location number for coal-preparation plants) | Township              | State mine number   | Mining and reclamation permit number | Type of facility  |
|----------|--|---|-----------------------|---------------------|--------------------------------------|---|
| Gallia   | Sugarcreek Clay & Limestone, Inc.<br>P.O. Box 402<br>Sugarcreek, OH 44681<br>330-852-4440<br>Daniel D. Miller, pres.     | Sugarcreek Tipple   | Crawford              | Cn-825              | D-0801                               | tipple  |
|          | McCarthy Construction<br>60 Dickason St.<br>Jackson, OH 45640<br>740-286-7501<br>Rick McCarthy, owner                    | Conrick Dock  | Addison               | Ga-216              | D-0739                               | dock  |
|          | Sands Hill Coal Co., Inc.<br>P.O. Box 650<br>Hamden, OH 45634-0650<br>740-384-4211<br>Alan C. Arthur, pres.              | Sands Hill Coal Co., Inc.   | Addison               | Ga-183              | D-0834                               | tipple  |
| Harrison | Waterloo Coal Co., Inc.<br>P.O. Box 626<br>Jackson, OH 45640<br>740-682-7787<br>T. L. Darlington, Jr., pres.             | Waterloo Dock #1  | Addison               | Ga-229              | D-0725                               | dock, tipple  |
|          | AEP Ohio Coal, L.L.C.<br>P.O. Box 176<br>Cadiz, OH 43907<br>740-942-8220<br>C. A. Ebetino, Jr., pres.                    | Nelms Prep Plant (30)   | Green                 | Hn-169 <sup>1</sup> | D-0424                               | prep plant—heavy-media vessel, heavy-media cyclones, spirals, dryers, thickeners, crushers, screens |
|          | Cravat Coal Co.<br>40580 Cadiz-Piedmont Rd.<br>Cadiz, OH 43907<br>740-942-4656<br>Michael Puskarich, pres.               | 22 Shop   | Moorefield            | Hn-230              |                                      | shop  |
| Jackson  | Harrison Mining Corp.<br>86395 Mine Rd.<br>P.O. Box 250<br>Hopedale, OH 43976<br>740-937-2615<br>Mark McIntire, v. pres. | Nelms Prep Plant (30)   | Green                 | Hn-169 <sup>1</sup> | D-0424                               | prep plant—heavy-media vessel, heavy-media cyclones, spirals, dryers, thickeners, crushers, screens |
|          | Waterloo Coal Co., Inc.<br>P.O. Box 626<br>Jackson, OH 45640<br>740-682-7787<br>T. L. Darlington, Jr., pres.             | Bowman Strip (10)   | Jefferson,<br>Madison | Jkn-367             | D-0285                               | prep plant—jig, crushers, breaker, screens, dryers, wash tables                                     |
|          | Collins Mining Co.<br>981 State Route 650<br>Ironton, OH 45638-8600<br>740-534-9445<br>C. E. Collins, v. pres.           | River Dock  | Hamilton              | Le-415              | D-0777                               | dock  |
| Mahoning | Thompson Bros. Mining Co.<br>3379 E. Garfield Rd.<br>New Springfield, OH 44443<br>330-549-3979<br>J. E. Thompson, owner  | Thompson Bros.<br>Mining Co.  | Springfield           | Mg-588              | D-0711                               | tipple  |

<sup>1</sup>This prep plant was operated January through October 2001 by Harrison Processing Corp. and November and December 2001 by AEP Ohio Coal, L.L.C.

**2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND  
ASSOCIATED FACILITIES, BY COUNTY (cont.)**

| County     | Name, address, telephone number, and president/owner/manager of company   | Name of plant (and map location number for coal-preparation plants) | Township              | State mine number   | Mining and reclamation permit number | Type of facility  |
|------------|---|---|-----------------------|---------------------|--------------------------------------|---|
| Meigs      | CONSOL Energy, Inc.<br>1800 Washington Rd.<br>Pittsburgh, PA 15421-1421<br>412-831-4000<br>Barry D. Dangerfield, v. pres.     | Meigs Mine No. 31 (14)  | Salem                 | Ms-293 <sup>2</sup> | D-0354                               | prep plant—heavy-media washers, flotation, cyclones, centrifuges, thickeners, filters, breaker, screens |
|            | Southern Ohio Coal Co.<br>P.O. Box 490<br>Athens, OH 45701<br>740-286-5051<br>Charles A. Ebetino, gen. mgr.                   | Meigs Mine No. 31 (14)  | Salem                 | Ms-293 <sup>2</sup> | D-0354                               | prep plant—heavy-media washers, flotation, cyclones, centrifuges, thickeners, filters, breaker, screens |
|            | Waterloo Coal Co., Inc.<br>P.O. Box 626<br>Jackson, OH 45640<br>740-682-7787<br>T. L. Darlington, Jr., pres.                  | Waterloo Dock #3  | Salisbury             | Ms-285              | D-0698                               | tipple, dock  |
| Morgan     | Central Ohio Coal Co.<br>P.O. Box 98<br>Cumberland, OH 43732<br>740-454-1121<br>Gary Dimmerling, gen. mgr.                    | Muskingum Mine (16)   | Meigsville            | Ne-41 <sup>3</sup>  | D-0378,<br>D-0420                    | tipple, prep plant—jigs, flotation, cyclones, thickener, filters, crushers, breakers, screens, magnets  |
|            | CONSOL Energy, Inc.<br>1800 Washington Rd.<br>Pittsburgh, PA 15421-1421<br>412-831-4000<br>Barry D. Dangerfield, v. pres.     | Muskingum Mine (16)   | Meigsville            | Ne-41 <sup>3</sup>  | D-0378,<br>D-0420                    | tipple, prep plant—jigs, flotation, cyclones, thickener, filters, crushers, breakers, screens, magnets  |
| Perry      | Crooksville Coal Co., Inc.<br>P.O. Box 149<br>Crooksville, OH 43731<br>740-982-6651<br>Ralph L. Allen, pres.                  | Crooksville Tipple  | Salt Creek            | Py-339              | D-0692                               | tipple  |
| Scioto     | Norfolk Southern Railroad<br>914 Hayport Rd.<br>Wheelerburg, OH 45694<br>740-574-8491<br>Charles G. Howard, asst. to mgr.     | NS Wheelersburg Terminal  | Porter                | So-96               |                                      | dock  |
| Tuscarawas | Central Fuel Co.<br>County Rd. 55<br>P.O. Box 165<br>New Philadelphia, OH 44663<br>330-339-5049<br>Keith B. Kimble, gen. mgr. | Central Fuel Co. (20)   | York                  | Ts-1938             | D-0264                               | prep plant—jig, screen, dryers  |
|            | Copperhead Mining<br>P.O. Box 525<br>Sugarcreek, OH 44681-0525<br>330-852-4511<br>Edward Gauss, pres.                         | Barrs Mills Tipple  | Sugar Creek           | Ts-MM1              | D-0876                               | tipple  |
|            | Holmes Limestone Co.<br>P.O. Box 295<br>Berlin, OH 44610<br>330-893-2721<br>Merle Mullet, pres.                               | Strasburg Wash Plant (21)   | Franklin,<br>Lawrence | Ts-1942             | D-0287                               | prep plant— jigs, cyclones, centrifuges, crushers, screens, picking tables                              |
|            |   | Slurry Wash Plant (32)  | Franklin,<br>Lawrence | Ts-HC               | D-0981                               | prep plant—cyclones   |

<sup>2</sup>This prep plant was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

<sup>3</sup>This prep plant was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

**2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND  
ASSOCIATED FACILITIES, BY COUNTY (cont.)**

| County | Name, address, telephone number, and president/owner/manager of company                                      | Name of plant (and map location number for coal-preparation plants) | Township        | State mine number | Mining and reclamation permit number | Type of facility   |
|--------|--|---|-----------------|-------------------|--------------------------------------|--|
| Vinton | Sands Hill Coal Co., Inc.<br>P.O. Box 650<br>Hamden, OH 45634-0650<br>740-384-4211<br>Alan C. Arthur, pres.  | Sands Hill Tipple/<br>Preparation Plant (24)                        | Clinton         | Vn-641            | D-0169,<br>D-0309                    | tipple, prep plant—heavy-media washers, flotation, cyclones, centrifuge, crushers, screens, dryer, picking tables, magnets |
|        | Waterloo Coal Co., Inc.<br>P.O. Box 626<br>Jackson, OH 45640<br>740-682-7787<br>T. L. Darlington, Jr., pres. | Benedict Tipple<br>Dundas Tipple                                    | Swan<br>Clinton | Vn-145<br>Vn-178  | D-0159<br>D-0185                     | tipple<br>tipple   |



A Cannon twin-boom jumbo drill is operated by John Bergles at the East Fairfield Coal Co. underground limestone mine in Mahoning County. The drill is capable of drilling 56 holes, 16 feet deep, in 1 hour and 10 minutes. Horizontal and vertical angles of the drill holes can be varied to facilitate blasting. Water from an attached tank is used to remove the drill cuttings and to control dust.

**USER HINT:**  
To rotate this page use the “View” menu or the rotate buttons in the tool bar above.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY

**NOTE:** This directory lists only the coal-producing operations. It does not list tipplers, loading docks, preparation plants, or other active, nonproducing operations that would contribute to employment and wage statistics presented in tables 11-17. For those mines that have not been assigned a state mine number, a letter designation is used (example: Bt-C). There is no correlation between the "Seam Number" column and the "Production Tonnage" column. The Seam Number column represents the seams mined at the operation. No production tonnage is listed by seam. Days in production were estimated for those companies not providing this information. To convert short tons to metric tons, multiply the given tonnage by 0.907185.

## SEAM IDENTIFICATION OF PRINCIPAL OHIO COALS

| Name of company                                    | Name of mine        | Township            | Seam<br>Number | Type<br>of<br>mine<br>Thickness<br>(inches) | Production<br>Method | Days in<br>production<br>in 2001 | Disposition<br>Method | Days in<br>disposition | Production<br>Under-<br>ground | Employment<br>Non-<br>produ-<br>ction | State<br>mine<br>number |
|--|---------------------|---------------------|----------------|---|----------------------|----------------------------------|-----------------------|------------------------|--------------------------------|---------------------------------------|-------------------------|
| 1 Sharon   | 4 Brookville        | 6A Lower Freeport   | 9 Meigs Creek  |   |                      |                                  |                       |                        |                                |                                       |                         |
| 2 Quakerstown                                      | 4A Clarion          | 7 Upper Freeport    | 11 Waynesburg  |   |                      |                                  |                       |                        |                                |                                       |                         |
| 3 Lower Mercer                                     | 5 Lower Kittanning  | 7A Mahoning         | 12 Washington  |   |                      |                                  |                       |                        |                                |                                       |                         |
| 3A Upper Mercer                                    | 5A Strasburg        | 8 Pittsburgh        | H Harlem       |   |                      |                                  |                       |                        |                                |                                       |                         |
| 3B Tionesta  | 6 Middle Kittanning | 8A Pomeroy-Redstone | W Winters      |   |                      |                                  |                       |                        |                                |                                       |                         |
| <b>ATHENS COUNTY—Total production = 1,248,192</b>  |                     |                     |                |   |                      |                                  |                       |                        |                                |                                       |                         |
| Buckingham Coal Co., Inc.                          | Trimble             | 6                   | 84             | drift                                       | cont. miner          | 1,248,192                        | 255                   | rail                   | 1,241,897                      | 42                                    | 23 As-B                 |
| <b>BELMONT COUNTY—Total production = 7,629,057</b> |                     |                     |                |   |                      |                                  |                       |                        |                                |                                       |                         |
| American Energy Corp.                              | Century Mine        | 63                  | drift          | cont. miner                                 | 481,219              | 212                              | water                 | 468,346                | 105                            | 29 Bt-67                              |                         |
| Bennoc, Inc.                                       | 32 surface          | 32                  | surface        | strip                                       | 27,845               | 72                               | truck                 | 27,845                 | 7                              | 12 Bt-BE                              |                         |
| Hendrysburg  | 36 surface          | 36                  | surface        | strip                                       | 254,312              | 247                              | truck                 | 36,604                 | 14                             | 4 Bt-C2                               |                         |
|  | 42 auger            | 42                  | auger          |   | 30,540               |                                  | water                 | 248,478                |                                |                                       |                         |
|  | <i>Total</i>        |                     |                |   | 284,852              |                                  | <i>Total</i>          | 285,082                |                                |                                       |                         |
| Johnen   | Wheeling            | 9                   | 42             | surface                                     | 192,502              | 212                              | truck                 | 17,234                 | 11                             | 2 Bt-C3                               |                         |
|  |                     |                     |                | strip                                       | 133,866              |                                  | water                 | 308,759                |                                |                                       |                         |
|  |                     |                     |                | auger                                       | 326,368              |                                  | <i>Total</i>          | 325,993                |                                |                                       |                         |
| Pultney  | Wheeling            | 9                   | 34             | surface                                     | 24,980               |                                  | truck                 | 43,119                 |                                |                                       |                         |
|  |                     |                     |                | strip                                       | 18,140               |                                  |                       |                        |                                |                                       |                         |
|  |                     |                     |                | auger                                       | <i>Total</i>         |                                  |                       |                        |                                |                                       |                         |
| St. Joe  | Cochran/Pease       | 11                  |                | surface                                     | 74,017               |                                  | truck                 | 86,801                 |                                |                                       |                         |
|  |                     |                     |                | strip                                       | 12,784               |                                  |                       |                        |                                |                                       |                         |
|  |                     |                     |                | auger                                       | <i>Total</i>         |                                  |                       |                        |                                |                                       |                         |
| Cochran/SWAD                                       | Colerain, Pease     |                     |                |   | 86,801               |                                  |                       |                        |                                |                                       |                         |
| Fairpoint  | Wheeling            | 9                   |                | surface                                     | 26,419               |                                  | truck                 | 31,502                 |                                |                                       |                         |
|  |                     | 11                  |                | strip                                       | 5,083                |                                  |                       |                        |                                |                                       |                         |
|  |                     |                     |                | auger                                       | <i>Total</i>         |                                  |                       |                        |                                |                                       |                         |
| Hostetler-Hapapuro                                 | Colerain            | 9                   |                | surface                                     | 106,138              |                                  | truck                 | 112,298                |                                |                                       |                         |
|  |                     | 11                  |                | strip                                       | 6,655                |                                  |                       |                        |                                |                                       |                         |
|  |                     |                     |                | auger                                       | <i>Total</i>         |                                  |                       |                        |                                |                                       |                         |
|  |                     |                     |                |   | 112,793              |                                  |                       |                        |                                |                                       |                         |

## COAL OPERATORS DIRECTORIES

|   |   |   |    |    |             |             |       |           |        |                               |          |
|---|---|---|----|----|-------------|-------------|-------|-----------|--------|-------------------------------|----------|
| Johnson-Wozniak                                     |   | Richland                                | 9  | 11 |             | surface     | strip | truck     | 53,627 |                               |          |
| Krulock-Hannan                                      |   | Colerain                                | 9  | 40 | surface     | strip       | truck | 31,046    |        | Bt-MC1                        |          |
| Mauersberger  |   | Union                                   | 9  | 48 | surface     | strip       | truck | 46,224    |        | Bt-M9                         |          |
| McGraw  |   | Richland, Wheeling                      | 11 |    | surface     | strip       | truck | 157,182   |        | Bt-M7                         |          |
| Refuse Site<br>Semakiewich                          |   | Pease<br>Wheeling                       | 9  | 9  | surface     | strip       | truck | 499       | 58     | Bt-1150<br>Bt-M8 <sup>2</sup> |          |
| Union<br>Smith <sup>1</sup>                         |   | Union<br>Smith <sup>1</sup>             | 9  | 8  | surface     | strip       | truck | 9,223     | 210    | 36                            |          |
| Ohio River Collieries, Inc.<br>Ohio Valley Coal Co. | 7400 Sulek<br>Powhatan No. 6                | Warren                                  | 8  | 40 | surface     | strip       | truck | 7,785     |        | Bt-1074<br>Bt-68              |          |
| Oxford Mining Co., Inc.                             | Boswell                                     | Warren<br>Warren                        | 8  | 40 | surface     | strip       | truck | 17,008    |        | 199                           | 1<br>227 |
| Egypt Valley East<br>Jeffco                         |   | Wheeling                                | 8  | 61 | surface     | strip       | truck | 2,611     | 7      | 3,093                         |          |
| Martin  |   | Warren                                  | 8  | 45 | surface     | strip       | truck | 4,122,158 | 358    | 2,675,646                     |          |
| Oxford Mining Co., Inc.                             |   |   |    |    | cont. miner | auger       | truck | 489,129   |        | 1,942,483                     |          |
| Sidwell Materials, Inc.                             | Bellaire Stone<br>Uniontown<br>Egypt Valley | Pultney<br>Wheeling<br>Kirkwood, Warren | 8  | 9  | Total       | 4,611,287   | Total | 4,618,129 |        |                               |          |
| Valley Mining, Inc.                                 |   | Warren                                  | 8  | 40 | surface     | strip       | truck | 319,867   | 151    | 364,265                       | 16       |
|   |   |   |    |    | auger       | cont. miner | truck | 44,398    |        |                               |          |
|   |   |   |    |    | Total       | 364,265     |       |           |        |                               |          |
|   |   |   |    |    | strip       | auger       | truck | 22,902    | 30     | 22,902                        | 2        |
|   |   |   |    |    | strip       | cont. miner | truck | 187,277   | 180    | 207,729                       | 14       |
|   |   |   |    |    | auger       | cont. miner | truck | 20,452    |        |                               |          |
|   |   |   |    |    | Total       | 207,729     |       |           |        |                               |          |
|   |   |   |    |    | strip       | auger       | truck | 52,110    | 91     | 59,674                        | 1        |
|   |   |   |    |    | auger       | cont. miner | truck | 7,564     |        |                               |          |
|   |   |   |    |    | Total       | 59,674      |       |           |        |                               |          |
|   |   |   |    |    | strip       | auger       | truck | 255,985   | 83     | 274,796                       | 10       |
|   |   |   |    |    | auger       | cont. miner | truck | 18,811    |        |                               |          |
|   |   |   |    |    | Total       | 274,796     |       |           |        |                               |          |
|   |   |   |    |    | strip       | auger       | truck | 19,073    | 107    | 19,073                        | 2        |
|   |   |   |    |    | cont. miner | cont. miner | truck |           |        |                               |          |
|   |   |   |    |    | Total       | 19,073      |       |           |        |                               |          |
|   |   |   |    |    | strip       | auger       | truck | 8,115     | 40     | 8,115                         | 1        |
|   |   |   |    |    | strip       | cont. miner | truck | 333,419   | 249    | 358,519                       | 25       |
|   |   |   |    |    | auger       | cont. miner | truck | 25,100    |        |                               |          |
|   |   |   |    |    | Total       | 358,519     |       |           |        |                               |          |

<sup>1</sup>Mining is in this township; mine portal is in township shown on map.

<sup>2</sup>Employment includes all of Marietta Coal Co. operations in Belmont County.

<sup>3</sup>See also Harrison County.

## 2001 OHIO MINERAL INDUSTRIES REPORT

**2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)**

| Name of company                                     | Name of mine        | Township   | Seam Number | Type of mine | Production Method | Days in production in 2001 | Disposition Method | Tonnage  | Employment Under-ground | Production Surface | Non-production | State mine number   |
|---|---------------------|------------|-------------|--------------|-------------------|----------------------------|--------------------|----------|-------------------------|--------------------|----------------|---------------------|
| <b>CARRROLL COUNTY—Total production = 114,263</b>   |                     |            |             |              |                   |                            |                    |          |                         |                    |                |                     |
| Buckeye Industrial Mining Co.                       | Starkey             | Fox        | 7A          | 27           | surface           | 39,902                     | 101                | truck    | 39,902                  | 4                  | 1              | Cl-B2               |
| Myers Mining  | Harlem #7           | Lee, Perry | H           | 18           | surface           | 36,341                     | 307                | truck    | 36,341                  | 4                  | 4              | Cl-M2               |
| Sterling Mining Co.                                 | Carrol Hollow       | Fox        | 7A          | 36           | surface           | 22,585                     | 251                | truck    | 38,020                  | 4                  | 1              | Cl-S                |
| <b>COLUMBIANA COUNTY—Total production = 215,778</b> |                     |            |             |              |                   |                            |                    |          |                         |                    |                |                     |
| Buckeye Industrial Mining Co.                       | Mountain Spring #11 | Madison    | 7A          | 36           | drift             | 1,900                      | 20                 | truck    | 1,900                   | 1                  | 1              | Ca-1003             |
|   | Ingledue            | Center     | 7A          | 24           | surface           | 135,969                    | 346                | truck    | 161,260                 | 8                  | 1              | Ca-B1               |
| C & E Coal, Inc.                                    | Dailey Pit          | Elkrun     | 7           | 34           | surface           | 25,848                     | 207                | truck    | 28,764                  | 2                  | 1              | Ca-CE2              |
| D. & D. Mining Co.                                  | Unity               |            | 5           |              | surface           | 423                        | 3                  | truck    | 423                     | 1                  | 5              | Ca-348              |
| State Line Resources, Inc.                          | Middleton           |            | 7           |              | surface           | 9,372                      | 240                | truck    | 9,372                   |                    | 3              | Ca-S1               |
|   | Middleton           |            | 5           |              | surface           | 14,059                     | 120                | truck    | 14,059                  | 2                  | 5              | Ca-505              |
|   |                     |            | 6           | 22           | strip             |                            |                    |          |                         |                    |                |                     |
| <b>COSHOCOTON COUNTY—Total production = 63,816</b>  |                     |            |             |              |                   |                            |                    |          |                         |                    |                |                     |
| Holmes Limestone Co.                                | Mill Creek          |            |             |              | strip             | 49,163                     | 248                | truck    | 49,163                  | 1                  | 1              | Cn-HL1              |
|   | Linton              |            |             |              | strip             | 14,653                     | 85                 | truck    | 14,653                  |                    | 2              | Cn-H2               |
| <b>GALLIA COUNTY—Total production = 221,057</b>     |                     |            |             |              |                   |                            |                    |          |                         |                    |                |                     |
| Sands Hill Coal Co., Inc.                           | Coal Valley         | Huntington | 6           | 72           | surface           | 54,653                     |                    | truck    | 10,897                  |                    |                | Ga-SH               |
|   |                     |            |             |              |                   |                            |                    | water    | 1,468                   |                    |                |                     |
|   |                     |            |             |              |                   |                            |                    | conveyor | 42,288                  |                    |                |                     |
|   |                     |            |             |              |                   |                            |                    | Total    | 54,653                  |                    |                |                     |
| Coal Valley   | Huntington          |            |             |              |                   | 166,404                    | 281                | truck    | 33,177                  | 13                 | 2              | Ga-629 <sup>4</sup> |
|   |                     |            |             |              |                   |                            |                    | water    | 4,471                   |                    |                |                     |
|   |                     |            |             |              |                   |                            |                    | conveyor | 128,756                 |                    |                |                     |
| <b>GUERNSEY COUNTY—Total production = 8,327</b>     |                     |            |             |              |                   |                            |                    |          |                         |                    |                |                     |
| Valley Mining, Inc.                                 | Snyder-Bush         | Wheeling   | 6           | 30           | surface           | 4,445                      | 91                 | truck    | 8,327                   | 1                  | 1              | Gy-318              |
|   |                     |            |             |              |                   | 3,882                      |                    |          |                         |                    |                |                     |
|   |                     |            |             |              |                   | 8,327                      |                    |          |                         |                    |                |                     |

## COAL OPERATORS DIRECTORIES

|   |                          |              |    |    |         |             |           |        |                        |                          |         |    |                     |  |
|---|--------------------------|--------------|----|----|---------|-------------|-----------|--------|------------------------|--------------------------|---------|----|---------------------|--|
|   |                          |              |    |    |         |             |           |        |                        |                          |         |    |                     |  |
| <b>HARRISON COUNTY—Total production = 3,544,834</b> |                          |              |    |    |         |             |           |        |                        |                          |         |    |                     |  |
| AEP Ohio Coal, L.L.C.                               | Nelms Mine-Cadiz Portal  | Green        | 6A | 60 | drift   | cont. miner | 271,604   | 55     | rail<br>water<br>other | 196,611<br>30,124<br>170 | 27      | 7  | Hn-710 <sup>b</sup> |  |
| CONSOL Energy, Inc.                                 | Dozer Pit                | Athens       | 8  | 42 | surface | strip       | 95,726    | 90     | truck                  | 95,726                   | 10      | 2  | Hn-CON              |  |
|   | Mahoning Valley Mine 937 | Athens       | 9  | 40 | surface | strip       | 377,299   | 143    | truck                  | 232,050                  | 48      | 6  | Hn-700              |  |
| Cravat Coal Co.                                     | Moorefield               | Moorefield   | 8A | 50 | surface | strip       | 2,512     | 8      | water                  | 2,512                    |         | 1  | Hn-C4               |  |
| Daron Coal Co., Inc.                                | Cadiz                    | Cadiz        | 8  | 18 | surface | strip       | 355,722   | 307    | rail                   | 1,774                    | 11      | 7  | Hn-D                |  |
| Harrison Mining Corp.                               | Nelms Mine-Cadiz Portal  | Green        | 6A | 36 | drift   | cont. miner | 429,544   | 73,822 | truck                  | 426,145                  | 427,919 |    |                     |  |
| Oxford Mining Co., Inc.                             | Martin                   | Athens       | 8  | 61 | surface | strip       | 1,791,010 | 298    | rail                   | 1,296,426                | 127     | 35 | Hn-710 <sup>b</sup> |  |
|   | McConnell                | Athens       | 9  | 45 | surface | strip       | 52,110    | 91     | truck                  | 198,630                  |         |    |                     |  |
| Schaney Mining                                      | Green                    | Green        | 8  |    | surface | auger       | 7,564     |        | water                  | 1,117                    |         |    |                     |  |
| Schiappa Coal Co., Inc.                             | Green                    | Green        | 8  |    | surface | auger       | 59,674    |        | other                  |                          |         |    |                     |  |
|   | Cherry Valley            | Green        | 8A | 56 | surface | auger       |           |        | Total                  | 1,496,173                |         |    |                     |  |
| <b>HOLMES COUNTY—Total production = 141,190</b>     |                          |              |    |    |         |             |           |        |                        |                          |         |    |                     |  |
| Holmes Limestone Co.                                | Walnut Creek             | Walnut Creek | 6  |    | surface | strip       | 386,082   | 264    | truck                  | 59,674                   | 22      | 2  | Hn-OX               |  |
| <b>JACKSON COUNTY—Total production = 1,305,575</b>  |                          |              |    |    |         |             |           |        |                        |                          |         |    |                     |  |
| Sands Hill Coal Co., Inc.                           | Lincoln                  | Milton       | 5  | 36 | surface | strip       | 3,802     | 78     | truck                  | 3,802                    | 1       | 3  | Hn-SM               |  |
|   |                          | Milton       | 6  | 18 | surface | strip       | 7,159     | 58     | truck                  | 7,159                    | 2       | 6  | Hn-SC               |  |
| Pearce  |                          | Milton       | 4A | 48 | surface | strip       | 120,422   | 301    | truck                  | 120,422                  | 13      | 5  | Hn-767              |  |
|   |                          |              |    |    |         |             |           |        | Total                  |                          |         |    |                     |  |
|   |                          |              |    |    |         |             |           |        |                        |                          |         |    |                     |  |

<sup>a</sup>Employment reported for Ga-629 includes Ga-SH.

<sup>b</sup>This mine was operated January through October 2001 by Harrison Mining Corp. and November and December 2001 by AEP Ohio Coal, L.L.C.

<sup>c</sup>See also Belmont County.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)

| Name of company                                    | Name of mine           | Township             | Seam Number  | Type of mine        | Production Method | Production Tonnage             | Disposition Method                 | Disposition Tonnage | Employment Under-Surface | Production Underground                | Non-production | State mine number |                          |
|--|------------------------|----------------------|--------------|---------------------|-------------------|--------------------------------|------------------------------------|---------------------|--------------------------|---------------------------------------|----------------|-------------------|--------------------------|
| Sands Hill Coal Co., Inc.<br>(cont.)               | Sands Hill Rockcamp II | Milton               | 4A<br>6<br>7 | 36<br>5<br>12<br>48 | surface           | strip                          | 269,987                            | 281                 | truck                    | 53,829<br>water<br>208,904<br>269,987 | 7,254          | 29                | 30 Jkn-S2 <sup>7,8</sup> |
| Waterloo Coal Co., Inc.                            | Bowman Strip           | Madison              | 4A<br>5<br>6 | 14<br>40<br>48      | surface           | strip                          | 874,604                            | 288                 | truck                    | 874,604                               | 63             | 46                | Jkn-367                  |
| <b>JEFFERSON COUNTY—Total production = 912,273</b> |                        |                      |              |                     |                   |                                |                                    |                     |                          |                                       |                |                   |                          |
| Anthony Mining Co., Inc.                           | Lions Club             | Smithfield           | 8A<br>9      | 56<br>20<br>30      | surface           | strip<br>auger<br><i>Total</i> | 130,083<br>9,998<br><i>140,081</i> | 301                 | truck                    | 140,081                               | 13             | 4 Jfn-AN          |                          |
| Buckeye Industrial Mining Co.                      | Snyder Deep Mine #10   | Ross                 | 7            | 36                  | drift             | cont. miner                    | 141,906                            | 240                 | truck                    | 141,906                               | 10             | 2 Jfn-BI          |                          |
| Cravat Coal Co.                                    | Prokes                 | Wells                | 8            | 54                  | surface           | strip<br>auger<br><i>Total</i> | 27,702<br>6,665<br><i>34,367</i>   | 54                  | water                    | 34,367                                | 3              | 1 Jfn-C           |                          |
| F. & M. Coal Co.<br>K.C.C.I.                       | F. & M. Strip Apex     | Wayne<br>Springfield | 8            | 54                  | surface           | strip                          | 23,756                             | 308                 | truck                    | 23,756                                | 3              | Jfn-FM            |                          |
| Sterling Mining Co.                                | Sterling South         | Brush Creek          | 7A           | 48                  | surface           | strip                          | 5,174                              | 80                  | truck                    | 5,174                                 | 1              | Jfn-K             |                          |
| Valley Minning, Inc.                               | Sterling North         | Brush Creek          | 7A           | 36                  | drift             | cont. miner                    | 233,872                            | 251                 | truck                    | 233,872                               | 6              | Jfn-ST            |                          |
|  | Hamilton               | Smithfield           | 8            | 36                  | drift             | cont. miner                    | 193,512                            | 251                 | truck                    | 193,512                               | 1              | Jfn-823           |                          |
| Piergallini  |                        |                      | 8A           | 8                   | surface           | strip                          | 78,968                             | 179                 | truck                    | 81,322                                | 1              | Jfn-V1            |                          |
| Varkony Mining Co.                                 | JWP                    | Ross                 | 9            | 54                  | surface           | strip<br>auger<br><i>Total</i> | 81,322<br>53,629<br><i>53,899</i>  | 254                 | truck                    | 53,899                                | 6              | 1 Jfn-831         |                          |
| <b>MAHONING COUNTY—Total production = 16,875</b>   |                        |                      |              |                     |                   |                                |                                    |                     |                          |                                       |                |                   |                          |
| ESSROC Cement Corp.                                |                        |                      |              |                     |                   |                                |                                    | 4,384               | 28                       | truck                                 | 4,384          | 1                 | Jfn-V2                   |
| East Fairfield Coal Co.                            | Poland                 |                      | 5            | 24                  | surface           | strip                          | 3,569                              | 250                 | truck                    | 3,569                                 | 2              | Mg-608            |                          |
| Thompson Bros.                                     | Springfield            |                      | 4            | 22                  | surface           | strip                          | 3,219                              | 251                 | truck                    | 3,219                                 | 1              | Mg-E              |                          |
| Mining Co.   | Beaver                 |                      | 4            | surface             | strip             |                                | 10,087                             | 53                  | truck                    | 10,087                                | 2              | Mg-T              |                          |

## COAL OPERATORS DIRECTORIES

## 2001 OHIO MINERAL INDUSTRIES REPORT

**2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)**

| Name of company                                     | Name of mine                | Township        | Seam Number | Type of mine | Production Method | Days in production in 2001           | Disposition Method | Tonnage    | Days in production in 2001                   | Disposition Method | Production Under-ground | Production Surface | Employment Non-production | State mine number |
|---|-----------------------------|-----------------|-------------|--------------|-------------------|--------------------------------------|--------------------|------------|--|--------------------|-------------------------|--------------------|---------------------------|-------------------|
| <b>NOBLE COUNTY (continued)</b>                     |                             |                 |             |              |                   |                                      |                    |            |  |                    |                         |                    |                           |                   |
| CONSOL Energy, Inc.                                 | Muskingum Mine              | Sharon          | 9           | 42           | surface           | 96,321<br>877<br><i>Total</i> 97,198 | 113                | truck      | 97,198                                       |                    | 6                       | 10                 | Ne-4112,13                |                   |
| Central Ohio Coal Co.                               | Muskingum Mine              | Sharon          | 9           | 42           | surface           | 29,692<br>269<br><i>Total</i> 29,961 | 42                 | conveyor   | 29,961                                       |                    | 2                       | 2                  | Ne-4112,13                |                   |
| <b>PERRY COUNTY—Total production = 1,052,138</b>    |                             |                 |             |              |                   |                                      |                    |            |  |                    |                         |                    |                           |                   |
| Oxford Mining Co., Inc.                             | Z-Mack                      | Clayton, Pike   | 5           | 42           | surface           | 1,052,138                            | 264                | rail truck | 314,894<br>737,244<br><i>Total</i> 1,052,138 |                    | 47                      | 8                  | Py-O                      |                   |
| <b>STARK COUNTY—Total production = 696,906</b>      |                             |                 |             |              |                   |                                      |                    |            |  |                    |                         |                    |                           |                   |
| Buckeye Industrial Mining Co.                       | Henning                     | Paris           | 6           | 26           | surface           | 702                                  | 6                  | truck      | 702  |                    | 1                       | Sk-B6              |                           |                   |
|   | Anthony                     | Osnaburg        | 5           | 2            | surface           | 28,074                               | 72                 | truck      | 28,074                                       |                    | 5                       | 1                  | Sk-B2                     |                   |
|   | Baird                       | Paris           | 6           | 25           | surface           | 107,624                              | 217                | truck      | 107,624                                      |                    | 9                       | 1                  | Sk-B5                     |                   |
|   | Close                       | Pike            | 6           | 24           | surface           | 8,325                                | 35                 | truck      | 8,325  |                    | 1                       | 1                  | Sk-B                      |                   |
|   | Finnie                      | Paris           | 4           | 24           | surface           | 89,210                               | 245                | truck      | 89,210                                       |                    | 4                       | 1                  | Sk-B3                     |                   |
| ENZ, Inc.   | Sickafoose Pit              | Sandy           | 6A          | 24           | surface           | 266,134                              | 307                | truck      | 266,134                                      |                    | 18                      | 9                  | Sk-208                    |                   |
| Holmes Limestone Co.                                | E. Canton-Thomas            | Osnaburg        | 4           | 22           | surface           | 139,432                              | 276                | truck      | 139,432                                      |                    | 8                       | 1                  | Sk-H1                     |                   |
|   | Bolivar                     | Bethlehem       | 6           | 22           | surface           | 57,405                               | 240                | truck      | 57,405                                       |                    | 3                       | 1                  | Sk-235                    |                   |
| <b>TUSCARAWAS COUNTY—Total production = 784,425</b> |                             |                 |             |              |                   |                                      |                    |            |  |                    |                         |                    |                           |                   |
| Belden Brick Co.                                    | Belden Pit                  | Sugar Creek     | 4           | 6            | surface           | 2,121                                | 20                 | truck      | 2,121  |                    | 1                       | Ts-1646            |                           |                   |
|   | Moomaw Pit                  | Sugar Creek     | 3B          | 12           | surface           | 16,096                               | 19                 | truck      | 16,096                                       |                    | 4                       | 4                  | Ts-1517                   |                   |
| Blue Jay Enterprises of Ts. Co., Inc.               | Wallick Pit                 | Franklin, Wayne | 4           | 30           | surface           | 18,900                               | 50                 | truck      | 18,900                                       |                    | 2                       | 1                  | Ts-1841                   |                   |
| Franklin Mineral                                    | Blue Jay #1                 | Sandy           | 4           | 21           | surface           | 1,769                                | 15                 | truck      | 1,769  |                    | 1                       | 1                  | Ts-BJ                     |                   |
| Holmes Limestone Co.                                | Franklin Mineral Kohl Pit 1 | Lawrence        | 5           | 20           | surface           | 7,604                                | 25                 | truck      | 7,604  |                    | 1                       | 1                  | Ts-F                      |                   |
|   | Dennison-R & F              | Rush            | 5A          | 18           | surface           | 56,339                               | 260                | truck      | 56,339                                       |                    | 4                       | 1                  | Ts-2043                   |                   |
|   |                             |                 | 6A          |              |                   | 40,208                               |                    |            | 40,208                                       |                    |                         |                    |                           |                   |
|   |                             |                 |             |              |                   | <i>Total</i> 96,547                  |                    |            | 96,547                                       |                    |                         |                    |                           |                   |

COAL OPERATORS DIRECTORIES

59

|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
|---|--|----|----|---------|----------------|-------------------------|--------|-------|-------------------------------------|--------|---------------------|---------|
| Stone Creek-Costain   | York                                     |    | 6  | surface | strip<br>auger | 137,582<br><i>Total</i> | 276    | truck | 161,392                             | 9      | 1                   | Ts-H5   |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Stone Creek-Spring Kimble Clay & Limestone Co.                | York                                     | 6  | 6  | surface | strip<br>auger | 1,302<br><i>Total</i>   | 10     | truck | 1,302<br>6,179                      | 1      | Ts-H4               |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | York                                     | 7  | 28 | surface | strip<br>auger | 4,405<br><i>Total</i>   | 13     | truck | 4,405<br>1,774                      | 1      | Ts-2019             |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Dover                                    | 5  | 28 | surface | strip<br>auger | 204,677<br><i>Total</i> | 241    | truck | 214,356<br>9,679                    | 10     | 1                   | Ts-K7   |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Salem                                    | 6  | 10 | surface | strip<br>auger | 73,958<br><i>Total</i>  | 202    | truck | 89,165                              | 5      | Ts-K6               |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Washington                               | 6  | 28 | surface | strip<br>auger | 11,749<br><i>Total</i>  | 33     | truck | 16,854                              | 2      | Ts-M <sup>14</sup>  |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Sugar Creek                              | 7  | 30 | surface | strip<br>auger | 674<br><i>Total</i>     | 12     | truck | 1,823                               | 1      | Ts-K5               |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Washington                               | 6  | 14 | surface | strip<br>auger | 1,149<br><i>Total</i>   | 4      | truck | 1,377                               | 1      | Ts-K4               |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Washington                               | 6A | 28 | surface | strip<br>auger | 37,762<br><i>Total</i>  | 225    | truck | 54,089                              | 3      | Ts-H6               |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Kimble Clay & Limestone                                       | Dover                                    | 6  | 33 | surface | strip<br>auger | 16,327<br><i>Total</i>  | 54,089 | 82    | truck                               | 33,265 | 3                   | Ts-1727 |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| L & M Mineral Co.<br>Marietta Coal Co.<br>Valley Mining, Inc. | Mill, Warwick<br>Linden Valley<br>Braver | 6  | 28 | surface | strip<br>auger | 9,382<br><i>Total</i>   | 19     | truck | 9,382<br>14,846<br>25,959<br>11,399 | 1      | Ts-1914             |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| <b>VINTON COUNTY—Total production = 1,628,756</b>             |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Sands Hill Coal Co., Inc.                                     | Big Valley                               | 5  | 48 | surface | strip          | 31,354                  | 31,354 | truck | 6,251<br>842<br>24,261<br>31,354    | 1      | Vn-S4               |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |
| Elk   | Elk                                      | 4  | 41 | surface | strip          | 69,186                  | 281    | truck | 13,794<br>1,859<br>53,533<br>69,186 | 17     | Vn-S2 <sup>15</sup> |         |
|   |  |    |    |         |                |                         |        |       |                                     |        |                     |         |

<sup>12</sup>See also Morgan County.

<sup>13</sup>This mine was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

<sup>14</sup>This mine was operated January through May 2001 by Marietta Coal Co. and June through December 2001 by Kimble Clay & Limestone Co.

<sup>15</sup>Employment reported for Vn-S2 includes Vn-S3 and Vn-S4.

## 2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)

| Name of company                                    | Name of mine        | Township | Seam Number | Type of mine | Production Method | Days in production in 2001 | Disposition Method | Tonnage                         | Days in disposition        | Employment Production Under-ground | Employment Surface | State mine number    |
|--|---------------------|----------|-------------|--------------|-------------------|----------------------------|--------------------|---------------------------------|----------------------------|------------------------------------|--------------------|----------------------|
| <b>VINTON COUNTY (continued)</b>                   |                     |          |             |              |                   |                            |                    |                                 |                            |                                    |                    |                      |
| Sands Hill Coal Co., Inc.<br>(cont.)               | Elk                 |          | 4           | 41           | surface<br>36     | 241,113                    | truck              | 48,073<br>water<br><i>Total</i> | 6,478                      |                                    |                    | Vn-S3                |
|  |                     |          | 4A          | 28           |                   |                            | conveyor           | 186,562                         |                            |                                    |                    |                      |
|  |                     |          |             |              |                   |                            | <i>Total</i>       | 241,113                         |                            |                                    |                    |                      |
|  |                     |          |             |              |                   |                            |                    |                                 |                            |                                    |                    |                      |
| Sands Hill Rockcamp II                             | Wilkesville         |          | 4A          | 48           | surface<br>36     | 269,987                    | 280                | truck<br>water<br><i>Total</i>  | 53,830<br>7,254<br>208,903 | 27                                 | 31                 | JKn-S2 <sup>16</sup> |
|  |                     |          | 5           | 19           |                   |                            | conveyor           | 269,987                         |                            |                                    |                    |                      |
|  |                     |          | 6           | 12           |                   |                            | <i>Total</i>       |                                 |                            |                                    |                    |                      |
|  |                     |          | 7           |              |                   |                            |                    |                                 |                            |                                    |                    |                      |
| Waterloo Coal Co., Inc.                            | Allied Pit          |          | 4,          | 18           | surface<br>32     | 143,806                    | 119                | truck                           | 143,806                    | 8                                  | 3                  | Vn-184 <sup>17</sup> |
|  |                     |          | 4A          | 24           |                   |                            |                    |                                 |                            |                                    |                    |                      |
|  |                     |          | 5           | 18           |                   |                            |                    |                                 |                            |                                    |                    |                      |
|  |                     |          | 6           | 50           | surface<br>36     | 836,721                    | 287                | truck                           | 836,721                    | 56                                 | 40                 | Vn-191               |
|  |                     |          | 4A          | 45           |                   |                            |                    |                                 |                            |                                    |                    |                      |
|  | Dundas Pit          | Clinton  | 5           | 45           |                   |                            |                    |                                 |                            |                                    |                    |                      |
|  |                     |          | 6           | 20           |                   |                            |                    |                                 |                            |                                    |                    |                      |
|  |                     |          | 7           | 18           |                   |                            |                    |                                 |                            |                                    |                    |                      |
|  |                     |          | 4A          | 17           | surface<br>strip  | 36,589                     |                    | truck                           | 36,589                     |                                    |                    | Vn-172               |
|  | Mitchell Hollow Pit | Swan     |             |              |                   |                            |                    |                                 |                            |                                    |                    |                      |
| <b>WASHINGTON COUNTY—Total production = 98,752</b> |                     |          |             |              |                   |                            |                    |                                 |                            |                                    |                    |                      |
| B & N Coal, Inc.                                   | Shilling            | Aurelius | 9           | 30           | surface<br>strip  | 98,752                     | 253                | truck                           | 98,752                     | 8                                  | 1                  | Ne-1008              |
|  |                     |          |             |              |                   |                            |                    |                                 |                            |                                    |                    |                      |

<sup>16</sup>See also Jackson County.<sup>17</sup>Employment reported for Vn-184 includes Vn-172.



The aggregate processing plant at the East Fairfield Coal Co. limestone mine in Mahoning County. The beltlines carry product from the primary crusher to the wet screen and the oversize ( $>2\frac{1}{2}$  inches) is carried back for recrushing.

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS**

*For those mines for which a state mine number has not been assigned, a letter designation is used (example: Ts-A).  
 If there are no sales or production figures given for an operation, that operation reported no sales or production in 2001.  
 To convert short tons to metric tons, multiply the given tonnage by 0.907185.*

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)   | County                               | Commodity  | 2001 sales (tons)    | 2001 production (tons) | State mine number                 | Mining and reclamation permit number  |
|--|--|--------------------------------------|--|----------------------|------------------------|-----------------------------------|---------------------------------------|
| ATS Enterprises<br>P.O. Box 13070<br>Lexington, KY 40583<br>859-299-7001<br>Steve Lawson, plant mgr.                       | ATS Enterprises (306)  | Scioto                               | sand & gravel  | 335,995              | 343,140                | So-79                             | IM-221                                |
| Acme Sand & Gravel<br>128 First St. W<br>Strasburg, OH 44680<br>330-878-7205<br>Susan Malcuit, pres.                       | Acme Sand & Gravel (612)   | Tuscarawas                           | sand & gravel  |                      |                        | Ts-A                              | IM-1218                               |
| Agg Rok Materials<br>711 Frank Rd.<br>Columbus, OH 43223<br>614-875-5500<br>William G. Heffner, pres.                      | Agg Rok (94)   | Franklin                             | sand & gravel  | 914,571              | 901,215                | Fn-36                             | IM-302                                |
| Alan Stone Co., Inc.<br>P.O. Box 127<br>Chesterhill, OH 43728<br>740-554-6191<br>Claudia Staley, pres.                     | Alan Stone Co., Inc. (51)<br>Marietta Quarry (43)  | Belmont<br>Washington                | sandstone<br>sandstone   |                      |                        | Bt-1193<br>Wn-45                  | IM-1117<br>IM-125                     |
| William Albert, Inc.<br>1300 Cassingham Hollow Rd.<br>Coshocton, OH 43812<br>740-622-3045<br>William Albert, pres.         | William Albert, Inc. (438)   | Coshocton                            | sand & gravel<br>clay  | 317                  | 317                    | Cn-828                            | IM-1026                               |
|  | William Albert, Inc. (723)   | Coshocton                            | sand & gravel  | 39,590               | 41,600                 | Cn-WA                             | IM-2036                               |
| Alden Sand & Gravel Co.<br>2504 Northampton Rd.<br>Cuyahoga Falls, OH 44223<br>330-928-3249<br>Connie Ensign, pres.        | Alden Excavating (496)   | Summit                               | sand & gravel  | 20,563               | 20,563                 | St-55                             | IM-589                                |
| Allgeier & Son, Inc.<br>6386 Bridgetown Rd.<br>Cincinnati, OH 45248<br>513-574-3735<br>Michael E. Allgeier, pres.          | Allgeier & Son, Inc. Pit 1 (521)<br>Allgeier & Son, Inc. Pit 2 (467)<br>Allgeier & Son, Inc. (520) | Hamilton<br>Hamilton<br>Hamilton     | sand & gravel<br>sand & gravel<br>sand & gravel                  | 100,000<br>120,000   | 100,000<br>120,000     | Hmn-AS1<br>Hmn-AS<br>Hmn-C        | IM-797<br>IM-1106<br>IM-1132          |
| Allied Corp., Inc.<br>1749 Highland Dr.<br>Twinsburg, OH 44087<br>330-425-7861<br>Mark Shelly, pres.                       | Allied Corp., Inc. (435)   | Stark                                | sand & gravel  |                      |                        | Sk-173                            | IM-879                                |
| American Excavating, Inc.<br>P.O. Box 374<br>Enon, OH 45323<br>937-882-1372<br>Robert E. Holland, pres.                    | American Excavating, Inc. (704)  | Clark                                | sand & gravel  | 2,645                | 31,000                 | Ck-A                              | IM-1359                               |
| American Landfill, Inc.<br>7916 Chapel St. SE<br>Waynesburg, OH 44688<br>330-866-3265<br>David A. Bower, Jr., pres.        | American Landfill, Inc. (123)  | Stark                                | clay   |                      |                        | Sk-246                            | IM-2024                               |
| American Sand & Gravel, Inc.<br>8188 Wales Rd. NW<br>North Canton, OH 44720<br>330-762-9373<br>Christopher A. Scala, pres. | American Sand & Gravel, Inc. (710)<br>Plant 1 (387)<br>Plant 2 (386)<br>Plant 4 (455)              | Portage<br>Portage<br>Stark<br>Stark | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 111,924<br>1,193,673 | 111,924<br>1,193,673   | Pe-A<br>Pe-95<br>Sk-203<br>Sk-243 | IM-1362<br>IM-212<br>IM-654<br>IM-908 |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)                                   | County                 | Commodity                      | 2001 sales (tons) | 2001 production (tons) | State mine number  | Mining and reclamation permit number |
|--|--|------------------------|--------------------------------|-------------------|------------------------|--------------------|--------------------------------------|
| Apache Aggregate & Paving Co.<br>46626 County Route 495<br>Coshocton, OH 43812<br>740-622-5904<br>Charlene B. Ross, pres.              | Apache Aggregate & Paving Co. (69)<br>Apache Aggregate & Paving Co. (70) | Coshocton<br>Coshocton | sand & gravel<br>sand & gravel | 119,923           | 135,429                | Cn-718<br>Cn-783   | IM-227<br>IM-717                     |
| Ashcraft Sand & Gravel, Inc.<br>5850 Dry Fork Rd.<br>Cleves, OH 45002<br>513-367-2177<br>Otis Ashcraft, pres.                          | Ashcraft Sand & Gravel, Inc. (120)                                       | Hamilton               | sand & gravel                  | 11,544            | 11,544                 | Hmn-54             | IM-710                               |
| Athens Hocking Reclamation Center<br>450 Gallagher Ave.<br>Logan, OH 43138<br>740-385-6019<br>Edward F. Kilbarger, pres.               | Athens Hocking Reclamation Center (81)                                   | Athens                 | clay                           | 1,025             | 1,025                  | As-594             |                                      |
| Atlas Towing Co.<br>P.O. Box 1632<br>Parkersburg, WV 26101<br>304-428-0341<br>Christopher V. Criss, pres.                              | Belpre Bank Run (432)  | Washington             | sand & gravel                  | 14,022            | 14,022                 | Wn-54              | IM-383                               |
| Ayers Limestone Quarry, Inc.<br>2000 Colerain Pike<br>P.O. Box 67<br>Martins Ferry, OH 43935<br>740-633-2958<br>Thomas E. Ayers, pres. | Ayers Limestone Quarry, Inc. (12)  | Belmont                | limestone                      | 87,334            | 87,334                 | Bt-716             | IM-1                                 |
| B & L Excavating<br>4711 CR 1-2<br>Swanton, OH 43558<br>419-825-1218<br>Boyd Rhodes, owner   | B & L Pit (654)<br>Nowak (725)   | Fulton<br>Fulton       | sand & gravel<br>sand & gravel |                   |                        | Ftn-BL1<br>Ftn-BL2 | IM-1282<br>IM-2025                   |
| B & L Sand Co.<br>441 Iowa St.<br>Ashland, KY 41101<br>606-325-8301<br>Janet R. Griffiths, pres.                                       | B & L Sand Co. (167)   | Lawrence               | sand & gravel                  | 2,459             | 2,459                  | Le-430             | IM-844                               |
| B & N Coal, Inc.<br>P.O. Box 100<br>Dexter City, OH 45727<br>740-783-3575<br>Carl Baker, Jr., pres.                                    | B & N Coal, Inc. (179)   | Noble                  | limestone                      |                   |                        | Ne-B               | IM-897                               |
| BPB-Celotex<br>P.O. Box 280<br>Port Clinton, OH 43452<br>419-734-3153<br>Charles H. Johnson, plant mgr.                                | American #2 (1)  | Ottawa                 | gypsum                         |                   | 117,003                | Oa-2               | IM-344                               |
| Baisden Sand & Gravel<br>1812 Baker Rd.<br>Springfield, OH 45504<br>937-390-6536<br>Brett Baisden, pres.                               | Baisden (718)  | Clark                  | sand & gravel                  | 138,008           | 160,008                | Ck-B               | IM-2026                              |
| Baker Sand, Inc.<br>7800 White Rd.<br>Burbank, OH 44214<br>330-948-1448<br>John E. Baker, pres.  | Baker Sand, Inc. (203)   | Medina                 | sand & gravel                  | 644,998           | 644,998                | Ma-20              | IM-448                               |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number)  | County   | Commodity  | 2001 sales (tons)                       | 2001 production (tons)                  | State mine number                             | Mining and reclamation permit number            |
|---|---|--|--|---|---|---|---|
| Ballentine Excavation Co.<br>7854 Cooley Rd.<br>Ravenna, OH 44266<br>330-297-9739<br>Daniel H. Ballentine, owner                            | Ballentine Lake (689)   | Portage  | sand & gravel  | 31,895                                  | 31,895                                  | Pe-BA   | IM-1327   |
| Barrett Paving Materials, Inc.<br>8401 Sylvania Ave.<br>Sylvania, OH 43560<br>734-483-4775<br>John Krispin, aggregate mgr.                  | Sylvania Quarry (160)<br>(225)  | Lucas  | limestone clay   | 658,193<br>852                          | 596,641<br>852                          | Ls-12   | IM-953  |
| Barrett Paving Materials, Inc.<br>Midwest South<br>7374 Main St.<br>Cincinnati, OH 45244<br>513-271-6200<br>George Ausseil, pres.           | Barrett Paving Materials-Perintown (59)<br>Jones Deposit (315)<br>Pence Pit (314)<br>River Quarry (112)<br>Schmidt Deposit (213)<br>(742)       | Clermont<br>Shelby<br>Shelby<br>Shelby<br>Shelby     | sand & gravel<br>sand & gravel<br>sand & gravel<br>limestone<br>limestone<br>sand & gravel | 66,510<br>0<br>529,000<br>321,000       | 265,556<br>50,000<br>529,000<br>375,000 | Ct-9<br>Shy-18<br>Shy-11<br>Shy-15<br>Shy-SC1 | IM-526<br>IM-388<br>IM-743<br>IM-387<br>IM-2017 |
| Barrett Paving Materials, Inc.<br>Midwest Central<br>P.O. Box 13591<br>Dayton, OH 45413-0591<br>937-279-3200<br>Gerald Bushelman, reg. mgr. | Barrett Paving Materials, Inc. (461)<br>Barrett Paving Materials, Inc. (177)<br>Gregory Stone Inc. (66)<br>Barrett Paving Materials, Inc. (734) | Clark<br>Miami<br>Miami<br>Montgomery                | sand & gravel<br>limestone<br>limestone<br>sand & gravel                                   | 584,660<br>283,421<br>93,259<br>170,555 | 614,476<br>243,629<br>93,259<br>173,692 | Ck-28<br>Mi-BPM<br>Mi-502<br>My-B             | IM-1100<br>IM-1169<br>IM-414<br>IM-2044         |
| Bartley & Bolin Excavating<br>1242 County Rd. 1475<br>Ashland, OH 44805-9277<br>419-289-1507<br>Mitchell W. Bolin, owner                    | Bartley & Bolin, Inc. Plant #2 (6)<br>Simanton Rd. (509)<br>Bartley & Bolin, Inc. (409)   | Ashland<br>Ashland<br>Richland                       | sand & gravel<br>sand & gravel<br>sand & gravel  | 193,323<br>16,775                       | 193,323<br>16,775                       | Ald-9<br>Ald-16<br>Rd-20                      | IM-745<br>IM-1120<br>IM-617                     |
| Baycliffs Corp.<br>15400 Pearl Rd. #201<br>Strongsville, OH 44136<br>440-238-1905<br>Carl Zipfel, pres.                                     | Johnson Island Quarry (198)   | Ottawa   | limestone  |   |   | Oa-BC   | IM-1288   |
| Bearcreek Clay Co.<br>11123 State Route 37 East<br>New Lexington, OH 43764<br>740-342-5269<br>Tom L. Dennis, owner                          | Dutch Ridge Rd. (108)<br>(108)<br>Nelson/Common (205)<br>(205)  | Perry<br>Perry                                       | clay<br>shale<br>clay<br>shale   | 12,756<br>25,513<br>17,707<br>16,197    | 12,756<br>25,513<br>17,707<br>16,197    | Py-338<br>Py-D1                               | IM-1092<br>IM-1304                              |
| Beaver Excavating, Inc.<br>P.O. Box 6059<br>Canton, OH 44706<br>330-478-2151<br>W. Mark Sterling, pres.                                     | Stone Products (607)<br>(162)   | Stark  | sand & gravel<br>clay  |   |   | Sk-BE   | IM-1202   |
| Beck Sand & Gravel, Inc.<br>2820 Webb Rd.<br>Ravenna, OH 44266<br>330-626-3863<br>Rodney Wenrich, pres.                                     | Beck Sand & Gravel, Inc. (256)  | Portage  | sand & gravel  | 189,992                                 | 189,992                                 | Pe-50   | IM-96   |
| Paul D. Beery Trucking Co.<br>4770 Cincinnati-Zanesville Rd.<br>Lancaster, OH 43130<br>740-653-5061<br>Paul D. Beery, pres.                 | Paul D. Beery Trucking Co. (401)  | Fairfield  | sand & gravel  | 6,572                                   | 0                                       | Fd-14   | IM-933  |
| Belden Brick Co.<br>P.O. Box 20910<br>Canton, OH 44701<br>330-852-2424<br>Robert F. Belden, pres.   | Beagle Pit (60)<br>Belden Pit (209)<br>(78)<br>(57)<br>(57)<br>Dundee (191)<br>(177)<br>(177)   | Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas | clay<br>limestone<br>sandstone<br>clay<br>shale<br>limestone<br>clay<br>shale              | 9,474                                   | 9,474                                   | Ts-1960<br>Ts-1646                            | IM-48<br>IM-44<br>Ts-BB                         |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine<br>(and map location number)   | County                   | Commodity  | 2001 sales (tons)              | 2001 production (tons)         | State mine number        | Mining and reclamation permit number |
|---|---|--------------------------|--|--------------------------------|--------------------------------|--------------------------|--------------------------------------|
|   | Moomaw Pit (187)<br>(62)<br>(56)<br>(56)<br>Plotner Pit (181)<br>(147)<br>(147)<br>Shanesville Pit (206)<br>(59)<br>(59)<br>Wallick Pit (232)<br>(71)<br>(58)<br>(58) | Tuscarawas               | limestone sandstone clay shale limestone clay shale limestone sandstone clay shale | 17,424<br><br>63,966<br>49,563 | 17,424<br><br>63,966<br>49,563 | Ts-1517                  | IM-46                                |
|   |   | Tuscarawas               |  |                                |                                | Ts-B                     | IM-49                                |
|   |   | Tuscarawas               |  |                                |                                | Ts-1939                  | IM-47                                |
|   |   | Tuscarawas               |  |                                |                                | Ts-1841                  | IM-45                                |
| Belville Mining Co., Inc.<br>P.O. Box 834<br>Ironton, OH 45638<br>740-643-2331<br>Thomas J. Belville, pres.                           | Belville Mining #1(159)<br>(93)   | Lawrence                 | limestone clay   |                                |                                | Le-B                     | IM-1188<br>D-0746                    |
| Best Sand Corp.<br>11830 Ravenna Rd.<br>Chardon, OH 44024<br>440-285-3132<br>Charles D. Fowler, pres.                                 | Best Sand Corp. (17)<br>Best Sand Corp. (45)<br>Best Sand Corp. (34)  | Geauga<br>Pike<br>Ross   | sandstone sandstone sandstone  | 728,813<br>87,051              | 822,953<br>52,268              | Gea-3<br>Pke-31<br>Rs-16 | IM-89<br>IM-835<br>IM-172            |
| Beverly Slag Co.<br>P.O. Box 599<br>McConnelsville, OH 43756<br>740-962-5621<br>Carl L. Price, v. pres.                               | Devola Pit (364)  | Washington               | sand & gravel  |                                |                                | Wn-55                    | IM-669                               |
| Big T Mining<br>P.O. Box 121<br>Haverhill, OH 45636<br>740-532-3951<br>Brian Hughes, owner  | Big T Pit (663)   | Scioto                   | sand & gravel  |                                |                                | So-BT                    | IM-1286                              |
| E. E. Blair Construction Co.<br>P.O. Box 309<br>Wheelersburg, OH 45694-0309<br>740-574-6575<br>Edwin E. Blair, pres.                  | Cab Pit (303)   | Scioto                   | sand & gravel  |                                |                                | So-98                    | IM-474                               |
| Bihn Excavating, Inc.<br>233 N. Lallendorf Rd.<br>Oregon, OH 43616<br>419-693-3301<br>Michael J. Bihn, pres.                          | Central Office Park (732)   | Lucas                    | sand & gravel  |                                |                                | Ls-BE                    | IM-2054                              |
| Black Top Contracting, Inc.<br>P.O. Box 426<br>Nelsonville, OH 45764<br>740-423-5455<br>Tim Maiden, pres.                             | Black Top #1 (19)<br>York Twp. Trustees (702)   | Athens<br>Athens         | sand & gravel<br>sand & gravel   |                                |                                | As-588<br>As-BT          | IM-630<br>IM-1350                    |
| Blue Jay Enterprises of Ts. Co., Inc.<br>P.O. Box 641<br>Zoar, OH 44697<br>330-874-2048<br>Leland D. Ervin, pres.                     | Blue Jay #1 (200)<br>(201)<br>(201)<br>Swonger Waltz Mine (207)<br>(85)<br>(85)   | Tuscarawas<br>Tuscarawas | limestone clay shale limestone clay shale  | 6,234<br>5,821                 | 6,234<br>5,821                 | Ts-BJ<br>Ts-520          | IM-1285<br>IM-214                    |
| Blue Stone Sand & Gravel, Inc.<br>14376 N. Cheshire St.<br>P.O. Box 567<br>Burton, OH 44021<br>440-834-1367<br>David W. Ronyak, pres. | Blue Stone Pit #1 (673)<br>Blue Stone Pit #2 (674)  | Portage<br>Portage       | sand & gravel<br>sand & gravel   | 128,171                        | 24,000                         | Pe-B1<br>Pe-B2           | IM-1296<br>IM-1305                   |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number)   | County   | Commodity  | 2001 sales (tons)                      | 2001 production (tons)                 | State mine number   | Mining and reclamation permit number   |
|---|--|--|--|--|--|---|--|
| Bluffton Stone Co.<br>P.O. Box 26<br>Bluffton, OH 45817-0026<br>419-358-6941<br>Brent C. Gerken, pres.                      | Bluffton Stone Co. (3)   | Allen  | limestone  | 351,473                                | 429,790                                | An-1  | IM-485   |
| Bowerston Shale Co.<br>1329 Seven Hills Rd. NE<br>Newark, OH 43055<br>740-763-3921<br>Mark Willard, pres.                   | Hanover (31)<br>Frazeyburg (38)<br>(38)  | Licking<br>Muskingum   | shale<br>clay<br>shale   | 20,723<br>16,559                       | 20,723<br>16,559                       | Lg-501<br>Mum-776   | IM-257<br>IM-256   |
| Bowerston Shale Co.<br>515 Main St.<br>P.O. Box 199<br>Bowerston, OH 44695<br>740-269-2921<br>Mark Willard, pres.           | Bowerston (11)<br>Scott Farm (109)   | Harrison<br>Harrison   | shale<br>shale   | 30,512                                 | 30,512                                 | Hn-152<br>Hn-B  | IM-42<br>IM-1020   |
| Gaston Bowling, Inc.<br>P.O. Box 330<br>Oxford, OH 45056<br>513-523-8805<br>Gaston Bowling, pres.                           | Indian Creek Sand & Gravel (37)  | Butler   | sand & gravel  |  |  | Br-40   | IM-493   |
| D. H. Bowman & Sons, Inc.<br>1201 Mill St.<br>Bellville, OH 44813-1282<br>419-886-2711<br>Richard D. Bowman, pres.          | D. H. Bowman & Sons, Inc. (287)  | Richland   | sand & gravel  | 52,969                                 | 68,100                                 | Rd-4  | IM-279,<br>IM-1255   |
| Boyas Excavating, Inc.<br>10055 Sweet Valley Dr.<br>Cleveland, OH 44125-4247<br>216-524-3620<br>Michael Boyas, pres.        | Boyas Excavating, Inc. (595)<br>(13)<br>(239)  | Cuyahoga   | sand & gravel<br>sandstone<br>clay   | 22,000<br>30,489                       | 22,000<br>30,489                       | Cya-42  | IM-686   |
| Boyd Excavating<br>9553 County Rd. 28<br>Zanesfield, OH 43360<br>937-465-3290<br>Jeff Boyd, owner                           | Boyd Excavating (669)  | Logan  | sand & gravel  | 9,876                                  | 9,876                                  | Lgn-B   | IM-1309  |
| Briar Hill Stone Co.<br>P.O. Box 457<br>Glenmont, OH 44628<br>330-377-5100<br>F. L. Waller, pres.                           | Quarry #18 (8)<br>Quarry #24 (7)<br>Quarry #26 (4)<br>Quarry #3 (5)<br>Quarry #32 (6)<br>Quarry #54 (46)<br>Quarry #55 (44)<br>Quarry #31 (19)<br>Quarry #6 (23) | Coshocton<br>Coshocton<br>Coshocton<br>Coshocton<br>Coshocton<br>Coshocton<br>Coshocton<br>Coshocton<br>Holmes<br>Knox | sandstone<br>sandstone<br>sandstone<br>sandstone<br>sandstone<br>sandstone<br>sandstone<br>sandstone<br>sandstone<br>sandstone | 681<br>2,128<br>3,052<br>585<br>17,473 | 681<br>2,128<br>3,052<br>585<br>17,473 | Cn-695<br>Cn-692<br>Cn-13<br>Cn-659<br>Cn-686<br>Cn-809<br>Cn-815<br>Hs-49<br>Kx-12 | IM-402<br>IM-294<br>IM-397<br>IM-232<br>IM-504<br>IM-909<br>IM-939<br>IM-418<br>IM-445 |
| Briggs Sand & Gravel, Inc.<br>Route 4 Box 303 County Rd. 10<br>Marietta, OH 45750<br>740-373-3363<br>James A. Briggs, pres. | Briggs Sand & Gravel, Inc. (365)   | Washington   | sand & gravel  | 5,483                                  | 5,483                                  | Wn-508  | IM-57  |
| Broadway Sand & Gravel, Inc.<br>2000 Sandridge Dr.<br>Dayton, OH 45439<br>937-299-1166<br>George D. Jones, v. pres.         | Broadway Sand & Gravel, Inc. (225)   | Montgomery   | sand & gravel  |  |  | My-65   | IM-594   |
| Broshear Contractors, Inc.<br>2520 Millville-Ross Rd.<br>Hamilton, OH 45013<br>513-863-3388<br>Gerald Broshear, pres.       | Green Heron (716)<br>Ross Twp. Gravel (31)   | Butler<br>Butler   | sand & gravel<br>sand & gravel   | 87,255                                 | 87,255                                 | Br-B<br>Br-48   | IM-2029<br>IM-562  |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|--|---|---|--|-----------------------------|-----------------------------|-------------------------------------|---|
| Gary L. Brown<br>900 W. South Boundary St.,<br>Bldg. 10<br>Perrysburg, OH 43551<br>419-872-4202<br>Gary L. Brown                     | Gary L. Brown (682)   | Lucas   | sand & gravel  |                             |                             | Ls-GB                               | IM-1323                                 |
| Browning-Ferris Industries of Ohio, Inc.<br>530 North Camp Rd.<br>Port Clinton, OH 43452<br>419-635-2367<br>David Vossmer, gen. mgr. | Ottawa County Landfill (198)  | Ottawa  | clay   | 153,177                     | 153,177                     | Oa-BF                               | IM-1287                                 |
| Oscar Brugmann Sand & Gravel,<br>Inc.<br>3828 Dudley Rd.<br>Mantua, OH 44255<br>330-274-8224<br>Roy Brugmann, pres.                  | Oscar Brugmann Sand & Gravel, Inc. (258)<br>(70)<br>Oscar Brugmann Sand & Gravel, Inc. (628)  | Portage<br>Portage                                  | sand & gravel<br>sandstone<br>sand & gravel                                  | 509,030<br>35,639           | 552,000<br>36,200           | Pe-9<br>Pe-OB                       | IM-119<br>IM-1241                       |
| Brush Wellman, Inc.<br>14710 W. Portage River South Rd.<br>Elmore, OH 43416-9502<br>419-862-2745<br>John Dayton, Env. Engineer       | Brush Wellman Clay Mine (136)   | Ottawa  | clay   |                             |                             | Oa-19                               | IM-1153                                 |
| Buckeye Excavating Development,<br>Inc.<br>P.O. Box 102<br>Orrville, OH 44667<br>330-682-0730<br>Steven R. Steiner, partner          | Steven Steiner (535)  | Wayne   | sand & gravel  | 11,664                      | 11,664                      | We-23                               | IM-1136                                 |
| Buckeye Industrial Mining Co.<br>P.O. Box 389<br>Lisbon, OH 44432<br>330-337-9511<br>John C. Grisham, pres.                          | Clay (192)<br>(186)<br>West Point (178)<br>Baird (237)<br>Cable Job (146)<br>(146)<br>Close (200)<br>(200)<br>Robertsville (189)<br>(189) | Columbiana<br>Columbiana<br>Stark<br>Stark<br>Stark | limestone<br>clay<br>clay<br>clay<br>shale<br>clay<br>shale<br>clay<br>shale | 117,655<br>48,000<br>11,331 | 117,655<br>48,000<br>11,331 | Ca-BIM<br>Ca-987<br>Sk-B4<br>Sk-247 | IM-1271<br>D-0928<br>D-2096<br>D-0929   |
| James Bunnell, Inc.<br>5730 State Route 128<br>Cleves, OH 45002<br>513-353-1100<br>Jack Ernst, pres.                                 | James Bunnell, Inc. (123)<br>James Bunnell, Inc. (124)  | Hamilton<br>Hamilton                                | sand & gravel<br>sand & gravel   | 495,237<br>525,487          | 495,237<br>525,487          | Hmn-50<br>Hmn-59                    | IM-205,<br>IM-1139<br>IM-812,<br>IM-815 |
| Burlington Sand & Gravel Co.<br>P.O. Box 399<br>Chesapeake, OH 45619<br>740-894-5978<br>Vernon E. Collier, owner                     | Burlington Sand & Gravel Co. (170)  | Lawrence  | sand & gravel  | 1,224                       | 1,224                       | Le-426                              | IM-856                                  |
| The Terry Byrne Mining Co.<br>4775 Mill Run Rd.<br>Lexington, OH 44904<br>419-886-4345<br>Terrance K. Byrne, owner                   | The Terry Byrne Mining Co. (699)  | Richland  | sand & gravel  |                             |                             | Rd-TB                               | IM-1343                                 |
| C & S Contractors, Inc.<br>P.O. Box 498457<br>Cincinnati, OH 45249<br>513-530-9844<br>Raymond A. Conn, pres.                         | C & S Contractors, Inc. (356)   | Warren  | sand & gravel  |                             |                             | Wan-47                              | IM-846                                  |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|--|---|---|--|--|--|--|
| C.I.R., Inc.<br>2856 N. County Line Rd.<br>Geneva, OH 44041-9604<br>440-352-2256<br>Louis W. Pirc, pres.                            | Harmon (625)   | Lake                                      | sand & gravel   | 1,471                                  | 1,471                                  | Lke-CIR                                      | IM-1243  |
| Cargill Incorporated<br>Cargill Salt Division<br>P.O. Box 6920<br>Cleveland, OH 44101<br>216-651-7200<br>Dale Fehrenback, gen. mgr. | Cargill Salt Inc. (1)<br>Cargill Incorporated (4)  | Cuyahoga<br>Summit                        | salt<br>salt  | 1,971,904<br>290,229                   | 2,162,160<br>287,246                   | Cya-30<br>St-9127                            |  |
| Carlisle Equipment Group L.P.<br>P.O. Box 308<br>Newport, KY 41072<br>859-441-7400<br>Jeff Fenton, pres.                            | Landmark Baptist Temple (227)<br>(235)   | Hamilton                                  | limestone<br>shale  | 12,000                                 | 12,000                                 | Hmn-CE                                       | IM-2113  |
| Carmeuse Ohio Inc.<br>1967 W. CR 42<br>Bettsville, OH 44815<br>419-986-5200<br>Farley Wood, operations mgr.                         | Maple Grove Works (106)  | Seneca                                    | limestone   | 3,255,464                              | 3,255,464                              | Sa-2   | IM-352   |
| Joe E. Carter<br>21399 State Line Rd.<br>Lawrenceburg, IN 47025<br>812-537-3970<br>Joe E. Carter, owner                             | Lost Bridge (642)  | Hamilton                                  | sand & gravel   | 500                                    | 500                                    | Hmn-JC                                       | IM-1267  |
| Carter & Carter, Inc.<br>P.O. Box 266<br>Miamisburg, OH 45343-0266<br>937-859-1036<br>Charles V. Carter, pres.                      | Carter & Carter, Inc. (561)<br>(157)   | Montgomery                                | sand & gravel<br>clay   | 4,816                                  | 6,000                                  | My-CW  | IM-878   |
| Cashen, Inc.<br>1225 Dock Rd.<br>Madison, OH 44057<br>440-428-1148<br>Andrew Cashen, owner  | Cashen, Inc. (597)   | Lake                                      | sand & gravel   |  |  | Lke-C  | IM-1215  |
| Cedar Heights Clay Co.<br>P.O. Box 295<br>Oak Hill, OH 45656-0295<br>740-682-7794<br>William T. Brown, pres.                        | Harrison (195)<br>Phillips (230)   | Jackson<br>Jackson                        | clay<br>clay  | 44,989                                 | 44,989                                 | Jkn-CH2<br>Jkn-CH3                           | IM-1302<br>IM-2035                               |
| Central-Allied Enterprises, Inc.<br>P.O. Box 80449<br>Canton, OH 44708-0449<br>330-477-6751<br>Gerald S. Orn, pres.                 | Canton Aggregate Div. (318)<br>Canton Aggregate Div. (319)<br>Central Aggregate Div. (631)<br>Massillon Washed Gravel Div. (325)<br>Massillon Washed Gravel Div. (578) | Stark<br>Stark<br>Stark<br>Stark<br>Stark | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 760,947<br>199,219<br>4,500<br>311,484 | 760,947<br>199,219<br>4,500<br>311,484 | Sk-681<br>Sk-689<br>Sk-CA<br>Sk-607<br>Sk-MW | IM-164<br>IM-173<br>IM-1234<br>IM-102<br>IM-1171 |
| Central Alloy Processing<br>275A Masonic Park Rd.<br>Marietta, OH 45750<br>740-525-0381<br>R. Grant Elliot, pres.                   | Fletcher (84)  | Knox                                      | sandstone   |  |  | Kx-C   | IM-2128  |
| Central Ohio Coal Co.<br>P.O. Box 98<br>Cumberland, OH 43732-0098<br>740-962-2013<br>Gary Dimmerling, gen. mgr.                     | Horse Run Stone Quarry (73)<br>Central Ohio Coal Company (230)   | Morgan<br>Noble                           | limestone<br>limestone  |  |  | Mon-600<br>Ne-C1                             | D-1034<br>IM-2134                                |
| Center West Enterprise, Inc.<br>1544 N. Main St.<br>Niles, OH 44446<br>330-544-0890<br>Andrew Basil Polivka, pres.                  | Center West Enterprise, Inc. (611)   | Trumbull                                  | sand & gravel   |  |  | Tl-C   | IM-1190  |

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|---|---|---|---|---|---|--|--|
| Cherokee Run Landfill<br>2946 U.S. Route 68 North<br>Bellefontaine, OH 43311<br>937-593-3566<br>Larry Sayler, gen mgr.                        | Cherokee Run Landfill (236)   | Logan   | clay  | 120,923                                 | 120,923                                 | Lgn-C  | IM-2108  |
| Chesterhill Stone Co.<br>773 East State Route 60 NE<br>P.O. Box 599<br>McConnelsville, OH 43756<br>740-962-5621<br>Carl L. Price, pres.       | Buck Farm (240)<br>Fordham Farm (735)<br>East Fultonham (75)<br>Mount Farm (761)<br>Willow Island (675) | Morgan<br>Morgan<br>Muskingum<br>Washington<br>Washington | sand & gravel<br>sand & gravel<br>limestone<br>sand & gravel<br>sand & gravel | 50,340<br>956,786<br>133,510<br>432,096 | 45,790<br>940,643<br>133,510<br>473,736 | Mon-588<br>Mon-CS1<br>Mum-106<br>Wn-C1<br>Wn-C | IM-35<br>IM-2049<br>IM-297<br>IM-2088<br>IM-1315 |
| Chesterville Sand & Gravel Co., Inc.<br>State Route 95 E<br>P.O. Box 51<br>Chesterville, OH 43317<br>419-768-3369<br>Carrol D. Gleason, pres. | Chesterville Sand & Gravel Co., Inc.(242)   | Morrow  | sand & gravel   | 245,438                                 | 245,539                                 | Mw-10  | IM-258   |
| Christman Quarry<br>47278 Swazey Rd.<br>Lewisville, OH 43754<br>740-838-2475<br>Gerald L. Christman, owner                                    | Christman Quarry (163)  | Monroe  | limestone   | 65,174                                  | 65,174                                  | Me-C   | IM-1088  |
| City Stone LLC<br>8063 Southern Blvd.<br>Youngstown, OH 44512<br>330-742-0578<br>John Annichinni, pres.                                       | City Stone LLC (86)   | Trumbull  | sandstone   | 160,000                                 | 240,000                                 | Tl-CA  | IM-2085  |
| Clark Clay, Inc.<br>6878 TR 310<br>Millersburg, OH 44654<br>330-674-2225<br>Dennis S. Clark, owner  | Clark Clay, Inc. (17)   | Holmes  | clay  |   |   | Hs-56  |  |
| Clemson Excavating, Inc.<br>9954 Old State Rd.<br>Chardon, OH 44024<br>440-286-4757<br>Bill Clemson, pres.                                    | Clemson (635)   | Ashtabula   | sand & gravel   | 31,726                                  | 31,726                                  | Asa-C  | IM-1278  |
| Cleveland Quarries/<br>American Stone Corp.<br>P.O. Box 261<br>Amherst, OH 44001-0261<br>440-986-4501<br>James Rallo, pres.                   | Birmingham Quarry (14)<br>Amherst Quarries (27)   | Erie<br>Lorain  | sandstone<br>sandstone  | 6,878                                   | 6,878                                   | Ee-21<br>Ln-3                                  | IM-416<br>IM-415                                 |
| M. J. Coates Construction Co., Inc.<br>P.O. Box 41231<br>Dayton, OH 45441<br>937-433-1581<br>Martin J. Coates, owner                          | M. J. Coates Construction Co., Inc. (548)<br>M. J. Coates Construction Co., Inc. (550)                  | Greene<br>Greene  | sand & gravel<br>sand & gravel  | 73,863<br>73,863                        | 73,863<br>73,863                        | Ge-47<br>Ge-G                                  | IM-751<br>IM-655                                 |
| Cochran Transportation Services,<br>Inc.<br>P.O. Box 608<br>Athens, OH 45701<br>740-593-3906<br>Charles W. Cochran, pres.                     | Circle Hill Sand & Gravel, Inc. (458)<br>(87)   | Athens  | sand & gravel<br>clay   | 28,506<br>35                            | 28,506<br>35                            | As-595   | IM-1083  |
| Boone Coleman Construction, Inc.<br>32 State Route 239<br>West Portsmouth, OH 45663<br>740-858-6661<br>Boone Coleman, pres.                   | Boone Coleman Construction, Inc. (73)<br>Coleman Pit (576)  | Scioto<br>Scioto  | sandstone<br>sand & gravel  |   |   | So-BC<br>So-B                                  | IM-1252<br>IM-705                                |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)                | County          | Commodity              | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|--|---|-----------------|------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| Bill D. Colwell<br>P.O. Box 261<br>Somerville, OH 45064<br>513-726-6800<br>Bill D. Colwell, owner  | Bill D. Colwell Gravel (28)                           | Butler          | sand & gravel          | 24,000            | 24,000                 | Br-36             | IM-649                               |
| Con-Ag, Inc.<br>16672 County Rd. 66A North<br>St. Marys, OH 45885<br>419-394-8870<br>Robert E. Hirschfeld, pres.   | Con-Ag, Inc. (10)                                     | Auglaize        | limestone              | 253,185           | 182,184                | Ae-31             | IM-744                               |
| County Disposal (Ohio), Inc.<br>dba County Environmental<br>of Wyandot<br>11164 CR 4<br>Carey, OH 43316<br>419-396-3581<br>Jim Van Weelden, reg.v. pres. | County Disposal (Ohio), Inc. (224)                    | Wyandot         | clay                   |                   |                        | Wt-CD             | IM-2016                              |
| County Line Concrete & Supply Co.<br>P.O. Box 176<br>Gnadenhutten, OH 44629<br>740-254-4635<br>William E. Stocker, Chairman                              | County Line Concrete & Supply Co. (668)               | Coshocton       | sand & gravel          |                   |                        | Cn-C              | IM-1311                              |
| Countywide Recycling and<br>Disposal Facility<br>3619 Gracemont St. SW<br>East Sparta, OH 44626<br>330-874-3855<br>Tim Vandersall, gen. mgr.             | Countywide Landfill (231)<br>Countywide RDF (53)      | Stark<br>Stark  | clay<br>clay           |                   |                        | Sk-CR<br>Sk-217   | IM-2020<br>D-0938                    |
| Donald A. Coy<br>3112 Clark Mill Rd.<br>Norton, OH 44203<br>330-753-6640<br>Donald A. Coy, owner   | Donald A. Coy (686)                                   | Summit          | sand & gravel          | 9,995             | 9,995                  | St-DC             | IM-1346                              |
| Craigton Shale Co.<br>P.O. Box 6<br>Lakeville, OH 44638<br>330-496-3000<br>Lenny & Bruce Schemrich,<br>owners  | Lakeville Sand & Gravel (670)<br>Craigton Shale (165) | Holmes<br>Wayne | sand & gravel<br>shale | 106,612           | 106,612                | Hs-C<br>We-25     | IM-1303<br>IM-1209                   |
| Cremeans Concrete & Supply<br>Co., Inc.<br>Georges Creek Rd.<br>P.O. Box 475<br>Gallipolis, OH 45631<br>740-446-1142<br>Frank A. Cremeans, pres.         | Cremeans Concrete & Supply Co., Inc. (440)            | Gallia          | sand & gravel          |                   |                        | Ga-626            | IM-1046                              |
| Crosby Gravel, Inc.<br>9570 State Route 128<br>Harrison, OH 45030<br>513-738-0077<br>Donald Smith, pres.   | Crosby Gravel, Inc. (121)                             | Hamilton        | sand & gravel          | 34,372            | 34,372                 | Hmn-44            | IM-120                               |
| R. A. Cruise Sand & Gravel, Inc.<br>P.O. Box 1066<br>Ravenna, OH 44266<br>330-296-4087<br>Larry A. Cruise, pres.   | R. A. Cruise Sand & Gravel, Inc. (261)                | Portage         | sand & gravel          | 43,865            | 43,865                 | Pe-45             | IM-139                               |
| Cunningham Asphalt Paving, Inc.<br>P. O. Box 370<br>Wheelersburg, OH 45694<br>740-574-6184<br>Karl Cunningham, pres.                                     | Cunningham Pit (304)                                  | Scioto          | sand & gravel          |                   |                        | So-83             | IM-211                               |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|--|---|------------|------------------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| Custar Stone Co.<br>P.O. Box 629<br>Napoleon, OH 43545<br>419-533-7701<br>Brent Gerken, pres.                                | Custar Stone Co.(129)                                       | Wood       | limestone                          | 434,249           | 429,270                | Wd-5              | IM-473                               |
| D. & D. Mining Co.<br>3379 E. Garfield Rd.<br>New Springfield, OH 44443<br>330-549-3127<br>Donald Thompson, pres.            | D. & D. Strip (130)<br>(130)<br>D. & D. Strip (57)<br>(164) | Columbiana | clay<br>shale<br>sandstone<br>clay | 3,138<br><br>680  | 3,138<br><br>680       | Ca-348<br>Ca-888  | IM-976<br>IM-1181                    |
| D & K Materials, Inc.<br>3141 Congress Lake Rd.<br>Mogadore, OH 44260<br>330-678-2411<br>Kimberly S. Ebie, pres.             | D & K Materials, Inc. (568)<br>(199)                        | Portage    | sand & gravel<br>clay              | 39,752            | 39,752                 | Pe-101            | IM-1154                              |
| D. & W. Sand & Gravel<br>10677 Wren Rd.<br>Mechanicsburg, OH 43044<br>937-834-2548<br>Dale Potter, owner                     | D. & W. Sand & Gravel (49)                                  | Champaign  | sand & gravel                      |                   |                        | Cpn-21            | IM-616                               |
| D.B.M. Materials, LLC<br>2040 Alum Creek Dr.<br>Columbus, OH 43207<br>614-445-8421<br>John B. Igel, pres.                    | D.B.M. Materials, LLC (97)                                  | Franklin   | sand & gravel                      |                   |                        | Fn-14             | IM-832                               |
| D.G.M., Inc.<br>453 Salisbury Rd.<br>Beaver, OH 45613<br>740-820-3145<br>Thomas Salisbury, pres.                             | Tow Path Ready Mix (664)                                    | Scioto     | sand & gravel                      | 48,085            | 48,085                 | So-DGM            | IM-1280                              |
| Darby Creek Excavating, Inc.<br>6790 Brooksmiller Rd.<br>Circleville, OH 43113<br>740-477-8600<br>Kevin R. Steward, pres.    | Darby Creek Excavating, Inc. (671)                          | Pickaway   | sand & gravel                      | 108,480           | 108,480                | Pky-DC            | IM-1316                              |
| De Milta Sand & Gravel, Inc.<br>921 Erie Rd.<br>Eastlake, OH 44095<br>440-942-2015<br>Nick De Milta, pres.                   | De Milta Sand & Gravel, Inc. (598)                          | Lake       | sand & gravel                      |                   |                        | Lke-D             | IM-1187                              |
| Demmy Construction, Inc.<br>4324 Fairfield Pike<br>Springfield, OH 45502<br>937-323-4079<br>Daniel E. Demmy, pres.           | Demmy Constuction, Inc.(216)<br>(385)                       | Clark      | limestone<br>sand & gravel         | 20,823<br>13,659  | 20,823<br>13,659       | Ck-501            | IM-340                               |
| Demmy Sand & Gravel<br>4324 Fairfield Pike<br>Springfield, OH 45502<br>937-323-9844<br>Woodrow Demmy, owner                  | Demmy Sand & Gravel (54)                                    | Clark      | sand & gravel                      | 6,956             | 6,956                  | Ck-502            | IM-375                               |
| A. J. Diana Sons, Inc.<br>1916 Erie Ave. NW<br>P.O. Box 488<br>Massillon, OH 44648<br>330-832-5904<br>Virgil V. Diana, pres. | Neidert Pit (320)   | Stark      | sand & gravel                      |                   |                        | Sk-694            | IM-858                               |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|--|---|--|--|---------------------------------------|---|---|
| Dingledine Basic Materials, Inc.<br>2304 Somerville Rd.<br>P.O. Box 262<br>Somerville, OH 45064<br>513-726-5258<br>Gerald Dingledine, pres. | Dingledine Basic Materials, Inc. (32)  | Butler  | sand & gravel  | 94,176                                   | 65,462                                | Br-50   | IM-739  |
| Dome Minerals, Inc.<br>15601 Emerick Rd.<br>Kensington, OH 44427<br>330-223-1413<br>Fred A. Rogers, owner                                   | Dome Minerals, Inc. (79)   | Columbiana  | shale  | 28,253                                   | 28,253                                | Ca-947  | IM-935  |
| James E. Downard<br>1185 Mount Zwingli Rd.<br>Bremen, OH 43107<br>740-569-7849<br>James E. Downard, owner                                   | Downard Pit (541)<br>(155)   | Fairfield   | sand & gravel<br>clay  | 8,041                                    | 8,041                                 | Fd-16   | IM-1156   |
| Dravo Lime, Inc.<br>922 Sprindale Rd.<br>Maysville, KY 41056<br>606-564-9600<br>Carl A. Gilbert, pres.                                      | Jones Pit (537)<br>Newtown (128)   | Clermont<br>Hamilton                                | sand & gravel<br>sand & gravel   | 0<br>0                                   | 750<br>1,000                          | Ct-11<br>Hmn-11   | IM-665<br>IM-133  |
| C. E. Duff & Son, Inc.<br>9042 State Route 117<br>P.O. Box 305<br>Huntsville, OH 43324-0305<br>937-686-2488<br>James E. Duff, pres.         | C. E. Duff & Son, Inc. (156)<br>C. E. Duff & Son, Inc. (183)<br>C. E. Duff & Son, Inc. (420)<br>C. E. Duff & Son, Inc. (444)<br>C. E. Duff & Son, Inc. (50)<br>Duff Sand Co. (182) | Hardin<br>Logan<br>Logan<br>Logan<br>Logan<br>Logan | limestone<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>limestone<br>sand & gravel | 59,046<br>305<br>305<br>374,861<br>7,603 | 59,046<br>305<br>374,861<br>7,603     | Hdn-S<br>Lgn-39<br>Lgn-36<br>Lgn-12<br>Lgn-15<br>Lgn-31 | IM-1034<br>IM-887<br>IM-1007<br>IM-1071<br>IM-453<br>IM-454 |
| E. A. Construction, Inc.<br>7013 S. Funk Rd.<br>Shreve, OH 44676<br>330-496-2531<br>Ellis Aylsworth, pres.                                  | #1 (613)<br>#1 (74)<br>(185)   | Wayne<br>Wayne                                      | sand & gravel<br>sandstone<br>clay   | 40,797<br>4,155                          | 40,797<br>4,155                       | We-24<br>We-EA  | IM-1211<br>IM-1259  |
| ENZ, Inc.<br>P.O. Box 405<br>Magnolia, OH 44643<br>330-866-4510<br>James R. Demuth, pres.   | Fox Pit (225)<br>Sickafoose Pit (205)<br>(203)<br>(203)  | Stark<br>Stark                                      | limestone<br>limestone<br>clay<br>shale  | 207,237<br>109,087                       | 207,237<br>109,087                    | Sk-205<br>Sk-208  | D-1144<br>D-1015  |
| ESSROC Cement Corp.<br>P.O. Box 779<br>Bessemer, PA 16112<br>724-667-7702<br>George Gregory, pres.  | Bessemer Pit (57)<br>(34)<br>(34)<br>Carbon Pit (162)<br>(107)<br>(107)  | Mahoning<br>Mahoning                                | limestone<br>clay<br>shale<br>limestone<br>clay<br>shale                                   | 22,680<br>16,864<br>66,174<br>542,594    | 22,680<br>16,864<br>66,174<br>542,594 | Mg-608<br>Mg-EM   | IM-4<br>IM-1056   |
| Eagle Material Supply Ltd.<br>1400 Tharp Rd.<br>Alexandria, OH 43001<br>740-924-1066<br>Rock Van Wey, pres.                                 | Eagle Material Supply Ltd. (600)   | Licking   | sand & gravel  | 235,882                                  | 255,000                               | Lg-W  | IM-1213   |
| East Clayton Asphalt, Inc.<br>P.O. Box 38<br>Nelsonville, OH 45764<br>740-753-1005<br>Dan Simms, pres.                                      | East Clayton Asphalt, Inc. (21)  | Athens  | sand & gravel  |  |                                       | As-1161   | IM-97   |
| East Fairfield Coal Co.<br>10900 South Ave.<br>P.O. Box 217<br>North Lima, OH 44452<br>330-549-2165<br>W. Thomas Mackall, pres.             | Meandering Creek Farms (228)<br>Withers-Petersburg (171)<br>(602)<br>(53)<br>(118)   | Mahoning<br>Mahoning                                | limestone<br>limestone<br>sand & gravel<br>sandstone<br>clay                               | 1,005,904                                | 1,019,318                             | Mg-EF<br>Mg-631 <sup>1</sup>                            | IM-2093,<br>IM-2101<br>IM-1103                              |

<sup>1</sup>This mine began underground limestone mining in 2000.

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|---|---------------|---|-------------------|------------------------|-------------------|--------------------------------------|
| East Liverpool Landfill, Inc.<br>7916 Chapel St. SE<br>Waynesburg, OH 44688<br>330-866-3265<br>David A. Bower, Jr., pres.   | East Liverpool Landfill, Inc. (232)                             | Columbiana    | clay  |                   |                        | Ca-E              | IM-2112                              |
| Eaton Sand & Gravel Co.<br>11641 Mosteller Rd.<br>Cincinnati, OH 45241<br>513-771-0820<br>James P. Jurgensen, pres.         | Cleves Pit (132)  | Hamilton      | sand & gravel                               |                   |                        | Hmn-46            | IM-396                               |
| David E. Edgington<br>P.O. Box 282<br>Frankfort, OH 45628<br>740-998-5328<br>David E. Edgington, owner                      | Edgington Pit (573)   | Ross          | sand & gravel                               | 35,151            | 35,151                 | Rs-E              | IM-1168                              |
| Embroy, Inc.<br>8320 North State Route 123<br>Franklin, OH 45005<br>513-746-6121<br>Ronald Martz, pres.                     | Embroy, Inc. (589)  | Warren        | sand & gravel                               |                   |                        | Wan-7             | IM-151                               |
| Enon Washed Sand & Gravel Co.<br>1665 Enon Rd.<br>P.O. Box 363<br>Enon, OH 45323<br>513-651-5000<br>John Steele, Jr., pres. | Enon Washed Sand & Gravel Co. (57)                              | Clark         | sand & gravel                               | 312,480           | 357,870                | Ck-3              | IM-463                               |
| Envirosafe Services of Ohio, Inc.<br>876 Otter Creek Rd.<br>Oregon, OH 43616<br>419-255-5100<br>Douglas E. Roberts, pres.   | Johlin Property Clay Mine (238)                                 | Lucas         | clay  | 69,255            | 69,255                 | Ls-E              | IM-1075,<br>IM-2116                  |
| Erie Blacktop, Inc.<br>4507 Tiffin Ave.<br>P.O. Box 2308<br>Sandusky, OH 44870<br>419-625-7374<br>Dean Wikel, pres.         | Erie Blacktop Quarry (24)<br>(637)<br>Erie Blacktop, Inc. (417) | Erie<br>Huron | limestone<br>sand & gravel<br>sand & gravel | 181,997<br>56     | 181,997<br>0           | Ee-27<br>Hrn-16   | IM-608<br>IM-975                     |
| Erie Materials, Inc.<br>4507 Tiffin Ave.<br>Sandusky, OH 44870<br>419-625-7374<br>Dean Wikel, pres.                         | Borchardt (83)  | Erie          | sand & gravel                               | 865               | 0                      | Ee-18             | IM-676                               |
| Erie Sand & Gravel Co.<br>P.O. Box 179<br>Erie, PA 16512-0179<br>814-453-6721<br>Sidney E. Smith, III, pres.                | Erie Sand & Gravel Co. (1)                                      | Lake Erie     | sand & gravel                               | 8,250             | 8,250                  | Ee-dredge         |                                      |
| Feikert Sand & Gravel, Inc.<br>6971 County Rd. 189<br>Millersburg, OH 44654<br>330-674-0038<br>Lynn O. Feikert, pres.       | Feikert Sand & Gravel, Inc. (154)                               | Holmes        | sand & gravel                               | 96,207            | 96,207                 | Hs-511            | IM-1048,<br>IM-1240                  |
| Fenner Sand & Gravel, Inc.<br>7131 W. Fenner Rd.<br>Ludlow Falls, OH 45339<br>937-698-7048<br>Robert P. Snead, pres.        | Woodville Concrete Corp. (222)                                  | Miami         | sand & gravel                               | 104,000           | 104,000                | Mi-4              | IM-472                               |

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|--|--|------------------------|--------------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| Fleming Construction Co., Inc.<br>dba Scioto Sand & Gravel<br>P.O. Box 31<br>Marion, OH 43301-0031<br>740-494-2177<br>Gerald E. Fleming, pres. | Pit #1 (197)<br>Pit #2 (423)                                   | Marion<br>Marion       | sand & gravel<br>sand & gravel | 32,617<br>3,752   | 32,617<br>3,752        | Mn-16<br>Mn-19    | IM-171<br>IM-990                     |
| Flesher Sand & Gravel, Inc.<br>3322 Clark Mill Rd.<br>Norton, OH 44203<br>330-745-9239<br>James E. Fisher, pres.                               | Flesher Sand & Gravel, Inc. (327)                              | Summit                 | sand & gravel                  | 764               | 764                    | St-52             | IM-900                               |
| David Florence<br>Route 4, Box 88<br>Marietta, OH 45750<br>740-374-6008<br>David S. Florence, owner  | Florence Pit (80)<br>(163)                                     | Washington             | sandstone<br>clay              |                   |                        | Wn-F              | IM-1208                              |
| Foureman's Sand & Gravel, Inc.<br>2791 Wildcat Rd.<br>Greenville, OH 45331<br>937-548-1718<br>Gary B. Foureman, pres.                          | Foureman's Sand & Gravel, Inc. (80)                            | Darke                  | sand & gravel                  | 101,860           | 160,500                | Dke-4             | IM-433                               |
| Fox Stone Products, Inc.<br>P.O. Box 299<br>Put-in-Bay, OH 43456<br>419-285-3025<br>Richard H. Fox, owner                                      | Fox Stone Products, Inc. (180)                                 | Ottawa                 | limestone                      | 2,500             | 3,200                  | Oa-18             | IM-635                               |
| Lloyd B. Fry<br>P.O. Box 1515<br>Piqua, OH 45356<br>937-773-1940<br>Lloyd B. Fry, pres.  | Lloyd B. Fry (390)   | Miami                  | sand & gravel                  |                   |                        | Mi-T              | IM-696                               |
| Frye Sand & Gravel, Inc.<br>3049 S. Denmark Rd.<br>P.O. Box 3<br>Dorset, OH 44032-0003<br>440-858-2627<br>Harold L. Frye, owner                | Frye Sand & Gravel, Inc. (650)<br>Frye Sand & Gravel, Inc. (9) | Ashtabula<br>Ashtabula | sand & gravel<br>sand & gravel | 664<br>2,580      | 664<br>2,580           | Asa-F<br>Asa-10   | IM-1289<br>IM-198                    |
| GANS Ltd. dba Brimfield Sand & Soils<br>800 West Maple St.<br>Hartville, OH 44632<br>330-877-2525<br>Ellis Erb, pres.                          | GANS Ltd. (605)  | Portage                | sand & gravel                  | 5,839             | 2,000                  | Pe-102            | IM-1184                              |
| Ganges Gravel Co.<br>P.O. Box 638<br>Mansfield, OH 44901<br>419-896-3660<br>Don Daugherty, pres.   | Ganges Gravel Co. (289)  | Richland               | sand & gravel                  | 35,844            | 41,094                 | Rd-18             | IM-670                               |
| John L. Garber Materials, Inc.<br>Route 8<br>Lexington, OH 44904<br>419-884-1567<br>John L. Garber, pres.                                      | John L. Garber Materials, Inc. (290)                           | Richland               | sand & gravel                  | 227,162           | 235,000                | Rd-14             | IM-436                               |
| General Motors Power Train<br>26427 State Route 281 East<br>Defiance, OH 43512<br>419-782-7010<br>Michael Chapman, pres.                       | GMPT borrow area (217)   | Defiance               | clay                           |                   |                        | De-3              | IM-1351                              |

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|--|--|------------|-------------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| Gibson Sand & Gravel Co.<br>1475 Knorr Rd.<br>Galion, OH 44833<br>419-468-5820<br>John Gibson, owner                               | Gibson Sand & Gravel Co. (724)               | Crawford   | sand & gravel                 | 648               | 648                    | Cd-G              | IM-0693                              |
| Gillum Bros. Excavating<br>485 Douglas Ave.<br>Chillicothe, OH 45601<br>740-773-3425<br>Robert D. Gillum, pres.                    | Gillum Bros. Excavating (758)                | Ross       | sand & gravel                 | 5,000             | 5,000                  | Rs-G              | IM-2099                              |
| Glen-Gery Corp.<br>P.O. Box 207<br>Iberia, OH 43325<br>419-468-5002<br>Steve Matsick, pres.  | Iberia Quarry (36)                           | Marion     | shale                         | 207,762           | 207,762                | Mn-7              | IM-309                               |
| Golden Crescent Construction, Inc.<br>1104 Milan Ave.<br>Amherst, OH 44001<br>440-967-6822<br>Samuel T. Bartlett, pres.            | Golden Crescent Construction, Inc. (66)      | Lorain     | sandstone                     |                   |                        | Ln-14             | IM-1205                              |
| Golsch Construction, Inc.<br>9880 Valley Junction Rd.<br>Cleves, OH 45002<br>513-353-2555<br>Gary Golsch, pres.                    | Golsch (641)                                 | Hamilton   | sand & gravel                 | 4,500             | 5,000                  | Hmn-G             | IM-1270                              |
| Joyce A. Good<br>1203 Kieffer St.<br>Wooster, OH 44691<br>330-264-6803<br>Joyce A. Good, owner                                     | Joyce A. Good (508)                          | Ashland    | sand & gravel                 | 2,911             | 2,911                  | Ald-G             | IM-1121                              |
| Goshen Sand & Gravel<br>1012 Commercial Ave. SE<br>New Philadelphia, OH 44663<br>330-339-3339<br>Ben Cookson, Jr., pres.           | Benco Leasing dba Goshen Sand & Gravel (389) | Tuscarawas | sand & gravel                 |                   |                        | Ts-1976           | IM-1235                              |
| Graymont Dolime (OH) Inc.<br>P.O. Box 158<br>Genoa, OH 43430<br>419-855-8336<br>William Dodge, pres.                               | GenLime Inc. (85)                            | Ottawa     | limestone                     | 1,317,104         | 1,460,293              | Oa-1 <sup>2</sup> | IM-292                               |
| Gray Road Fill, Inc.<br>325 Clark Rd<br>Cincinnati, OH 45215<br>513-761-4980<br>Roy B. Schweitzer, pres.                           | Gray Road Fill, Inc. (211)                   | Hamilton   | limestone                     |                   |                        | Hmn-GR            | IM-1363                              |
| Louis A. Green and Associates<br>1356 N. Fairfield Rd., Suite D<br>Beaver Creek, OH 45432<br>937-431-0143<br>Louis A. Green, owner | Deam (719)                                   | Clark      | sand & gravel                 |                   |                        | Ck-LG             | IM-2073                              |
| Green Oaks Potting, Inc.<br>2222 Lake Rockwell Rd.<br>P.O. Box 979<br>Ravenna, OH 44266<br>330-296-2157<br>John Lyon, pres.        | Green Oaks (451)<br>(161)<br>(7)             | Portage    | sand & gravel<br>clay<br>peat |                   |                        | Pe-89             | IM-1142                              |

<sup>2</sup>Graymont Dolime (OH) Inc., and Stansley Mineral Resources operate from the same mine.

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|---|--|--|--|--|--|--|
| H. T. Griffin Excavating, Inc.<br>3950 S. Berkey Southern Rd.<br>Swanton, OH 43558<br>419-826-0230<br>Henry T. Griffin, owner         | H. T. Griffin Excavating, Inc. (472)  | Lucas  | sand & gravel  |  |  | Ls-G   | IM-1090  |
| Grimes Excavating<br>Route 3 Box 121<br>New Matamoras, OH 45767<br>740-865-3990<br>Lewis Grimes, owner                                | Grimes Sand and Gravel (533)  | Washington   | sand & gravel  | 162,930  | 162,930  | Wn-1008  | IM-1111  |
| Gwin Contracting Co.<br>P.O. Box 205<br>Columbiana, OH 44408<br>330-482-2092<br>Lyle D. Gwin, pres.                                   | Gwin Contracting Co. (30)   | Mahoning   | sandstone  |  |  | Mg-62  | IM-599   |
| J. M. Hamilton & Sons Co., Inc.<br>1974 Marion-Bucyrus Rd.<br>Marion, OH 43302<br>740-382-2189<br>Oliver E Hamilton, pres.            | J. M. Hamilton & Sons Co., Inc. (59)  | Marion   | limestone  | 22,287   | 22,287   | Mn-2 <sup>3</sup>                                  | IM-423   |
| Hanson Aggregates Davon, Inc.<br>4281 Roush Rd.<br>Hillsboro, OH 45133<br>937-364-2311<br>John B. Patton, pres.                       | Plum Run Stone (1)<br>Eagle Crushed Stone (184)<br>Highland Stone (41)<br>Hanson Aggregates Davon, Inc. (219)<br>Piketon Sand & Gravel (255)<br>Scioto Valley Resources (395) | Adams<br>Brown<br>Highland<br>Highland<br>Pike<br>Scioto | limestone<br>limestone<br>limestone<br>limestone<br>sand & gravel<br>sand & gravel | 1,864,897<br>1,284,471<br>792,875<br>450,611<br>282,780            | 1,910,000<br>1,322,450<br>810,000<br>462,773<br>282,780    | Ads-1<br>Bn-EC<br>Hd-2<br>Hd-D<br>Pke-24<br>So-100 | IM-237<br>IM-1195<br>IM-230<br>IM-2071<br>IM-222<br>IM-950 |
| Hanson Aggregates Midwest, Inc.<br>8130 Brint Rd.<br>P.O. Box 278<br>Sylvania, OH 43560-0278<br>419-882-0123<br>John B. Lawson, pres. | Sandusky Quarry (25)<br>Sylvania Quarry (53)<br>Waterville Quarry (52)<br>Hanson Paulding Plant (86)<br>Bloomville Quarry (108)<br>Flat Rock Quarry (107)                     | Erie<br>Lucas<br>Lucas<br>Paulding<br>Seneca<br>Seneca   | limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>limestone         | 4,479,760<br>830,108<br>182,632<br>234,557<br>232,617<br>1,555,795 | 4,540,159<br>772,443<br>0<br>238,448<br>1,624<br>1,541,782 | Ee-11<br>Ls-3<br>Ls-1<br>Pg-7<br>Sa-3<br>Sa-1      | IM-263<br>IM-580<br>IM-575<br>IM-349<br>IM-347             |
| Harden Agricultural Lime & Reclam. Svcs., Inc.<br>13865 Nickel Plate Rd.<br>Logan, OH 43138<br>740-385-5296<br>Scott R. Harden, owner | Harden Sand & Gravel (679)  | Hocking  | sand & gravel  |  |  | Hg-HA  | IM-1320  |
| Norman Harpster<br>16069 State Route 235<br>Belle Center, OH 43310<br>937-464-5623<br>Norman Harpster, owner                          | Harpster Pit (553)  | Hardin   | sand & gravel  | 100  | 100  | Hdn-H  | IM-864   |
| Harrison Sand & Gravel Co.<br>10980 Campbell Rd.<br>Harrison, OH 45030<br>513-367-5174<br>Donald L. Gauck, v. pres.                   | Harrison Sand & Gravel Co. (135)  | Hamilton   | sand & gravel  | 11,861   | 11,861   | Hmn-17   | IM-295   |
| Hartley Gravel<br>22941 Hartley Rd.<br>Alliance, OH 44601<br>330-823-0003<br>Jacob Maendel, pres.                                     | Hartley Gravel (721)  | Columbiana   | sand & gravel  | 9,300  | 9,300  | Ca-H1  | IM-2033  |
| Harvest Sand & Gravel, Inc.<br>2295 Bazetta Rd.<br>Cortland, OH 44410<br>330-372-4408<br>Andrew T. Yount, pres.                       | Harvest Sand & Gravel, Inc. (720)<br>(240)  | Columbiana   | sand & gravel<br>clay  | 51,514<br>285  | 56,666<br>314  | Ca-H   | IM-2027  |

<sup>3</sup>This mine was operated January through June 2001 by J. M. Hamilton & Sons Co., Inc., and July through December 2001 by National Lime & Stone Co.

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine<br>(and map location number)  | County                        | Commodity                                       | 2001 sales (tons)                  | 2001 production (tons)             | State mine number        | Mining and reclamation permit number   |
|--|--|-------------------------------|---|------------------------------------|------------------------------------|--------------------------|--|
| Haubeil & Sons Asphalt & Materials, Inc.<br>379 Seney Rd.<br>Chillicothe, OH 45601<br>740-773-6358<br>George W. Haubeil, pres.           | Haubeil & Sons Asphalt & Materials, Inc. (491)   | Ross                          | sand & gravel                                   | 92,225                             | 92,225                             | Rs-H                     | IM-1052                                |
| Haueter Sand & Gravel, Inc.<br>P.O. Box 206<br>Chardon, OH 44024<br>440-286-9482<br>Donald H. Haueter, pres.                             | Haueter Sand & Gravel, Inc. (108)<br>Haueter Sand & Gravel, Inc. (545)   | Geauga<br>Geauga              | sand & gravel<br>sand & gravel                  | 184,041<br>6,982                   | 184,041<br>6,982                   | Gea-29<br>Gea-H          | IM-215<br>IM-510                       |
| J. B. Hayes Excavating and Pipeline<br>758 West Union St.<br>Athens, OH 45701<br>740-592-3478<br>James B. Hayes, pres.                   | J. B. Hayes Excavating and Pipeline (226)  | Athens                        | clay  |                                    |                                    | As-H                     | IM-2081                                |
| Heiser Sand & Gravel Corp.<br>4833 Wayview St. NW<br>North Canton, OH 44720<br>330-499-8201<br>Richard L. Heiser, pres.                  | Heiser Sand & Gravel Corp. (608)<br>Heiser Sand & Gravel Corp. (609)   | Stark<br>Stark                | sand & gravel<br>sand & gravel                  | 32,325                             | 32,325                             | Sk-HS<br>Sk-HS1          | IM-1193<br>IM-1203                     |
| Hilltop Aggregate, Inc.<br>P.O. Box 100<br>Mogadore, OH 44260<br>330-628-4000<br>Robert W. West, pres.                                   | Hilltop Aggregate, Inc. (262)<br>Hilltop Aggregate, Inc. (737)   | Portage<br>Portage            | sand & gravel<br>sand & gravel                  | 227,788                            | 227,788                            | Pe-56<br>Pe-H            | IM-127<br>IM-2039                      |
| Hilltop Basic Resources, Inc.<br>One West Fourth St., Suite 1100<br>Cincinnati, OH 45202-3615<br>513-651-5000<br>John Steele, Jr., pres. | Hilltop Basic Resources, Inc. (747)<br>Fairborn Aggregate Plant (112)<br>West Carrollton Aggregate Plant (232) | Clark<br>Greene<br>Montgomery | sand & gravel<br>sand & gravel<br>sand & gravel | 534,700<br>578,799                 | 606,507<br>671,053                 | Ck-H<br>Ge-4<br>My-19    | IM-2089<br>IM-394<br>IM-401,<br>IM-916 |
| Hocking Valley Concrete, Inc.<br>35255 Hocking Dr.<br>Logan, OH 43138<br>740-385-2165<br>Mark Vaughn, v. pres.                           | Hocking Valley Concrete, Inc. (151)  | Hocking                       | sand & gravel                                   | 78,000                             | 85,000                             | Hg-262                   | IM-41                                  |
| Hocking Valley Mulch<br>32091 Beech Camp Rd.<br>Logan, OH 43138<br>740-385-6744<br>David E. Sheets, Jr., pres.                           | Sheets Pit (657)   | Hocking                       | sand & gravel                                   |                                    |                                    | Hg-HV                    | IM-1284                                |
| William A. Hoffman, Jr.<br>25043 State Route 104<br>Circleville, OH 43113<br>740-474-2002<br>William A. Hoffman, Jr., owner              | Hoffman Pit (480)  | Pickaway                      | sand & gravel                                   | 1,452                              | 1,452                              | Pky-H                    | IM-1039                                |
| Hollinger Excavating<br>2097 Hollansburg-Arcanum Rd.<br>New Madison, OH 45346<br>937-996-5381<br>Tom W. Hollinger, leasee                | Hollinger Gravel (81)  | Darke                         | sand & gravel                                   | 65                                 | 65                                 | Dke-10                   | IM-326                                 |
| Holmes Limestone Co.<br>P.O. Box 295<br>Berlin, OH 44610<br>330-893-2721<br>Merle Mullet, pres.  | 241 Plant (44)<br>(19)<br>(19)<br>Bolivar (76)<br>L&M Rainsburg (151)  | Holmes<br>Stark<br>Tuscarawas | limestone<br>clay<br>shale<br>clay<br>shale     | 3,119<br>5,059<br>20,265<br>36,623 | 3,119<br>5,059<br>20,265<br>36,623 | Hs-67<br>Sk-235<br>Ts-H1 | IM-3, IM-768<br>IM-945<br>IM-927       |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number) | County     | Commodity      | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|---|--|------------|----------------|-------------------|------------------------|-------------------|--------------------------------------|
| Holmes Supply Corp.<br>6710 County Rd. 624<br>Millersburg, OH 44654<br>330-674-0051<br>Steve Schlabach, pres.                                   | Holmes Supply Corp. (470)              | Holmes     | sand & gravel  | 244,477           | 244,477                | Hs-J              | IM-1043                              |
| Honey Creek Stone Co.<br>P.O. Box 286<br>Petersburg, OH 44454<br>724-654-5537<br>Carmen W. Shick, pres.   | Honey Creek Stone Co. (56) (208)       | Mahoning   | limestone clay | 304,191<br>63,036 | 328,958<br>63,036      | Mg-54             | IM-93                                |
| Terry A. Hoppes<br>1533 Moorefield Rd.<br>Springfield, OH 45503<br>937-399-1531<br>Terry A. Hoppes, pres.                                       | Hoppes (748)                           | Clark      | sand & gravel  |                   |                        | Ck-TH             | IM-2133                              |
| Hugo Sand Co.<br>7055 State Route 43<br>Kent, OH 44240<br>216-587-2700<br>Dorothy M. Strohm, pres.  | Hugo Sand Co. (264)                    | Portage    | sand & gravel  | 215,609           | 215,609                | Pe-10             | IM-138                               |
| Hunter Land Development<br>3672 CR 6-1<br>Delta, OH 43515<br>419-822-3744<br>Glenn Hunter, pres.  | Hunter Land Development (690)          | Fulton     | sand & gravel  |                   |                        | Ftn-H             | IM-1336                              |
| Hydraulic Press Brick Co.<br>8900 Hemlock Rd.<br>P.O. Box 31330<br>Independence, OH 44131<br>216-524-2950<br>Steven Rowe, pres.                 | Hydraulic Press Brick Co. (7)          | Cuyahoga   | shale          | 245,658           | 212,358                | Cya-19            | IM-95                                |
| George J. Igel & Co., Inc.<br>2040 Alum Creek Dr.<br>Columbus, OH 43207<br>614-445-8421<br>John B. Igel, pres.                                  | Valley Sand & Gravel, Inc. (627)       | Pickaway   | sand & gravel  | 800               | 800                    | Pky-C             | IM-1223                              |
| Inland South Aggregates<br>P.O. Box 276<br>Petersburg, OH 44454<br>330-542-1100<br>Dave Sugar, pres.  | Inland South Aggregates (539)          | Columbiana | sand & gravel  | 9,505             | 12,780                 | Ca-351            | IM-634                               |
| JBM Ltd.<br>dba State Rte. 416 Sand & Gravel<br>764 State Rte. 416 SE<br>New Philadelphia, OH 44663<br>330-339-4313<br>William P. Marino, pres. | State Rte. 416 Sand & Gravel (500)     | Tuscarawas | sand & gravel  | 88,103            | 88,103                 | Ts-2018           | IM-1076                              |
| J. L. & Son Excavating, Inc.<br>8241 Ft. Laurens Rd. NW<br>Strasburg, OH 44680<br>330-878-5883<br>Jerry L. Slankard, pres.                      | Beach City Pit (54)                    | Tuscarawas | sandstone      | 1,500             | 1,500                  | Ts-2032           | IM-1141                              |
| JP Sand & Gravel Co.<br>5911 Lockbourne Rd.<br>P.O. Box 2<br>Lockbourne, OH 43137<br>614-497-0083<br>Richard A. Roberts, pres.                  | JP Sand & Gravel Co. (98)              | Franklin   | sand & gravel  | 441,751           | 441,751                | Fn-52             | IM-191                               |

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|--|--|--------------------------|---|-------------------|------------------------|------------------------|--------------------------------------|
| Jaclib Enterprises, Inc.<br>560 State Route 554<br>Cheshire, OH 45620<br>740-367-0602<br>Jason C. Leach, pres.                       | Cheshire Pit (726)                                     | Gallia                   | sand & gravel                                   | 3,705             | 3,705                  | Ga-JE                  | IM-2034                              |
| JALIP, LTD.<br>16303 TR 124<br>Harpster, OH 43323<br>740-496-3025<br>David Herring, owner  | JALIP, LTD. (762)                                      | Wyandot                  | sand & gravel                                   | 2,261             | 2,261                  | Wt-J                   | IM-2119                              |
| James Bros., Inc.<br>3930 Boggs Rd.<br>Zanesville, OH 43701<br>740-454-1522<br>Daniel G. James, owner                                | James Sand & Gravel (248)                              | Muskingum                | sand & gravel                                   |                   |                        | Mum-216                | IM-689                               |
| Janson & Sons Corp.<br>11829 Spencer Park Rd.<br>Hiram, OH 44234<br>330-274-8896<br>Gary Janson, owner                               | Janson & Sons Corp. (738)                              | Portage                  | sand & gravel                                   | 101,748           | 101,748                | Pe-J                   | IM-2051                              |
| Janson's Soil Service, Inc.<br>1492 Mechanicsville Rd.<br>Rock Creek, OH 44084<br>440-466-3835<br>Peter E. Janson III, pres.         | Janson's Soil Service, Inc. (10)<br>(82)<br>(82)       | Ashtabula                | sand & gravel<br>clay<br>shale                  | 200               | 200                    | Asa-14                 | IM-563                               |
| Jarrett Sand Co.<br>6505 Skadden Rd.<br>Sandusky, OH 44870<br>419-359-1750<br>James Jarrett, owner                                   | Jarrett Sand Co. (84)                                  | Erie                     | sand & gravel                                   | 1,008             | 1,008                  | Ee-29                  |                                      |
| Jaymar, Inc.<br>8751 North State Route 7<br>Cheshire, OH 45620<br>740-992-6637<br>Jay Hall, Jr., pres.                               | Jaymar, Inc. (544)<br>Plant #4 (560)<br>Plant #5 (559) | Gallia<br>Meigs<br>Meigs | sand & gravel<br>sand & gravel<br>sand & gravel | 567,256           | 567,256                | Ga-J<br>Ms-308<br>Ms-L | IM-1145<br>IM-1174<br>IM-1159        |
| Jefferson Materials Co.<br>8505 State Route 14<br>Streetsboro, OH 44241<br>330-626-3816<br>Mark Shelly, pres.                        | Jefferson Materials Co. (265)                          | Portage                  | sand & gravel                                   | 396,055           | 396,055                | Pe-63                  | IM-82                                |
| Louis Johnson<br>9780 State Route 62<br>Orient, OH 43146<br>614-877-4184<br>Louis Johnson, owner                                     | Darby Materials Plant #5 (648)                         | Pickaway                 | sand & gravel                                   |                   |                        | Fn-C                   | IM-1265                              |
| Van Johnson Construction, Inc.<br>2672 Eckert Rd.<br>Lancaster, OH 43130<br>740-687-6043<br>Molly D. Johnson, pres.                  | Molly Johnson Mining (695)<br>(206)                    | Fairfield                | sand & gravel<br>clay                           |                   |                        | Fd-VJ                  | IM-1339                              |
| Johnson Road Sand & Gravel<br>510 Johnson Rd.<br>Kent, OH 44240<br>330-673-3396<br>Robert K. Heimann, pres.                          | Johnson Road Sand & Gravel (615)                       | Portage                  | sand & gravel                                   |                   |                        | Pe-98                  | IM-1219,<br>IM-1231                  |
| Johnson Stone Products, Inc.<br>14647 State Route 511<br>P.O. Box 39<br>Oberlin, OH 44074<br>440-774-1601<br>Terry A. Johnson, pres. | Kipton Quarry (75)                                     | Lorain                   | sandstone                                       |                   |                        | Ln-J                   | IM-1300                              |

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|---|---|------------------------|---|-------------------|------------------------|-------------------|--------------------------------------|
| Joseph Sand & Gravel, Inc.<br>16272 Boundary Rd.<br>Wapakoneta, OH 45895<br>419-568-3788<br>Kenneth D. Burden, pres.    | Joseph Sand & Gravel, Inc. (23)                           | Auglaize               | sand & gravel                           | 20,202            | 20,202                 | Ae-23             | IM-508                               |
| K.C.C.I.<br>P.O. Box 1298<br>Steubenville, OH 43952<br>740-543-4389<br>David Krulock, pres.                             | Apex (176)  | Jefferson              | limestone                               | 112,617           | 112,617                | Jfn-K             | IM-1164                              |
| K. M. A. Services<br>6741 North St.<br>Newark, OH 43055<br>740-587-0565<br>Kim M. Ault, owner                           | K. M. A. Services (729)                                   | Licking                | sand & gravel                           |                   |                        | Lg-KMA            | IM-2043                              |
| Keeney Sand & Stone, Inc.<br>13320 Girdled Rd.<br>Painesville, OH 44077<br>440-254-4582<br>Dennis J. Keeney, pres.      | Keeney Sand & Stone, Inc. (60)                            | Lake                   | sandstone                               | 84,352            | 84,352                 | Lke-K             | IM-859                               |
| Kelcher Environmental, Inc.<br>6834 Loop Rd.<br>Centerville, OH 45459<br>937-434-1334<br>Todd H. Kelcher, pres.         | Santefost Property (228)                                  | Butler                 | clay                                    |                   |                        | Br-K              | IM-2041                              |
| Kellstone, Inc.<br>P.O. Box 25527<br>Garfield Heights, OH 44125<br>216-883-7200<br>James A. Palladino, pres.            | Kellstone, Inc. (174)                                     | Erie                   | limestone                               | 931,985           | 931,985                | Ee-K              | IM-727                               |
| Kilbarger Construction, Inc.<br>P.O. Box 946<br>Logan, OH 43138<br>740-385-6019<br>Edward Kilbarger, pres.              | David Sheets (523)  | Hocking                | sand & gravel                           | 21,975            | 21,975                 | Hg-329            | IM-1112                              |
| Kimble Clay & Limestone Co.<br>3596 State Route 39 NW<br>Dover, OH 44622-9801<br>330-343-1226<br>Keith B. Kimble, pres. | Kimble Clay & Limestone Co. (117)<br>(41)<br>(63)<br>(63) | Tuscarawas             | limestone<br>sandstone<br>clay<br>shale | 39,338            | 39,338                 | Ts-1818           | IM-9                                 |
| King Limestone, Inc.<br>53681 Spencer Rd.<br>Cumberland, OH 43732<br>740-638-3942<br>Duane King, pres.                  | King Limestone, Inc. (147)                                | Guernsey,<br>Muskingum | limestone                               | 304,176           | 304,176                | Gy-309            | IM-1030                              |
| King Quarries, Inc.<br>41820 TR 4<br>Caldwell, OH 43724<br>740-732-2923<br>Mary King, pres.                             | King Quarries, Inc. (194)<br>King Quarries, Inc. (197)    | Noble<br>Noble         | limestone<br>limestone                  | 77,820            | 77,820                 | Ne-K<br>Ne-K1     | IM-1254<br>IM-1292                   |
| Kinsman Materials, LTD.<br>P.O. Box 76<br>Chardon, OH 44024<br>440-293-5400<br>Bill Clemson, pres.                      | Kinsman Materials, LTD. (593)                             | Ashtabula              | sand & gravel                           | 87,172            | 87,172                 | Asa-20            | IM-1198                              |
| Kipp's Gravel Co., Inc.<br>4987 State Route 222<br>Batavia, OH 45102<br>513-732-1024<br>Melvin M. Kipp, pres.           | Kipp's Gravel Co., Inc. (61)                              | Clermont               | sand & gravel                           | 72,648            | 72,648                 | Ct-7              | IM-432                               |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|--|--|---|---------------------------------|---------------------------------|--|---|
| Kirby's Sand & Gravel, Inc.<br>4876 County Hwy. 43<br>Upper Sandusky, OH 43351-9155<br>419-927-2260<br>Gene Kirby, owner        | Kirby's Sand & Gravel, Inc. (382)<br>Kirby's Sand & Gravel, Inc. (591)   | Wyandot<br>Wyandot                                   | sand & gravel<br>sand & gravel  | 92,990                          | 92,990                          | Wt-17<br>Wt-K                          | IM-604<br>IM-943  |
| Knox County Board of Commissioners<br>110 East High St.<br>Mt. Vernon, OH 43050<br>740-397-1590<br>James Henry, county engineer | Apple Valley (148)   | Knox   | shale   | 2,700                           | 2,700                           | Kx-K                                   | IM-870  |
| Koch-Glitsch, Inc.<br>Knight Division<br>P.O. Box 30070<br>East Canton, OH 44730<br>330-488-1651<br>Mike Graeff, pres.          | Koch-Glitsch, Inc. (174)   | Stark  | clay  |                                 |                                 | Sk-K                                   | IM-1236   |
| Krizman Enterprises<br>53100 Placid Dr.<br>South Bend, IN 46637<br>219-272-8887<br>David J. Krizman, pres.                      | Krizman Enterprises (743)  | Tuscarawas   | sand & gravel   |                                 |                                 | Ts-K                                   | IM-2050   |
| T & K Kuhnle Co.<br>P.O. Box 375<br>Newbury, OH 44065<br>440-564-7168<br>Bob Russell, v. pres.                                  | Munn Rd. Sand & Gravel (518)   | Geauga   | sand & gravel   | 103,097                         | 103,097                         | Gea-TK                                 | IM-902  |
| L & I Natural Resources, Inc.<br>10369 Cones Rd.<br>Loveland, OH 45140<br>513-459-7716<br>Jerry Walker, pres.                   | L & I Pit & Mill (430)   | Warren   | sand & gravel   | 91,941                          | 91,941                          | Wan-50                                 | IM-1006   |
| L & M Mineral Co.<br>5205 State Route 39<br>Millersburg, OH 44654<br>330-893-2227<br>John E. Ling, Jr., pres.                   | Evans, Heil (64)<br>Luikart (65)<br>(65)<br>Spring Industries (588)<br>Spring (170)<br>(691)<br>(55)<br>(77)<br>(77) | Tuscarawas<br>Tuscarawas<br>Tuscarawas<br>Tuscarawas | shale<br>clay<br>shale<br>sand & gravel<br>limestone<br>sand & gravel<br>sandstone<br>clay<br>shale | 51,242<br>9,350<br>3,820        | 51,242<br>9,350<br>3,820        | Ts-1884<br>Ts-1914<br>Ts-SI<br>Ts-1982 | IM-6<br>D-0701<br>IM-569<br>IM-621  |
| LUB, Inc.<br>4174 East Pike<br>Zanesville, OH 43701<br>740-452-3668<br>Otto Luburgh, pres.                                      | LUB, Inc. (756)  | Muskingum  | sand & gravel   | 25,000                          | 30,500                          | Mum-LB                                 | IM-2106   |
| Lafarge Corp.<br>Great Lakes Region<br>P.O. Box 160<br>Paulding, OH 45879<br>419-399-4861<br>Philippe Rollier, pres.            | Paulding Quarry (87)<br>(42)   | Paulding   | limestone<br>clay   | 757,115<br>132,036              | 763,115<br>132,036              | Pg-1                                   | IM-513  |
| Lafarge North America<br>555 Frost Rd., Suite 100<br>Streetsboro, OH 44241<br>800-352-3250<br>Todd Ohlheiser, v. pres.          | Petersburg (212)<br>Marblehead (84)<br>Shalersville Plant-Northern Division (277)                                    | Mahoning<br>Ottawa<br>Portage                        | limestone<br>limestone<br>sand & gravel   | 357,986<br>3,133,935<br>739,054 | 494,261<br>3,780,448<br>637,731 | Mg-L<br>Oa-7<br>Pe-68                  | IM-1353<br>IM-440<br>IM-660,<br>IM-1047,<br>IM-1107,<br>IM-1124<br>IM-582 |
|   | Navarre (453)  | Stark  | sand & gravel   |                                 |                                 | Sk-241                                 |   |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number)   | County             | Commodity                      | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|---|--|--------------------|--------------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| LaMar Sand & Fill, Ltd.<br>9090 State Route 73<br>Hillsboro, OH 45133<br>937-393-1264<br>Larry Miller, owner            | LaMar Pit (656)  | Highland           | sand & gravel                  |                   |                        | Hd-L              | IM-1297                              |
| Laidlaw Waste Systems (Celina), Inc.<br>6141 Depwig Rd.<br>Celina, OH 45822<br>937-593-0057<br>Eric Hildreth, gen. mgr. | Laidlaw Waste Systems (Celina), Inc. (209)   | Mercer             | clay                           | 20,725            | 20,725                 | Mr-C              | IM-1341, IM-2107                     |
| Lakeside Sand & Gravel Co.<br>3431 Frost Rd.<br>Mantua, OH 44255<br>330-274-2569<br>Larry Kotkowski, pres.              | Lakeside Sand & Gravel Co. (268)<br>Lakeside Sand & Gravel Co. (661)                   | Portage<br>Portage | sand & gravel<br>sand & gravel | 437,481           | 437,481                | Pe-40<br>Pe-LS    | IM-190<br>IM-1293                    |
| Lancaster Limestone<br>35380 Hocking Dr.<br>Lancaster, OH 43138<br>740-385-2625<br>Lucas A. Horn, pres.                 | Lancaster Limestone (752)  | Hocking            | sand & gravel                  | 1,300             | 1,300                  | Hg-L              | IM-2117                              |
| Latham Limestone, Inc.<br>P.O. Box 77<br>Latham, OH 45646<br>740-493-2677<br>Robert Murray, pres.                       | Latham Limestone (91)  | Pike               | limestone                      | 284,125           | 285,000                | Pke-13            | IM-213                               |
| Leetonia Sand & Gravel Co., Inc.<br>P.O. Box 236<br>Canfield, OH 44406<br>330-427-1015<br>Stephen Holowach, pres.       | Leetonia Sand & Gravel Co., Inc. (463)<br>(65)   | Columbiana         | sand & gravel<br>sandstone     |                   |                        | Ca-982            | IM-1108                              |
| Lingvai Peat Co.<br>01693 CR 8<br>Edgerton, OH 43517<br>419-298-2058<br>Ronald Lingvai, owner                           | Lingvai Peat Co. (4)   | Williams           | peat                           |                   |                        | Ws-17             |                                      |
| Link Trucking Co., Inc.<br>7305 State Route 669 N<br>McConnelsville, OH 43756<br>740-962-4480<br>Paul Kussmaul, pres.   | Link Trucking Co., Inc. (647)  | Morgan             | sand & gravel                  | 22,887            | 22,887                 | Mon-L             | IM-1266                              |
| Little Miami Sand & Gravel<br>P.O. Box 36<br>Lebanon, OH 45036<br>513-932-3221<br>Paul N. Herdman, pres.                | Little Miami Sand & Gravel Plant #1 (391)<br>Little Miami Sand & Gravel Plant #2 (429) | Warren<br>Warren   | sand & gravel<br>sand & gravel | 0<br>0            | 1,505<br>1,600         | Wan-B<br>Wan-46   | IM-679<br>IM-842                     |
| Logan Construction<br>3610 CR 50<br>Rushsylvania, OH 43347<br>937-468-2356<br>Todd Mobley, owner                        | Logan Construction (731)   | Logan              | sand & gravel                  |                   |                        | Lgn-L             | IM-2064                              |
| London Tile Co.<br>65 Walnut St.<br>New London, OH 44851<br>419-929-1551<br>Sylvia Danison, pres.                       | Biglow (1)   | Ashland            | shale                          |                   |                        | Ald-1             | IM-334                               |
| Loxley Aggregates, Inc.<br>4277 Falls Rd.<br>Lewisburg, OH 45338<br>937-839-5488<br>Matthew L. Loxley, pres.            | Loxley Aggregates, Inc. (488)<br>(101)   | Preble             | sand & gravel<br>clay          | 2,495<br>1,696    | 2,495<br>1,696         | Pre-9             | IM-1095                              |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|---|---|--|---|--|---|--|
| Luburgh Inc.<br>4174 East Pike<br>Zanesville, OH 43701<br>740-452-3668<br>Otto Luburgh, pres.                             | Luburgh Clay Pit (210)  | Muskingum   | clay   | 34,500  | 34,500   | Mum-L   | IM-1344  |
| Lucky Sand & Gravel Co.<br>12018 Frost Rd.<br>Mantua, OH 44255<br>330-562-6196<br>Bernard Udelson, pres.                  | Lucky Sand & Gravel Co. (570)   | Portage   | sand & gravel  | 73,198  | 73,198   | Pe-L  | IM-154   |
| M & J Sand & Gravel, Inc.<br>114½ E. Fourth St.<br>Williamstown, WV 26187<br>304-375-9939<br>Gale Wilson, pres.           | M & J Sand & Gravel, Inc. (590)<br>(152)  | Washington  | sand & gravel<br>clay  |   |  | Wn-1010   | IM-1163  |
| M & M Builders Supply Co.<br>5820 Carbon Hill Rd.<br>East Palestine, OH 44413<br>330-426-9958<br>Hugh Madden, owner       | M & M Builders Supply Co. (47)<br>(106)   | Columbiana  | sandstone<br>clay  |   |  | Ca-970  | IM-1024  |
| Al Mackey Enterprises, Inc.<br>P.O. Box 269<br>Swanton, OH 43558<br>419-826-7700<br>Al Mackey, pres.                      | Lynch Property (622)<br>Eton (639)<br>Mackey (655)<br>20A Pit (646)<br>Nebraska (681)<br>Schaeffer Pit (753)  | Fulton<br>Fulton<br>Fulton<br>Lucas<br>Lucas<br>Lucas   | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel   | 523   | 523  | Ftn-M<br>Ftn-M1<br>Ftn-M2<br>Ls-M<br>Ls-AM<br>Ls-M1   | IM-1246<br>IM-1275<br>IM-1294<br>IM-1261<br>IM-1318<br>IM-2137   |
| MacRitchie Materials, Inc.<br>P.O. Box 90<br>West Millgrove, OH 43467<br>419-288-2790<br>Donald B. MacRitchie, pres.      | MacRitchie Materials, Inc. (130)  | Wood  | limestone  | 308,013   | 421,353  | Wd-1  | IM-548   |
| Marshall Quarry, Inc.<br>11199 State Route 124<br>Hillsboro, OH 45133<br>937-466-2560<br>Ronald L. Main, pres.            | Marshall Quarry, Inc. (43)  | Highland  | limestone  | 473   | 473  | Hd-4  | IM-406   |
| Marta Track Constructors, Inc.<br>P.O. Box 1509<br>Washington, PA 15301<br>724-225-6155<br>Thomas P. Stout, pres.         | Marta Track Constructors, Inc. (692)<br>(214)   | Huron   | sand & gravel<br>clay  |   |  | Hrn-M   | IM-1338  |
| Martin Marietta Aggregates<br>300 Star Ave., Suite 312<br>Parkersburg, WV 26101<br>304-485-7341<br>John M. Hays, v. pres. | Apple Grove Plant (209)   | Meigs   | sand & gravel  | 690,000   | 660,813  | Ms-205  | IM-30  |
| Martin Marietta Aggregates<br>4770 Duke Dr., Suite 200<br>Mason, OH 45040<br>513-701-1140<br>Geoff Harris, pres.          | Fairfield II Gravel (33)<br>Fairfield Sand & Gravel (30)<br>Hamilton (29)<br>Ross Sand & Gravel (34)<br>Fairborn Gravel (52)<br>Fort Jefferson Limestone (19)<br>Delaware #332 (22)<br>Meredith Quarry #359 (23)<br>Shawnee #324 (20)<br>Blue Rock Limestone #342 (27)<br>Columbus #319 (95)<br>Columbus Limestone #321 (31)<br>Lockbourne #213 (96)<br>Marble Cliff #323 (30)<br>Cedarville Limestone (32)<br>Haines Rd. (405)<br>Spring Valley Gravel (404) | Butler<br>Butler<br>Butler<br>Butler<br>Clark<br>Darke<br>Delaware<br>Delaware<br>Delaware<br>Fayette<br>Franklin<br>Franklin<br>Franklin<br>Franklin<br>Greene<br>Greene<br>Greene | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>sand & gravel<br>limestone<br>sand & gravel<br>limestone<br>sand & gravel<br>limestone<br>sand & gravel | 1,924,000<br>1,924,000<br>696,000<br>729,000<br>708,000<br>190,000<br>1,000,539<br>126,762<br>897,323<br>825,245<br>2,990,054<br>997,907<br>1,608,233<br>1,165,000<br>0 | 2,337,000<br>Br-35<br>770,000<br>744,000<br>587,000<br>240,000<br>1,015,237<br>204,121<br>897,845<br>454,656<br>2,600,916<br>0<br>1,445,665<br>813,000<br>10 | Br-14<br>Br-35<br>Br-5<br>Br-29<br>Ck-13<br>Dke-1<br>Del-3<br>Del-2<br>Del-4<br>Fe-2<br>Fn-6<br>Fn-53<br>Fn-23<br>Fn-2<br>Ge-17<br>Ge-32<br>Ge-42 | IM-147<br>IM-200<br>IM-153<br>IM-149<br>IM-366<br>IM-362<br>IM-327<br>IM-299<br>IM-262<br>IM-169<br>IM-185<br>IM-185<br>IM-183<br>IM-261<br>IM-435<br>IM-400<br>IM-954 |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)   | County   | Commodity   | 2001 sales (tons)  | 2001 production (tons)   | State mine number  | Mining and reclamation permit number   |
|--|--|--|---|--|--|--|--|
| Martin Marietta Aggregates (cont.)   | Spring Valley North (441)<br>Xenia Gravel (110)<br>Camp Dennison Gravel (127)<br>E-town Sand & Gravel (134)<br>E-town Sand & Gravel (680)<br>Harrison Sand & Gravel (118)<br>Miamitown (468)<br>Lynchburg Quarry (175)<br>East Liberty #326 (49)<br>Prospect S & G #362 (198)<br>Troy Gravel (219) | Greene<br>Greene<br>Hamilton<br>Hamilton<br>Hamilton<br>Hamilton<br>Hamilton<br>Highland<br>Logan<br>Marion<br>Miami | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>limestone<br>limestone<br>sand & gravel<br>sand & gravel | 5,000<br>813,000<br>153,000<br>406,000<br>493,000<br>669,000<br>789,000<br>124,368<br>493,000<br>610,000<br>957,000<br>123,104<br>552,000<br>519,000 | 5,000<br>659,000<br>151,000<br>350,000<br>493,000<br>610,000<br>Hmn-5<br>Hmn-71<br>Hmn-P<br>Hmn-37<br>Hmn-D<br>Hd-M<br>Lgn-1<br>Mn-4<br>Mi-3 | Ge-38<br>Ge-33<br>IM-148<br>IM-771<br>IM-1333<br>IM-170<br>IM-1079<br>IM-1170<br>IM-574<br>IM-290<br>IM-462,<br>IM-658<br>IM-368<br>IM-374<br>IM-677<br>IM-615 | IM-333<br>IM-379<br>IM-148<br>IM-771<br>IM-1333<br>IM-170<br>IM-1079<br>IM-1170<br>IM-574<br>IM-290<br>IM-462,<br>IM-658<br>IM-368<br>IM-374<br>IM-677<br>IM-615 |
| Martin Marietta Magnesia Specialties, Inc.<br>755 Lime Rd.<br>Woodville, OH 43469<br>419-849-4200<br>Steve Raffensperger, pres.            | Dayton Limestone (71)<br>Phillipsburg Limestone #339 (70)<br>Rip Rap Rd. (224)<br>Franklin Gravel (349)  | Montgomery<br>Montgomery<br>Montgomery<br>Warren   | limestone<br>limestone<br>sand & gravel<br>sand & gravel  | 1,195,250<br>0<br>345,000  | 1,035,368<br>10,000<br>418,000   | My-23<br>My-1<br>My-66<br>Wan-38   | IM-368<br>IM-374<br>IM-677<br>IM-615   |
| Martin Marietta Magnesia Specialties, Inc.<br>755 Lime Rd.<br>Woodville, OH 43469<br>419-849-4200<br>Steve Raffensperger, pres.            | Woodville Quarry (102)   | Sandusky   | limestone   | 2,459,555  | 2,649,953  | Sy-1   | IM-537   |
| R.J. Martin Service & Excavating<br>1875 Roxanna-<br>New Burlington Rd.<br>Waynesville, OH 45068<br>937-862-4182<br>Roger J. Martin, pres. | Horseshoe Bend Sand & Gravel (403)   | Greene   | sand & gravel   | 906  | 906  | Ge-40  | IM-923   |
| Mason's Sand & Gravel Co./<br>George C. Smith<br>2385 Rathmell Rd.<br>Obetz, OH 43207<br>614-491-3611<br>George C. Smith, pres.            | Mason's Sand & Gravel Co. (100)  | Franklin   | sand & gravel   | 140,886  | 140,886  | Fn-11  | IM-234   |
| Massillon Materials, Inc.<br>26 N. Cochran St.<br>P.O. Box 499<br>Dalton, OH 44618<br>330-837-4767<br>Howard J. Wenger, pres.              | Massillon Materials, Inc. (495)<br>MMI Warmington Plant (685)<br>MMI Sandyville Plant (687)  | Stark<br>Stark<br>Tuscarawas   | sand & gravel<br>sand & gravel<br>sand & gravel   | 610,150<br>78,560<br>746   | 610,150<br>78,560<br>746   | Sk-M<br>Sk-M1<br>Ts-MM   | IM-1031<br>IM-1332<br>IM-1324  |
| Mathews Sand & Gravel<br>5061 Monroe Center<br>Conneaut, OH 44030<br>440-594-1130<br>Edward G. Mathews, owner                              | Mathews Sand & Gravel (651)  | Ashtabula  | sand & gravel   | 720  | 720  | Asa-M  | IM-1301  |
| Maxville Quarries, Inc.<br>7957 State Route 668 South<br>Logan, OH 43138<br>740-385-2568<br>David J. McCort, pres.                         | St. Clair (222)<br>Carpenter (168)<br>Downhour (89)  | Hocking<br>Perry<br>Perry  | limestone<br>limestone<br>limestone   | 82,786<br>82,786<br>82,786   | 82,786<br>82,786<br>82,786   | Hg-M<br>Py-343<br>Py-235   | IM-2057<br>IM-1061<br>IM-515   |
| Mecco, Inc.<br>2504 S. Main St.<br>Middletown, OH 45042<br>513-422-3781<br>David T. Morgan, pres.  | Mecco, Inc. (39)   | Butler   | sand & gravel   | 225,677  | 237,000  | Br-15  | IM-316   |
| Mechanicsburg Sand & Gravel, Inc.<br>P.O. Box 18<br>Mechanicsburg, OH 43044<br>937-834-2606<br>James G. Cushman, pres.                     | Mechanicsburg Sand & Gravel, Inc. (50)   | Champaign  | sand & gravel   | 192,622  | 192,622  | Cpn-22   | IM-889   |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|--|--|--|---|---|---|--|
| Meigs County Commissioners<br>34110 Fairground Rd.<br>Pomeroy, OH 45769<br>740-992-2895<br>Jeff Thornton, commissioner                | Meigs County Commissioners (211)   | Meigs  | sand & gravel  | 17,221  | 15,441  | Ms-301  | IM-619   |
| The Melvin Stone Co., LLC<br>P.O. Box 158<br>Sabina, OH 45169<br>937-584-2486<br>Dennis J. Garrison, pres.                            | Melvin (17)<br>Fayette (28)<br>Bowersville (217)<br>Circleville (481)<br>Williamsport (92)<br>Plano Road (199)   | Clinton<br>Fayette<br>Greene<br>Pickaway<br>Ross | limestone<br>limestone<br>limestone<br>sand & gravel<br>limestone<br>limestone         | 1,817,706<br>187,425<br>307,760<br>405,036<br>438,545 | 1,816,971<br>283,020<br>265,858<br>355,285<br>277,168 | Cln-1<br>Fe-1<br>Ge-M<br>Pky-R<br>Pky-4<br>Rs-MC1 | IM-241<br>IM-831<br>IM-2052<br>IM-993<br>IM-209<br>IM-1298 |
| Menuez Bros. Sand & Gravel, Inc.<br>5366 County Rd. 349 Route 1<br>Millersburg, OH 44654<br>330-674-4254<br>James T. Menuez, v. pres. | Menuez Bros. Sand & Gravel, Inc. (153)   | Holmes   | sand & gravel  | 187,356   | 189,000   | Hs-82   | IM-707   |
| Mesenburg Bros., Inc.<br>2366 Wells Rd<br>Collins, OH 44826<br>419-668-5691<br>Peter J. Mesenburg, pres.                              | Mesenburg Bros., Inc. (20)   | Huron  | sandstone  | 3,716   | 3,716   | Hrn-8   | IM-268   |
| Miami River Stone Co.<br>1700 Miami River Rd.<br>Sidney, OH 45365<br>937-492-5412<br>Thomas P. Milligan, pres.                        | Miami River Stone Co. (110)<br>(311)<br>Rock Run (111)<br>Staley Pit (224)<br>(577)<br>Washington Twp. Pit (312) | Shelby   | limestone<br>sand & gravel<br>limestone<br>limestone<br>sand & gravel<br>sand & gravel | 560,764<br>146,381<br>367<br>7,778<br>2,655           | 558,071<br>137,353<br>367<br>0<br>52,210              | Shy-17<br>Shy-16<br>Shy-SS<br>Shy-13              | IM-389<br>IM-411<br>IM-438<br>IM-412                       |
| Miami View Mining Co., Ltd.<br>998-B East Ridge Dr.<br>Lebanon, OH 45036<br>513-494-1238<br>David Oeder, managing mbr.                | Miami View (688)   | Warren   | sand & gravel  | 555,821   | 555,821   | Wan-MV  | IM-1329  |
| Doug Mill<br>1800 Mt. Vernon Rd.<br>Newark, OH 43055<br>740-763-3901<br>Doug & Susan Mill, owners                                     | Newark (174)   | Licking  | sand & gravel  |   |   | Lg-2  | IM-184   |
| Miller Bros. Gravel, Inc.<br>7900 S. Kessler-Frederick Rd.<br>Tipp City, OH 45371<br>937-836-0981<br>Thomas O. Miller, pres.          | Miller Bros. Gravel, Inc. (233)<br>Miller Bros. Gravel, Inc. (447)   | Montgomery<br>Miami                              | sand & gravel<br>sand & gravel   | 365,901   | 334,506   | My-52<br>Mi-504                                   | IM-348<br>IM-1032  |
| Miller Sand & Gravel, Inc.<br>10228 State Route 82<br>Windham, OH 44288<br>330-326-3157<br>Brian K. Miller, pres.                     | Miller Sand & Gravel, Inc. (272)   | Portage  | sand & gravel  | 1,121   | 1,121   | Pe-39   | IM-1078  |
| Millersville Lime Inc.<br>3964 CR 41<br>Millersville, OH 43435-9786<br>419-638-2511<br>Bob Durks, pres.                               | Millersville Plant (103)<br>Woodville Plant (104)  | Sandusky<br>Sandusky                             | limestone<br>limestone   | 524,636   | 422,790   | Sy-4<br>Sy-3                                      | IM-381<br>IM-282   |
| Mills Rock, Sand, & Soil, Inc.<br>4022 State Route 303<br>Mantua, OH 44255<br>330-297-7579<br>Alvin Mills, pres.                      | 303 Sand & Gravel (676)  | Portage  | sand & gravel  | 30,611  | 30,611  | Pe-M  | IM-1312  |

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|---|--|---|---|---|---|---|--|
| Mitchell Transport, Inc.<br>1300 E. 9th St., Suite 1100<br>Cleveland, OH 44114-1503<br>216-942-9191<br>Robert Amos, pres.                                   | North Park Reclamation Clay Center (92)  | Lake  | clay  |   |   | Lke-M                                   | IM-1059  |
| Moon Enterprises, Inc.<br>2701 South Eber Rd.<br>Monclova, OH 43542<br>419-866-1317<br>Kenneth Mark Moon, pres.   | Moon Enterprises, Inc. (683)   | Lucas   | sand & gravel   |   |   | Ls-ME                                   | IM-1345  |
| Moore's Excavating Co.<br>2222 N. U.S. Hwy 68<br>Urbana, OH 43078<br>937-653-6288<br>Dorothy Moore, pres.   | Moore's Excavating Co. (51)<br>(153)<br>Moore's Excavating Co. (619)<br>Moore's Excavating Co. (620)   | Champaign<br>Clark  | sand & gravel<br>clay<br>sand & gravel<br>sand & gravel   | 17,735<br>8,741<br>6,857                                | 17,735<br>0<br>0  | Cpn-20<br>Cpn-25<br>Ck-29               | IM-482<br>IM-1227<br>IM-1233   |
| Moraine Materials Co., Inc.<br>9661 Sugar St.<br>Germantown, OH 45327<br>937-855-2228<br>George Kling, pres.  | Moraine Materials Co., Inc. Plant 22 (41)<br><br>Moraine Materials Co., Inc. Plant 21 (239)<br>(10)  | Butler<br>Montgomery  | sand & gravel<br>sand & gravel<br>peat  | 291,257<br>291,662                                      | 291,257<br>291,662                                      | Br-6<br>My-41                           | IM-177<br>IM-360   |
| Morrow Gravel Co.<br>11641 Mosteller Rd.<br>Cincinnati, OH 45241<br>513-771-0820<br>James P. Jurgensen, pres.   | Urbana (48)<br>Rockford Quarry (63)<br>Pike County (693)<br>Morrow Gravel Co. (501)<br><br>Morrow Gravel Co. (502)<br>Morrow Plant (503)                             | Champaign<br>Mercer<br>Pike<br>Warren<br>Warren<br>Warren                       | sand & gravel<br>limestone<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel                      | 189,967<br>146,631                                      | 189,967<br>254,536                                      | Cpn-1<br>Mr-2<br>Pke-M<br>Wan-M         | IM-371<br>IM-430<br>IM-1325<br>IM-728,<br>IM-1065<br>IM-1051<br>IM-837 |
| Morton International, Inc.<br>Morton Salt Division<br>151 S. Industrial St.<br>P.O. Box 337<br>Rittman, OH 44270-0337<br>330-925-3015<br>Jay Stewart, pres. | Morton Salt Well Field (5)   | Wayne   | salt  | 533,070   | 550,523   | We-9129                                 |  |
| Morton International, Inc.<br>Morton Salt Division<br>P.O. Box 428<br>Grand River, OH 44045-0428<br>440-639-4243<br>Paul R. Schank, facility mgr.           | Fairport Mine (2)  | Lake  | salt  | 1,460,198   | 1,512,440   | Lke-6                                   |  |
| Mt. Eaton Reclamation, Inc.<br>P.O. Box 256<br>Mt. Eaton, OH 44659<br>330-359-5364<br>Freeman Mullet, pres.   | Mt. Eaton Reclamation, Inc. (64)<br>(144)<br>(144)   | Wayne   | sandstone<br>clay<br>shale  | 35,776  | 35,776  | We-26                                   | IM-690,<br>IM-1210   |
| Muskingum River Gravel Co.<br>P.O. Box 1585<br>Zanesville, OH 43702-1585<br>740-453-0721<br>Richard A. McClelland, pres.                                    | S & S Aggregate #8 (152)<br>Plant #4 (448)<br>S & S Agg (755)<br>S & S Aggregate #1 (247)<br>S & S Agg #16 (257)<br>S & S Aggregate Plant #7 (452)<br>Plant #2 (367) | Hocking<br>Muskingum<br>Muskingum<br>Muskingum<br>Portage<br>Ross<br>Washington | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 138,141<br>182,186<br>324,374<br>179,149<br>19,592      | 140,066<br>183,689<br>315,815<br>181,937<br>51,860      | Hg-301<br>Mum-262<br>Mon-M              | IM-458<br>IM-422<br>IM-0718<br>IM-421<br>IM-104<br>IM-114<br>IM-701    |
| National Aggregates, Inc.<br>P.O. Box 340<br>Malvern, OH 44644<br>330-866-1999<br>William Scheckler, pres.  | National Aggregates, Inc. (610)  | Stark   | sand & gravel   | 446,184   | 446,184   | Sk-1017                                 | IM-1186  |
| National Lime & Stone Co.<br>P.O. Box 120<br>Findlay, OH 45839-0120<br>419-422-4341<br>R. W. Kruse, v. chairman   | Lima Plant (5)<br>Buckland Plant (11)<br>Wapakoneta Plant (24)<br>Bucyrus Plant (18)<br>Delaware Plant (21)  | Allen<br>Auglaize<br>Auglaize<br>Crawford<br>Delaware                           | limestone<br>limestone<br>sand & gravel<br>limestone<br>limestone   | 721,000<br>510,000<br>190,000<br>2,724,000<br>4,307,000 | 721,000<br>510,000<br>190,000<br>2,724,000<br>4,307,000 | An-3<br>Ae-10<br>Ae-30<br>Cd-1<br>Del-5 | IM-484<br>IM-486<br>IM-598<br>IM-404<br>IM-207                         |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)   | County  | Commodity   | 2001 sales (tons)   | 2001 production (tons)  | State mine number  | Mining and reclamation permit number   |
|--|--|---|---|---|---|--|--|
|  | Findlay Plant (149)<br>Ridge Quarry (196)<br>County Lime Quarry (218)<br>Marion Plant (60)<br>National Lime & Stone, Inc. (59)<br>Rimer Plant (231)<br>Carey Plant (134)<br>Sammet (763)<br>Upper Sandusky Plant (380) | Hancock<br>Hancock<br>Hardin<br>Marion<br>Marion<br>Putnam<br>Wyandot<br>Wyandot<br>Wyandot | limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>sand & gravel<br>sand & gravel | 1,401,000<br><br>957,000<br><br>206,000<br>2,814,000<br><br>217,000 | 1,401,000<br><br>957,000<br>206,000<br>2,814,000<br><br>217,000 | Hk-7<br>Hk-A <sup>4</sup><br>Hdn-N<br>Mn-3<br>Mn-2 <sup>5</sup><br>Pm-N<br>Wt-1<br>Wt-N<br>Wt-15 | IM-1002<br>IM-1299<br>IM-2072<br>IM-168<br>IM-423<br>IM-0479<br>IM-405<br>IM-2123<br>IM-376,<br>IM-551 |
| Neer's Sand & Gravel<br>4859 Township Rd. 45<br>Bellefontaine, OH 43311<br>937-585-6733<br>Arden J. Neer, Sr., owner               | Neer's Sand & Gravel (189)   | Logan   | sand & gravel   | 153,012   | 176,448   | Lgn-6  | IM-459   |
| Nelson Sand & Gravel, Inc.<br>P.O. Box 466<br>Kingsville, OH 44048<br>440-224-0198<br>Thomas H. Nelson, pres.                      | Nelson Sand & Gravel, Inc. (14)<br>Nelson Sand & Gravel, Inc. (746)  | Ashtabula<br>Ashtabula  | sand & gravel<br>sand & gravel  | 87,500  | 87,500  | Asa-12<br>Asa-N1   | IM-1130<br>IM-2102   |
| New Baltimore CDD Landfill, Ltd.<br>6950 River Rd.<br>New Baltimore, OH 45030<br>513-385-9031<br>Thomas & Kenneth Henke,<br>owners | New Baltimore CDD Landfill, Ltd. (700)<br>(216)  | Hamilton  | sand & gravel<br>clay   |   |   | Hmn-NB   | IM-1337  |
| Newbury Sand and Gravel<br>15365 Ravenna Rd.<br>Burton, OH 44021<br>440-834-0200<br>Blaine M. Kaufman, owner                       | Newbury Sand and Gravel (517)<br>(50)  | Geauga  | sand & gravel   |   |   | Gea-N  | IM-1123  |
| New Carlisle Sand & Gravel Co.<br>6090 S. Scarff Rd.<br>New Carlisle, OH 45344<br>937-845-8434<br>James R. Upton, owner            | New Carlisle Sand & Gravel Co. (217)   | Miami   | sand & gravel   | 640   | 640   | Mi-501   |  |
| Newton Asphalt Paving, Inc.<br>P.O. Box 86<br>Strasburg, OH 44680<br>330-878-5648<br>George A. Gessner, pres.                      | 516 (428)  | Tuscarawas  | sand & gravel   | 148,994   | 148,994   | Ts-2001  | IM-1004  |
| Nick's Trucking<br>14228 Madison Rd.<br>Middlefield, OH 44062<br>216-299-2165<br>Nick R. Loze, owner                               | Nick's Trucking (584)  | Trumbull  | sand & gravel   | 3,500   | 3,500   | Tl-16  | IM-1158  |
| J. E. Nicolozakes Co.<br>62920 Georgetown Rd.<br>Cambridge, OH 43725<br>740-435-3222<br>John E. Nicolozakes, pres.                 | Bank One (744)   | Tuscarawas  | sand & gravel   |   |   | Ts-N   | IM-2032  |
| Andy Nixon Contractors, Inc.<br>13307 CR J35<br>Montpelier, OH 43543<br>419-737-2060<br>Carol J. Nixon, pres.                      | Nixon Pit (665)<br>(223)   | Williams  | sand & gravel<br>clay   | 88,384<br>145   | 88,384<br>145   | Ws-N   | IM-1291  |

<sup>4</sup>This mine was operated January and February 2001 by Stansley Mineral Resources and March through December 2001 by National Lime & Stone Co.<sup>5</sup>This mine was operated January through June 2001 by J. M. Hamilton & Sons, Inc., and July through December 2001 by National Lime & Stone Co.

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number)   | County   | Commodity   | 2001 sales (tons)   | 2001 production (tons)  | State mine number   | Mining and reclamation permit number                                 |
|---|--|--|---|---|---|---|--|
| Northern Ohio Paving Co.<br>1749 Highland Dr.<br>Twinsburg, OH 44087<br>330-425-7861<br>Mark Shelly, pres.                      | Allied Plant #3 (316)  | Stark  | sand & gravel   | 587,710   | 587,710   | Sk-N  | IM-156   |
| North Shore Stone Quarries, Inc.<br>72 Fernhill Ave.<br>Columbus, OH 43228<br>614-878-0620<br>Clifford Hammond, pres.           | North Shore Stone Quarries, Inc. (109)   | Seneca   | limestone   | 4,489   | 4,489   | Sa-8  | IM-313   |
| Northwest Ohio Property Developments, Ltd.<br>P.O. Box 14<br>Defiance, OH 43512<br>419-784-4850<br>Paul E. Gaeke, pres.         | Northwest Ohio Property Developments, Ltd. (750)   | Fulton   | sand & gravel   | 13,268  | 13,268  | Ftn-NW  | IM-2138  |
| Nuway Services, Inc.<br>3441 Sportsman Club Rd.<br>Johnstown, OH 43031<br>740-587-2451<br>George M. McInturff, Sr., pres.       | Hopewell (229)   | Licking  | clay  | 60,650  | 60,650  | Lg-NU   | IM-2046  |
| Carl E. Oeder & Sons Sand & Gravel<br>3890 Turtlecreek Rd.<br>Lebanon, OH 45036<br>513-494-1238<br>Carl E. Oeder, pres.         | Carl E. Oeder & Sons Sand & Gravel (352)   | Warren   | sand & gravel   | 423,102   | 423,102   | Wan-41  | IM-629   |
| Oglebay Norton Industrial Sands, Inc.<br>P.O. Box 1000<br>Zanesville, OH 43702-1000<br>800-522-0171<br>Jeff Gray, pres.         | Millwood Plant (24)<br>Glass Rock Plant (48)<br>(137)  | Knox Perry   | sandstone sandstone clay  | 122,116<br>186,340  | 122,116<br>186,340  | Kx-1<br>Py-344  | IM-269<br>IM-1014  |
| Ohio Asphaltic Limestone Corp.<br>8591 Mad River Rd.<br>Hillsboro, OH 45133<br>937-364-2191<br>W. C. Mason, pres.               | Ohio Asphaltic Limestone Corp. (220)<br>Ohio Asphaltic Limestone Corp. (221)<br>Ohio Asphaltic Limestone Corp. (42)  | Highland<br>Highland<br>Highland                                     | limestone limestone limestone   | 482,490   | 482,490   | Hd-O<br>Hd-O1<br>Hd-3                                     | IM-2056<br>IM-2068<br>IM-253   |
| Ohio Bulk Transfer Co.<br>P.O. Box 25527<br>Garfield Heights, OH 44125<br>216-883-7200<br>James Palladino, pres.                | Twinsburg Sand & Gravel (68)   | Summit   | sandstone   |   |   | St-60   | IM-1206  |
| Ohio-West Virginia Excavation<br>57245 Ferry Landing Rd.<br>Dilles Bottom, OH 43947<br>740-676-7464<br>Dennis Hendershot, pres. | OH-WV Excavation (424)   | Monroe   | sand & gravel   |   |   | Me-508  | IM-1000  |
| Olen Corp.<br>4755 South High St.<br>Columbus, OH 43207-4028<br>614-491-1515<br>Ken Holland, pres.                              | Stewart Plant #4 (459)<br>Columbus Plant #3 (465)<br>Hilliard Plant #1(154)<br>Darel L. Hathaway (728)<br>Fredericktown Plant #2 (161)<br>St. Louisville Plant #5 (176)<br>McCarthy Quarry (133) | Athens<br>Franklin<br>Franklin<br>Knox<br>Knox<br>Licking<br>Wyandot | sand & gravel<br>sand & gravel<br>limestone<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>limestone | 23,024<br>2,208,386<br>575,590<br>488,910<br>353,893<br>328,802 | 23,024<br>2,550,000<br>575,590<br>525,000<br>400,000<br>328,802 | As-W<br>Fn-58<br>Fn-43<br>Kx-DH<br>Kx-16<br>Lg-31<br>Wt-3 | IM-979<br>IM-1023<br>IM-188<br>IM-2078<br>IM-793<br>IM-246<br>IM-298 |
| Oneida Sand & Gravel, Inc.<br>P.O. Box 910<br>Malvern, OH 44644<br>330-863-0808<br>Rodney L. Smitley, pres.                     | Oneida Sand & Gravel, Inc. (47)  | Carroll  | sand & gravel   | 104,440   | 104,440   | Cl-204  | IM-554   |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine<br>(and map location number)   | County                                  | Commodity  | 2001 sales (tons)            | 2001 production (tons)       | State mine number                 | Mining and reclamation permit number   |
|--|---|---|--|------------------------------|------------------------------|-----------------------------------|--|
| Osborne Materials Co.<br>P.O. Box 248<br>Grand River, OH 44045-0248<br>440-357-5562<br>Harold T. Larned, pres.                     | Osborne Materials Co. (2)   | Lake Erie                               | sand & gravel  | 169,762                      | 169,762                      | Lke-dredge                        |  |
| Oster Sand & Gravel, Inc.<br>5947 Whipple Ave. NW<br>North Canton, OH 44720-7692<br>330-494-5472<br>Marlene K. Oster, pres.        | Malvern Plant (717)<br>Massillon Plant (326)<br>Mudbrook Plant (581)<br>Oster Sand & Gravel, Inc.-Bolivar (586) | Carroll<br>Stark<br>Stark<br>Tuscarawas | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 678,555<br>26,530<br>260,951 | 678,555<br>26,530<br>260,951 | Cl-O<br>Sk-165<br>Sk-R<br>Ts-2036 | IM-2082<br>IM-192<br>IM-697<br>IM-1155 |
| Ours Sand & Gravel<br>20444 State Route 7 S<br>Crown City, OH 45623<br>740-256-1378<br>Donald Ours, owner                          | Ours Sand & Gravel (466)  | Gallia                                  | sand & gravel  | 4,789                        | 4,789                        | Ga-O                              | IM-1028                                |
| P & H Construction<br>3745 S. Third St.<br>Ironton, OH 45638<br>740-533-3030<br>Paul Popov, pres.                                  | P & H Mine (182)  | Lawrence                                | clay   |                              |                              | Le-PH                             | IM-1268                                |
| Patrick Excavating, Inc.<br>5839 State Route 5<br>P.O. Box 38<br>Ravenna, OH 44266<br>330-296-7706<br>Tim Patrick, pres.           | Patrick (745)<br>(212)  | Portage                                 | sand & gravel<br>clay  | 2,186                        | 2,186                        | Pe-P                              | IM-1322                                |
| R. H. Penick Co.<br>1504 Blue Jay Rd.<br>Heath, OH 43056-1767<br>740-323-3040<br>R. H. Penick, owner                               | R. H. Penick Co.(3)   | Licking                                 | salt   | 6,144                        | 6,144                        | Lg-45                             |  |
| Phillips Sand & Gravel<br>P.O. Box 187<br>Alpha, OH 45301<br>937-426-5461<br>Richard Phillips, II, pres.                           | Phillips Sand & Gravel (115)  | Greene                                  | sand & gravel  | 361,204                      | 361,204                      | Ge-36                             | IM-305                                 |
| Pine Grove Regional Facility<br>5131 Drinkle Rd.<br>Amanda, OH 43102<br>740-969-4487<br>Tony Furgiuele, pres.                      | Pine Grove Regional Facility (83)<br>(234)  | Fairfield                               | sandstone<br>clay  | 27,000<br>33,335             | 27,000<br>33,335             | Fd-PG                             | IM-2086                                |
| Piqua Materials, Inc.<br>Piqua Minerals Division<br>1750 W. Statler Rd.<br>Piqua, OH 45356<br>937-773-4824<br>Albert Donovan, mgr. | Piqua Minerals Division (64)  | Miami                                   | limestone  | 772,357                      | 910,699                      | Mi-1                              | IM-382                                 |
| Pleasant Valley Limestone<br>12321 Ideal Rd.<br>Byesville, OH 43723<br>740-685-6726<br>George V. Thompson, pres.                   | Thompson Mining/<br>Pleasant Valley Stone (185)   | Muskingum                               | limestone  | 129,618                      | 129,618                      | Mum-907                           | IM-1200                                |
| C. F. Poeppelman, Inc.<br>4755 N. State Route 721<br>Bradford, OH 45308<br>937-448-2191<br>James C. Poeppelman, pres.              | C. F. Poeppelman, Inc. (67)   | Miami                                   | limestone  | 408,768                      | 408,768                      | Mi-10                             | IM-335                                 |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine (and map location number)                               | County           | Commodity                                   | 2001 sales (tons)           | 2001 production (tons)      | State mine number | Mining and reclamation permit number |
|---|--|------------------|---|-----------------------------|-----------------------------|-------------------|--------------------------------------|
| Power Development Corp.<br>P.O. Box 936<br>Malvern, OH 44644<br>330-863-0603<br>Paul W. Robertson, pres.  | Power Development Corp. (703)  | Carroll          | sand & gravel                               | 1,430                       | 1,430                       | Cl-PD             | IM-1352                              |
| Prairie Lane Sand & Gravel Co.<br>3001 Prairie Lane Rd.<br>P.O. Box 233<br>Wooster, OH 44691<br>330-262-6821<br>Ralph W. Miller, pres.                            | Prairie Lane Sand & Gravel Co. (372)<br>(179)                        | Wayne            | sand & gravel<br>clay                       | 211,707                     | 209,842                     | We-11             | IM-547                               |
| Precision Aggregate, Inc.<br>12205 E. Gypsy Lane Rd.<br>Bowling Green, OH 43402<br>419-352-4681<br>Randolph Schmeltz, pres.                                       | Precision Aggregate II (183)<br>(666)<br>Precision Aggregate I (379) | Wood<br>Wyandot  | limestone<br>sand & gravel<br>sand & gravel | 221,000<br>33,260<br>88,470 | 221,000<br>33,260<br>88,470 | Wd-14<br>Wt-4     | IM-1157<br>IM-520                    |
| Precision Aggregates III, LLC<br>100 Stone St.<br>Fremont, OH 43240<br>419-352-4681<br>Randolph G. Schmeltz, pres.  | Precision Aggregates III, LLC (101)<br>(768)                         | Sandusky         | limestone<br>sand & gravel                  | 225,000<br>43,800           | 225,000<br>43,800           | Sy-5              | IM-0259                              |
| Putnam County Board of Commissioners<br>Putnam County Courthouse<br>245 E. Main St., Suite 101<br>Ottawa, OH 45875<br>419-523-3656<br>Dennis A. Ellerbrock, pres. | Putnam County Landfill Borrow Pit (221)                              | Putnam           | clay  |                             |                             | Pm-P              | IM-2002                              |
| Putnam Stone Co.<br>7053 Road M<br>Ottawa, OH 45875-9754<br>419-523-6004<br>Tony Shroyer, pres.   | Putnam Stone Co. (98)  | Putnam           | limestone                                   | 253,712                     | 272,553                     | Pm-2              | IM-570                               |
| Quality Ready Mix, Inc.<br>12201 Fryburg Rd.<br>Wapakoneta, OH 45895<br>419-738-2817<br>Robert E. Hirschfeld, pres.   | Quality Ready Mix, Inc. (25)   | Auglaize         | sand & gravel                               | 32,603                      | 32,603                      | Ae-16             | IM-595                               |
| Quality Stone Co.<br>8751 North State Route 7<br>Cheshire, OH 45620<br>740-992-6637<br>Jay Hall, Jr., pres.   | Quality Stone Co. (148)<br>Route 32 (182)                            | Vinton<br>Vinton | limestone<br>limestone                      | 531,287                     | 531,287                     | Vn-190<br>Vn-193  | D-0761                               |
| The Quarry, LLC<br>1700 Lyons Rd.<br>Dayton, OH 45458<br>937-435-8584<br>Sherry Oakes, pres.  | The Quarry (226)   | Greene           | limestone                                   | 820                         | 820                         | Ge-Q              | IM-2090                              |
| Quarry Trails<br>7500 S. Cassel Rd.<br>P.O. Box 520<br>Vandalia, OH 45377<br>937-890-1141<br>John E. Moyer, Sr., pres.  | Quarry Trails (178)  | Montgomery       | limestone                                   |                             |                             | My-Q              | IM-860                               |
| R. & S., Inc.<br>7522 Wales Rd. NW<br>North Canton, OH 44720<br>330-499-1024<br>Gary A. Ross, pres.   | Copley Sand & Gravel (427)   | Summit           | sand & gravel                               |                             |                             | St-54             | IM-934                               |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)              | County             | Commodity                      | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|--|---|--------------------|--------------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| R. L., Ltd.<br>5850 Dryfork Rd.<br>Cleves, OH 45002<br>513-367-5700<br>Rick Ashcraft, v. pres.   | R. L., Ltd. (137)                                   | Hamilton           | sand & gravel                  | 2,867             | 2,867                  | Hmn-67            | IM-529                               |
| Rack Sand, Inc.<br>5175 Este Ave.<br>Cincinnati, OH 45232<br>513-242-5052<br>Roy Schweitzer, owner   | Rack Sand, Inc. (139)                               | Hamilton           | sand & gravel                  |                   |                        | Hmn-10            | IM-226                               |
| Rainbow Sand & Gravel, Inc.<br>P.O. Box 240<br>Bristol, OH 44402<br>330-889-9400<br>Rex King, pres.  | Rainbow Sand & Gravel, Inc. (280)                   | Portage            | sand & gravel                  | 119,971           | 119,971                | Pe-64             | IM-1017                              |
| Red Brush Peat Co.<br>6945 Red Brush Rd.<br>Ravenna, OH 44266<br>330-297-0923<br>Barbara H. Linger, owner                                    | Red Brush Peat Co. (482)<br>(116)<br>(9)            | Portage            | sand & gravel<br>clay<br>peat  | 47                | 47                     | Pe-61             | IM-1064                              |
| Redskin Transport LLC<br>6824 Mt. Vernon Rd.<br>Newark, OH 43055<br>740-745-5965<br>Rock Van Wey, pres.                                      | Sleepy Hollow Pit (658)                             | Licking            | sand & gravel                  |                   |                        | Lg-S-1            | IM-1281                              |
| Richards Service Garage<br>2170 Wilberforce-Clifton Rd.<br>Xenia, OH 45385<br>937-372-8263<br>Roger Richards, owner                          | Richards Service Garage (547)                       | Greene             | sand & gravel                  |                   |                        | Ge-R              | IM-829                               |
| Richland Moulded Brick Co.<br>1000 Richland Shale Rd.<br>P.O. Box 1711<br>Mansfield, OH 44901<br>419-524-0000<br>Dudley P. Frame, Jr., pres. | Richland Moulded Brick Co. (114)                    | Richland           | shale                          | 15,189            | 15,189                 | Rd-R              | IM-1035                              |
| Ridge Township Quarry<br>16905 Middlepoint Rd.<br>Van Wert, OH 45891<br>419-238-2533<br>Jenny Lautenschleger, foreman                        | Ridge Township Quarry (122)                         | Van Wert           | limestone                      | 67,179            | 67,179                 | Vt-7              | IM-642                               |
| Riverside Sand & Gravel Co., Inc.<br>P.O. Box 324<br>Tallmadge, OH 44278-0324<br>330-673-2021<br>Albert H. Acken, Jr., pres.                 | Riverside Sand & Gravel Co., Inc.(333)<br>(49)      | Summit             | sand & gravel<br>sandstone     | 20,298<br>3,196   | 20,298<br>3,196        | St-24             | IM-239                               |
| Gary Roberts Excavating<br>570 Derby Downs Rd.<br>Newark, OH 43055<br>740-763-3206<br>Gary L. Roberts, owner                                 | Gary Roberts Excavating (419)                       | Licking            | sand & gravel                  | 2,150             | 2,150                  | Lg-504            | IM-991                               |
| Rockwell Sand & Gravel, Inc.<br>8300 State Route 14<br>Streetsboro, OH 44241<br>330-626-5577<br>Roger Schuck, pres.                          | Rockwell Sand & Gravel, Inc. (273)<br>Ruefner (739) | Portage<br>Portage | sand & gravel<br>sand & gravel | 257,604           | 257,604                | Pe-85<br>Pe-R     | IM-700<br>IM-2037                    |
| Dale B. Rohr<br>10794 Strusser St. NW<br>Canal Fulton, OH 44614<br>330-854-4004<br>Dale B. Rohr, pres.                                       | D. & C. Rohr (759)                                  | Stark              | sand & gravel                  |                   |                        | Sk-RO             | IM-2084                              |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|--|--|--|---|----------------------------|----------------------------|--|--|
| Roy M. Roush<br>11278 Darby Creek Rd.<br>Orient, OH 43146<br>614-877-4792<br>Roy M. Roush, owner                             | R Farm S & G (736)   | Pickaway   | sand & gravel   | 927                        | 1,000                      | Pky-RR                                   | IM-2040  |
| Rubel Quarry, Inc.<br>35479 State Route 78<br>Lewisville, OH 43754<br>740-567-3217<br>Randy Rubel, pres.                     | Rubel Quarry, Inc. (164)   | Monroe   | limestone   |                            |                            | Me-509                                   | IM-1094  |
| Rumpke Mountain Mining Co.<br>10795 Hughes Rd.<br>Cincinnati, OH 45251<br>513-851-0122<br>William J. Rumpke, pres.           | Rumpke Mountain Mining Co. (190)<br>(190)  | Hamilton   | clay shale  | 430,201                    | 430,201                    | Hmn-72                                   | IM-1264  |
| Rumpke Waste, Inc.<br>9427 Beyers Rd.<br>Georgetown, OH 45121<br>513-851-0122<br>William Rumpke, pres.                       | Rumpke Waste, Inc. (227)<br>(227)  | Brown  | clay shale  | 51,161<br>49,113           | 51,161<br>49,113           | Bn-W                                     | IM-2076  |
| Rupp Construction, Inc.<br>18228 Fulton Rd.<br>Marshallville, OH 44645<br>330-855-2781<br>Gary D. Radabaugh, pres.           | Rupp Construction, Inc. (373)  | Wayne  | sand & gravel   | 249,456                    | 249,456                    | We-7                                     | IM-471   |
| S & S Aggregate, Inc.<br>P.O. Box 1585<br>Zanesville, OH 43702-1585<br>740-453-0721<br>Richard A. McClelland, v. pres.       | Plant #6 (101)<br>Twin Lakes-S & S Ag #10 (282)<br>Twin Lakes-S & S Agg. #11 (281)<br>S & S Agg #14 (292)<br>Twin Lakes-S & S Agg #9 (336) | Franklin<br>Portage<br>Portage<br>Richland<br>Summit | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 6,573<br>539,073<br>65,360 | 6,573<br>585,491<br>66,879 | Fn-24<br>Pe-67<br>Pe-59<br>Rd-5<br>St-44 | IM-266<br>IM-202<br>IM-210<br>IM-470<br>IM-178 |
| Samco, Inc.<br>10217 State Route 534 N<br>Middlefield, OH 44062<br>440-272-5158<br>J. Jim Holmes, pres.                      | Springbrook (340)<br>(77)<br>(184)   | Trumbull   | sand & gravel<br>sandstone<br>shale   | 271,445<br>525<br>25,000   | 271,445<br>525<br>25,000   | Tl-12                                    | IM-131   |
| Sandco, Inc.<br>P.O. Box 351145<br>Toledo, OH 43635<br>419-875-6969<br>Raymond Cordray, pres.                                | SANDO Sand & Topsoil (672)   | Fulton   | sand & gravel   |                            |                            | Ftn-SI                                   | IM-1308  |
| Sandkuhl Clay Works, Inc.<br>05536 Kossuth-Amanda Rd.<br>Spencerville, OH 45887<br>419-647-2905<br>Leslie E. Sandkuhl, pres. | Sandkuhl Clay Works, Inc. (2)  | Auglaize   | clay  | 5,554                      | 5,554                      | Ae-7                                     |  |
| Sandman Trucking, Inc.<br>9025 Old Airport Hwy.<br>Holland, OH 43528<br>419-865-1666<br>Shaun Parker, pres.                  | Sandman Trucking, Inc. (678)<br>Sandman Trucking, Inc. (751)<br>Sandman Trucking, Inc. (708)<br>Sandman Trucking, Inc. (733)               | Fulton<br>Fulton<br>Lucas<br>Lucas                   | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel                  | 169,861                    | 169,861                    | Ftn-SA<br>Ftn-SA1<br>Ls-ST<br>Ls-ST1     | IM-1335<br>IM-2136<br>IM-2001<br>IM-2060       |
| Guy Schieve<br>P.O. Box 83<br>Birmingham, OH 44816<br>440-965-8792<br>Guy Schieve, owner                                     | Guy Schieve Pit (191)  | Lorain   | sand & gravel   | 9,100                      | 9,100                      | Ln-12                                    | IM-731   |
| E. H. Schilling & Sons, Inc.<br>1154 TR 1117<br>Ironton, OH 45638<br>740-532-8463<br>Earl H. Schilling, pres.                | E. H. Schilling & Sons, Inc. (305)   | Scioto   | sand & gravel   |                            |                            | So-78                                    |  |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|--|---|--|--|--|--|--|--|
| Schloss Materials Co.<br>13700 McCracken Rd.<br>Cleveland, OH 44125<br>216-587-4900<br>Raymond E. Schloss, Jr., pres.                          | Schloss Materials Co. (274)<br>Schloss Materials Co. (569)  | Portage<br>Portage   | sand & gravel<br>sand & gravel   | 186,892  | 186,892  | Pe-60<br>Pe-SM   | IM-78<br>IM-499  |
| Schrader and Son, Inc.<br>15317 Beaver Pike<br>Jackson, OH 45640<br>740-286-0258<br>Jeffrey L. Schrader, pres.                                 | Schrader & Son, Inc. (82)   | Pike   | sandstone  | 33,327   | 33,327   | Pke-S  | IM-1348  |
| Roy B. Schweitzer<br>dba The Gravel Co.<br>325 Clark Rd.<br>P.O. Box 15501<br>Cincinnati, OH 45215<br>513-761-4980<br>Roy B. Schweitzer, pres. | New Miami Pit (42)<br>Cleves (141)  | Butler<br>Hamilton   | sand & gravel<br>sand & gravel   |  |  | Br-3<br>Hmn-28   | IM-719<br>IM-353   |
| Mark E. Scott<br>P.O. Box 6112<br>Chillicothe, OH 45601<br>740-772-4990<br>Mark E. Scott, owner  | Scott Pit (575)   | Ross   | sand & gravel  | 30,000   | 30,000   | Rs-P   | IM-122   |
| Seaway Sand & Stone, Inc.<br>11330 Airport Hwy.<br>Swanton, OH 43558<br>419-865-5751<br>Brent Gerken, pres.                                    | Seaway Sand & Stone, Inc. (188)<br>(195)<br>(156)<br>(156)  | Lucas  | limestone<br>sand & gravel<br>clay<br>shale  | 293,616<br>52,658  | 293,616<br>52,658  | Ls-13  | IM-492   |
| Seville Sand & Gravel, Inc.<br>8215 Seville Rd.<br>Lodi, OH 44254<br>330-948-1812<br>George D. Cross, pres.                                    | Seville Sand & Gravel, Inc. (206)   | Medina   | sand & gravel  | 193,615  | 193,615  | Ma-22  | IM-425,<br>IM-442,<br>IM-650,<br>IM-651  |
| Betty Sewell and Rebecca Johnson<br>3403 U.S. Route 68 South<br>Bellefontaine, OH 43311<br>740-922-3942<br>Mary J. Brown, pres.                | Sewell and Johnson (730)  | Logan  | sand & gravel  |  |  | Lgn-J  | IM-2053  |
| Shady Bend Sand & Gravel<br>550 Pleasant Valley Rd. NW<br>P.O. Box 336<br>Sugarcreek, OH 44681<br>330-852-4440<br>Daniel O. Miller, owner      | Shady Bend Sand & Gravel (72)   | Coshcocton   | sand & gravel  | 155,302  | 155,302  | Cn-624   | IM-243   |
| Shamrock Materials, Inc.<br>11641 Mosteller Rd.<br>Cincinnati, OH 45241<br>513-771-0820<br>James P. Jurgensen, pres.                           | Shamrock (38)   | Butler   | sand & gravel  | 613,469  | 616,758  | Br-52  | IM-814   |
| Sharon Stone Co.<br>P.O. Box 100<br>Dexter City, OH 45727<br>740-989-2290<br>David Skinner, pres.  | Sharon Stone Co. (167)<br>(197)<br>Belpre Sand & Gravel (713)   | Noble<br>Washington  | limestone<br>clay<br>sand & gravel   | 128,357<br>40,402  | 128,357<br>50,000  | Ne-S<br>Wn-SS  | IM-913<br>IM-2006  |
| Shelly Materials, Inc.<br>80 Park Dr.<br>P.O. Box 266<br>Thornville, OH 43076<br>740-246-6315<br>Mark Shelly, pres.                            | Springfield Plant #3 (58)<br>Coshocton Plant #5 (71)<br>Lancaster Plant #14 (92)<br><br>Belle Center Plant #8 (51)<br>Racine Plant #6 (212)<br>Dresden Plant #9 (244) | Clark<br>Coshocton<br>Fairfield<br><br>Logan<br>Meigs<br>Muskingum | sand & gravel<br>sand & gravel<br>sand & gravel<br><br>limestone<br>sand & gravel<br>sand & gravel | 181,288<br>184,423<br>908,294<br><br>433,467<br>290,898<br>488,624 | 181,288<br>184,423<br>908,294<br><br>433,467<br>290,898<br>488,624 | Ck-25<br>Cn-694<br>Fd-13<br><br>Lgn-2<br>Ms-298<br>Mum-799 | IM-358<br>IM-293<br>IM-848,<br>IM-1331<br><br>IM-494<br>IM-32<br>IM-317,<br>IM-264 |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

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|---|---|--|--|------------------------------------|------------------------------------|---------------------------------------|---|
| Shelly Materials, Inc.<br>(cont.)   | Chillicothe Plant #21 (490)<br>Ostrander Plant #10 (120)<br>York Center #11 (119)       | Ross<br>Union<br>Union                           | sand & gravel<br>limestone<br>limestone                                  | 222,287<br>2,140,031<br>360,944    | 222,287<br>2,140,031<br>360,944    | Rs-27<br>Un-2<br>Un-1                 | IM-1098<br>IM-236<br>IM-208             |
| Shelly Materials, Inc.<br>1558 CR 105<br>Belle Center, OH 43310<br>937-464-3833<br>Mark Shelly, pres.   | Tri-County Limestone Co. (61)   | Marion   | limestone  | 193,319                            | 193,319                            | Mn-1                                  | IM-250                                  |
| Shelly Materials, Inc.<br>12484 State Route 701<br>Kenton, OH 43326<br>937-464-3833<br>Mark Shelly, pres.                                     | Hardin Quarry (38)  | Hardin   | limestone  | 180,910                            | 210,000                            | Hdn-2                                 | IM-443                                  |
| Sidco Development, Inc.<br>4620 Limestone Valley Rd.<br>Zanesville, OH 43701<br>740-849-2394<br>Jeffrey R. Sidwell, pres.                     | Columbia Cement (203)<br>Midvale Sand & Gravel (214)<br>(712)                           | Muskingum<br>Tuscarawas                          | limestone<br>limestone<br>sand & gravel                                  | 1,189<br>289,488                   | 309,229                            | Mum-SD<br>Ts-S2                       | IM-1313<br>IM-1356                      |
| R. W. Sidley, Inc.<br>615 W. Main St.<br>Conneaut, OH 44030<br>440-352-9343<br>Robert Buescher, pres.   | Sidley-Kingsville Pit (15)  | Ashtabula  | sand & gravel  | 145,000                            | 155,000                            | Asa-15                                | IM-783                                  |
| R. W. Sidley, Inc.<br>7123 Madison Rd.<br>Thompson, OH 44086<br>440-352-9343<br>Robert Buescher, pres.  | Hambden Pit (58)<br>Thompson Pit (18)<br>Painesville Plant (166)                        | Geauga<br>Geauga<br>Lake                         | sandstone<br>sandstone<br>sand & gravel                                  | 450<br>120,000<br>5,000            | 450<br>150,000<br>5,000            | Gea-S<br>Gea-1<br>Lke-7               | IM-161<br>IM-163<br>IM-162              |
| Sidney Sand & Gravel Co.<br>1120 Milligan Ct., Suite 104<br>Sidney, OH 45365<br>937-492-5412<br>Thomas P. Milligan, pres.                     | Wagner Pit (493)  | Shelby   | sand & gravel  |                                    |                                    | Shy-S                                 | IM-1005                                 |
| Sidwell Materials, Inc.<br>4620 Limestone Valley Rd.<br>Zanesville, OH 43701<br>740-849-2392<br>Jeffrey R. Sidwell, pres.                     | Bellaire Stone (152)<br>(56)<br>(105)<br>(105)  | Belmont  | limestone<br>sandstone<br>clay<br>shale                                  | 228,623<br>10,219                  | 228,623<br>10,219                  | Bt-1190                               | IM-1089                                 |
|   | Northshore Limestone (201)<br>Uniontown Stone (195)<br>Dupler/Ford (186)                | Belmont<br>Belmont<br>Muskingum                  | limestone<br>limestone<br>limestone                                      | 171<br>134,159<br>325,639          | 171<br>134,159<br>325,639          | Bt-B<br>Bt-N<br>Mum-SB                | D-998<br>IM-1283<br>IM-1212,<br>IM-1269 |
|   | Sidwell Materials, Inc. (229)<br>White Cottage (78)                                     | Muskingum<br>Muskingum                           | limestone<br>limestone   | 554,466                            | 554,466                            | Mum-SW<br>Mum-104                     | IM-2092<br>IM-277                       |
| Joe Simak & Sons Trucking, Inc.<br>3052 E. Center St.<br>P.O. Box 599<br>North Kingsville, OH 44068<br>440-224-1992<br>Joseph E. Simak, pres. | Amboy Pit (677)<br>Baird Pit (701)<br>Basen Pit (715)<br>North Ridge Pit (413)<br>(166) | Ashtabula<br>Ashtabula<br>Ashtabula<br>Ashtabula | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>clay | 7,632<br>16,522<br>26,167<br>9,505 | 7,632<br>16,522<br>26,167<br>9,505 | Asa-ST<br>Asa-JS<br>Asa-ST1<br>Asa-18 | IM-1349<br>IM-1360<br>IM-2023<br>IM-949 |
| Small's Sand & Gravel, Inc.<br>P.O. Box 617<br>Gambier, OH 43022<br>740-427-3677<br>Michael W. Small, pres.                                   | Small's Sand & Gravel, Inc. (707)<br>Small's Sand & Gravel, Inc. (162)                  | Knox<br>Knox                                     | sand & gravel<br>sand & gravel   | 87,358<br>39,460                   | 87,358<br>39,460                   | Kx-S<br>Kx-5                          | IM-2000<br>IM-884,<br>IM-1307           |
|   | Small's Sand & Gravel, Inc. (165)<br>Small's Sand & Gravel, Inc. (408)                  | Knox<br>Knox                                     | sand & gravel<br>sand & gravel   | 223,554<br>3,213                   | 223,554<br>3,213                   | Kx-15<br>Kx-17                        | IM-967<br>IM-968                        |
| Sober Sand & Gravel Co.<br>2898 Tallmadge Rd.<br>Ravenna, OH 44266<br>330-325-7088<br>Tracy Sober, pres.                                      | Sober Sand & Gravel Co. (275)<br>(211)  | Portage  | sand & gravel<br>clay  | 30,566                             | 30,566                             | Pe-18                                 | IM-193                                  |

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|--|--|--|--|--------------------------------------|--------------------------------------|----------------------------------|---------------------------------------|
| Soehnlen Bros. Sand & Gravel, Inc.<br>10449 Soehnlen Rd. NW<br>Beach City, OH 44608<br>330-756-2244<br>Francis L. Soehnlen, pres.            | Soehnlen Bros. Sand & Gravel, Inc. (343)   | Tuscarawas                               | sand & gravel  | 133,365                              | 133,365                              | Ts-1826                          | IM-88                                 |
| Solomon's Mines, Inc.<br>7732 Salem-Unity Rd.<br>Salem, OH 44460<br>330-337-0123<br>Jack Solomon, owner                                      | Solomon's Mines, Inc. (636)<br>(72)<br>(194)<br>Solomon's Mines #1 (196)<br>(135)                | Columbiana<br>Mahoning                   | sand & gravel<br>sandstone<br>clay<br>sand & gravel<br>clay      | 118,783<br>27,974                    | 118,783<br>27,974                    | Ca-S<br>Mg-632                   | IM-1258<br>IM-808                     |
| Solon Excavators Sand & Gravel, Inc.<br>10925 Mantua Center Rd.<br>P.O. Box 850<br>Mantua, OH 44255<br>330-274-8241<br>Howard Sargent, pres. | May (623)<br>Brugman (757)<br>Burke (276)  | Geauga<br>Portage<br>Portage             | sand & gravel<br>sand & gravel<br>sand & gravel                  | 6,221<br>23,153<br>164,115           | 0<br>23,153<br>164,115               | Gea-43<br>Pe-S1<br>Pe-36         | IM-1230<br>IM-2126<br>IM-90           |
| Soltis Sand & Gravel<br>P.O. Box 452<br>Parkman, OH 44080<br>440-548-5813<br>James Soltis, owner   | Soltis Sand & Gravel (415)<br>(86)   | Geauga                                   | sand & gravel<br>clay  | 5,057<br>728                         | 5,057<br>728                         | Gea-9                            | IM-132                                |
| South Central Sand & Gravel<br>340 Bailey Chapel Rd.<br>Piketon, OH 45661<br>740-289-2629<br>James A. Nier, owner                            | South Central Sand & Gravel (254)  | Pike                                     | sand & gravel  | 28,934                               | 28,934                               | Pke-30                           | IM-786                                |
| Southdown Inc.<br>3250 Linebaugh Rd.<br>Xenia, OH 45385<br>937-879-8380<br>Gilberto Perez, pres., U.S. ops.                                  | Batdorf, Feirstine, Schneider (34)<br>Harner (90)<br>Miller et al. (202)<br>(10)<br>G-Tract (72) | Greene<br>Greene<br>Greene<br>Montgomery | limestone<br>clay<br>limestone<br>clay<br>limestone              | 546,046<br>174,106<br>396<br>378,185 | 518,419<br>178,337<br>396<br>412,800 | Ge-9<br>Ge-44<br>Ge-8<br>My-58   | IM-364<br>IM-364<br>IM-330            |
| Southern Ohio Aggregates, Inc.<br>11641 Mosteller Rd.<br>Cincinnati, OH 45241<br>513-771-0820<br>James P. Jurgensen, pres.                   | New Miami Plant (460)<br>E. Miami River Road (551)<br>Kilby Road (552)<br>Gratis Plant (284)     | Butler<br>Hamilton<br>Hamilton<br>Preble | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 20,526                               | 20,526                               | Br-S<br>Hmn-S<br>Hmn-SO<br>Pre-7 | IM-1053<br>IM-746<br>IM-720<br>IM-306 |
| Speer Brothers, Inc.<br>3812 Old Railroad Rd.<br>Sandusky, OH 44870<br>419-626-5291<br>David Speer, pres.                                    | 101 Location (89)  | Erie                                     | clay   |                                      |                                      | Ee-32                            | IM-1077                               |
| Sphagnum Moss Peat Farm<br>9904 State Route 736<br>Plain City, OH 43064<br>937-645-5459<br>Mike Poling, owner                                | Sphagnum Moss Peat Farm (2)  | Champaign                                | peat   |                                      |                                      | Cpn-9                            |                                       |
| Spring Creek Corp.<br>4723 Hardin-Wapak Rd.<br>Sidney, OH 45365<br>937-492-4186<br>Jerry Bushelman, pres.                                    | Morelock Pit (494)   | Shelby                                   | sand & gravel  | 455,000                              | 529,000                              | Shy-SC                           | IM-1018                               |
| City of Springfield<br>201 Eagle City Rd.<br>Springfield, OH 45502<br>937-525-5880<br>Jerry Swanton, water plant supt.                       | City of Springfield (437)  | Clark                                    | sand & gravel  |                                      |                                      | Ck-7                             | IM-449                                |

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|--|---|---|--|---|--|--|--|
| Spring Industries, Inc.<br>56290 Dilles Bottom Rd.<br>Shadyside, OH 43947<br>740-671-9400<br>Glenn Straub, pres.         | Bolivar Pit (582)<br>Midvale Pit (344)  | Stark<br>Tuscarawas   | sand & gravel<br>sand & gravel   |   |  | Sk-SI<br>Ts-1771   | IM-588<br>IM-77  |
| Spring Run Gravel<br>P.O. Box 466<br>Killbuck, OH 44637<br>330-276-2444<br>Jeff Chaney, owner                            | Spring Run Gravel (416)<br>(111)  | Holmes  | sand & gravel<br>clay  | 13,396  | 13,396   | Hs-96  | IM-997   |
| Stansley Mineral Resources<br>3810 Herr Rd.<br>Sylvania, OH 43560<br>419-843-2813<br>Jeffrey Stansley, pres.             | Ridge Quarry (196)<br>Stansley Mineral Resources,<br>Genoa Plant (85)   | Hancock<br>Ottawa   | limestone<br>limestone   | 699,300   | 699,300  | Hk-A <sup>6</sup><br>Oa-1A <sup>7</sup>  | IM-1299<br>IM-292  |
| State Line Resources, Inc.<br>P.O. Box 419<br>Negley, OH 44441<br>330-426-9611<br>James Muse, v. pres.                   | State Line Resources, Inc. (4)  | Columbiana  | clay   | 77,531  | 77,531   | Ca-505   | IM-13,<br>IM-936   |
| Stewart & Reichman, Inc.<br>1866 State Route 416 SE<br>Gnadenhutten, OH 44629<br>740-922-0050<br>Timothy G. Brown, pres. | Stewart & Reichman, Inc. (722)<br>Stewart & Reichman, Inc. (346)  | Coshocton<br>Tuscarawas   | sand & gravel<br>sand & gravel   | 75,101  | 75,101   | Cn-SR<br>Ts-111  | IM-2065<br>IM-55   |
| Stocker Sand & Gravel Co.<br>P.O. Box 176<br>Gnadenhutten, OH 44629<br>740-254-4635<br>William E. Stocker, pres.         | Stocker Sand & Gravel Co.-<br>Gnaden (347)<br>Stocker Sand & Gravel Co.-<br>Island (348)<br>Stocker Sand & Gravel Co. (760)   | Tuscarawas  | sand & gravel  | 578,076   | 578,076  | Ts-69  | IM-51  |
| Stoneco, Inc.<br>1345 Ford St.<br>P.O. Box 29A<br>Maumee, OH 43537<br>419-893-8731<br>John Bearss, pres.                 | Maumee Quarry (54)<br>Celina Quarry (62)<br>Rocky Ridge Quarry (83)<br>Auglaize Quarry (88)<br>Scott Quarry (121)<br>Montpelier North Pit (376)<br>Montpelier S.-Takacs Pit (506)<br>Montpelier South Pit (375)<br>Lime City Quarry (131)<br>Portage Quarry (132) | Lucas<br>Mercer<br>Ottawa<br>Paulding<br>Van Wert<br>Williams<br>Williams<br>Williams<br>Wood<br>Wood | limestone<br>limestone<br>limestone<br>limestone<br>limestone<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>limestone<br>limestone | 1,187,285<br>458,727<br>272,054<br>783,630<br>398,605<br>15,410<br>15,410<br>942,855<br>398,223 | 1,259,576<br>512,816<br>266,130<br>891,176<br>411,527<br>Ws-9<br>Ws-T<br>Ws-6<br>Wd-6<br>Wd-11 | Ls-2<br>Mr-1<br>Oa-14<br>Pg-2<br>Vt-3<br>IM-498<br>IM-1022<br>IM-497<br>IM-480<br>IM-475 | IM-503<br>IM-592<br>IM-320<br>IM-481<br>IM-495<br>IM-498<br>IM-497<br>IM-480<br>IM-475 |
| Stone Creek Brick Co.<br>P.O. Box 116<br>Stone Creek, OH 43840<br>330-339-5511<br>A. C. Marsh, Jr., pres.                | Stone Creek Brick Clay Mine (67)<br>Stone Creek Brick Shale Pit (67)  | Tuscarawas<br>Tuscarawas  | clay<br>shale  | 38,420<br>5,500   | 38,420<br>5,500  | Ts-1557<br>Ts-1558   | IM-52<br>IM-52   |
| Suburban South Recycling & Disposal Facility<br>3415 TR 447<br>Glenford, OH 43739<br>740-787-2327<br>Frank Fello, pres.  | Suburban South Recycling & Disposal Facility (81)<br>(213)<br>(213)   | Perry   | sandstone<br>clay<br>shale   |   |  | Py-SU  | IM-1340  |
| Suever Stone Co., Inc.<br>Bloomlock Rd.<br>P.O. Box 10<br>Delphos, OH 45833<br>419-692-9796<br>Neal Lause, pres.         | Suever Stone Co., Inc. (7)<br>Suever Stone Co., Inc. (123)  | Allen<br>Van Wert   | limestone<br>limestone   | 118,300<br>210,950  | 118,300<br>210,950   | An-4<br>Vt-1   | IM-491<br>IM-500   |

<sup>6</sup>This mine was operated January and February 2001 by Stansley Mineral Resources and March through December 2001 by National Lime & Stone Co.  
<sup>7</sup>Stansley Mineral Resources and Graymont Dolime (OH), Inc., operate from the same mine.

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company   | Name of mine<br>(and map location number) | County     | Commodity             | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|---|---|------------|-----------------------|-------------------|------------------------|-------------------|--------------------------------------|
| Summitville Tiles, Inc.<br>P.O. Box 173<br>Summitville, OH 43962<br>330-223-1511<br>David Johnson, pres.                      | Summitville Tiles, Inc. (5)               | Columbiana | shale                 | 36,180            | 36,180                 | Ca-205            | IM-74                                |
| Sunshine Sand Co.<br>12400 Broadway Ave.<br>Cleveland, OH 44125<br>216-587-2700<br>Dorothy M. Strohm, pres.                   | Sunshine Sand Co. (528)                   | Portage    | sand & gravel         |                   |                        | Pe-SSC            | IM-318                               |
| Swingle Drilling, Inc.<br>713 Keystone St.<br>P.O. Box 220<br>Crooksville, OH 43731<br>740-982-4280<br>Mark B. Swingle, pres. | T.G. Enterprises (138)                    | Perry      | clay                  |                   |                        | Py-S1             | IM-1183                              |
| TCNC Industries, Inc.<br>P.O. Box 101<br>N. Versailles, PA 15137<br>412-672-6480<br>Chester Winters & Tom Schwer, partners    | TCNC Industries, Inc. (210)               | Carroll    | limestone             |                   |                        | Cl-TC             | IM-1319                              |
| Tackett Builders<br>906 Charleston Pike<br>Chillicothe, OH 45601<br>740-772-5431<br>Carmel G. Tackett, owner                  | Tackett's Pit (606)<br>(150)              | Ross       | sand & gravel<br>clay | 328               | 328                    | Rs-T              | IM-1189                              |
| E. H. Taylor, Inc.<br>2603 Dorr St.<br>Toledo, OH 43607<br>419-536-6020<br>Bobby J. Howard, pres.                             | E. H. Taylor, Inc. (709)                  | Lucas      | sand & gravel         |                   |                        | Ls-T              | IM-2012                              |
| Taylorsville Rd. Hardfill<br>4252 Taylorsville Rd.<br>Huber Heights, OH 45424<br>937-233-7500<br>James T. McDonald, pres.     | Taylorsville Rd. Hardfill (236)           | Montgomery | sand & gravel         |                   |                        | My-55             | IM-571                               |
| Teague Gravel Co., Inc.<br>P.O. Box 380<br>Newbury, OH 44065<br>440-564-5677<br>Donald R. Teague, pres.                       | Teague Gravel Co., Inc. (109)             | Geauga     | sand & gravel         | 45,695            | 45,695                 | Gea-35            | IM-321                               |
| Thiel Construction Co.<br>P.O. Box 225<br>Blakeslee, OH 43505<br>419-272-2712<br>Lee R. Thiel, pres.                          | Thiel Construction Co. (633)              | Williams   | sand & gravel         | 2,494             | 2,494                  | Ws-21             | IM-1225                              |
| Thomas Sand & Gravel<br>P.O. Box 171<br>Gratis, OH 45330<br>937-787-4677<br>Howard Thomas, owner                              | Thomas Sand & Gravel (741)                | Preble     | sand & gravel         | 140               | 680                    | Pre-T             | IM-2036                              |
| Don Thompson Excavating, Inc.<br>1471 W. Paintersville Rd.<br>Spring Valley, OH 45370<br>937-862-7911<br>Todd Thompson, pres. | Don Thompson Excavating, Inc. (546)       | Greene     | sand & gravel         |                   |                        | Ge-46             | IM-1149                              |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)                         | County              | Commodity                              | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|--|--|---------------------|--|-------------------|------------------------|-------------------|--------------------------------------|
| Tipp Stone Co., Inc.<br>P.O. Box 367<br>Troy, OH 45373<br>937-890-4051<br>Michael Eideemiller, v. pres.                          | Tipp Stone Co., Inc. (446)<br>Tipp Stone Co., Inc. (238)       | Miami<br>Montgomery | sand & gravel<br>sand & gravel         | 42,742<br>79,347  | 42,742<br>79,347       | Mi-12<br>My-61    | IM-467<br>IM-468                     |
| Towne Square Products<br>156 E. Broadway<br>Westerville, OH 43081<br>614-781-6990<br>Suzanne Edgar, pres.                        | Towne Square Products (41)                                     | Noble               | shale                                  | 160               | 160                    | Ne-66             | IM-664                               |
| Tri-State Asphalt Products<br>56290 Dilles Bottom Rd.<br>Shadyside, OH 43947<br>740-671-9400<br>Glenn Straub, pres.              | Tri-State Asphalt Products (26)                                | Belmont             | sand & gravel                          |                   |                        | Bt-74             | IM-288                               |
| Trout Sand & Gravel Co.<br>Route 4<br>Marietta, OH 45750<br>740-373-7471<br>Henry C. Trout, Jr., owner                           | Trout Sand & Gravel Co. (369)                                  | Washington          | sand & gravel                          | 18,685            | 35,472                 | Wn-510            | IM-25                                |
| Tuffco Sand & Gravel, Inc.<br>P.O. Box 399<br>Marysville, OH 43040<br>614-873-3977<br>Charles Lewis, pres.                       | Tuffco Sand & Gravel, Inc. (474)<br>(207)                      | Madison             | sand & gravel<br>clay                  | 187,229<br>32     | 187,500<br>32          | Mdn-11            | IM-1063                              |
| Twinsburg Development Corp.<br>P.O. Box 248<br>Grand River, OH 44045<br>440-357-5562<br>Harold T. Larned, pres.                  | Twinsburg Development Corp.(260)<br>(204)                      | Portage             | sand & gravel<br>clay                  | 215,148           | 265,541                | Pe-84             | IM-868                               |
| U.S. Aggregates, Inc.<br>5400 W. 86th St.<br>P.O. Box 68123<br>Indianapolis, IN 46268<br>317-872-6010<br>James Fehsenfeld, pres. | U.S. Aggregates/Richmond Plant (571)                           | Preble              | sand & gravel                          | 52,500            | 0                      | Pre-AAC           | IM-779                               |
| U.S. Silica Co.<br>P.O. Box 146<br>Dundee, OH 44624<br>800-243-7500<br>Rick Shearer, pres.                                       | Dundee Mine (42)   | Tuscarawas          | sandstone                              | 12,750            | 15,000                 | Ts-1660           | IM-68                                |
| United Aggregates, Inc.<br>P.O. Box 750<br>Mt. Vernon, OH 43050<br>740-397-0000<br>John D. Ellis, pres.                          | United Aggregates, Inc. (163)                                  | Knox                | sand & gravel                          | 223,905           | 168,707                | Kx-3              | IM-300                               |
| Valley Brook Sand & Gravel, Inc.<br>3967 State Route 303<br>Mantua, OH 44255<br>330-297-1325<br>Frank Ruehr, pres.               | Ruehr (740)  | Portage             | sand & gravel                          |                   |                        | Pe-V              | IM-2061                              |
| Valley Clay Mining Co.<br>7052 Rosehill Rd.<br>Roseville, OH 43777<br>740-697-0620<br>Steve McCann, pres.                        | Spring Mine (122)<br>Tague Mine (173)                          | Muskingum<br>Perry  | clay<br>clay                           | 16,027<br>1,440   | 16,027<br>1,440        | Mum-904<br>Py-V   | IM-1127<br>IM-1245                   |
| Valley Materials Co.<br>4947 U.S. Route 23 S<br>P.O. Box 400<br>Piketon, OH 45661<br>740-289-4551<br>Ralph McFann, pres.         | Valley Materials #1 (252)<br>(99)<br>Valley Materials #2 (694) | Pike                | sand & gravel<br>clay<br>sand & gravel | 71,858            | 34,801                 | Pke-26<br>Pke-V   | IM-142<br>IM-1330                    |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)  | County     | Commodity           | 2001 sales (tons) | 2001 production (tons) | State mine number | Mining and reclamation permit number |
|--|---|------------|---------------------|-------------------|------------------------|-------------------|--------------------------------------|
| Van Wey Sand & Gravel, Inc.<br>6824 Mt. Vernon Rd. NE<br>Newark, OH 43055<br>740-745-5965<br>Rock Van Wey, pres.                               | Van Wey Sand & Gravel, Inc. (179)   | Licking    | sand & gravel       | 839,580           | 860,000                | Lg-10             | IM-217                               |
| Ralph Wagner & Sons<br>7317 Brinker St.<br>Navarre, OH 44662<br>330-495-7414<br>Michael Wagner, owner  | Wagner & Sons (579)   | Stark      | sand & gravel       |                   |                        | Sk-W              | IM-867                               |
| Wagner Quarries Co.<br>4203 Milan Rd.<br>Sandusky, OH 44870<br>419-625-8141<br>Martin A. Jones, pres.  | Wagner Quarries Co. (26)  | Erie       | limestone           | 2,985,826         | 3,158,671              | Ee-1              | IM-310                               |
| Walcottville Sand & Gravel Corp.<br>1345 Ford St.<br>Maumee, OH 43537<br>419-873-8731<br>John T. Bearss, pres.                                 | London Aggregates-Enon Pit (634)  | Williams   | sand & gravel       | 107,173           | 128,156                | Ws-22             | IM-1222                              |
| Walhonding Sand & Gravel<br>27679 State Route 206<br>Walhonding, OH 43843<br>740-824-5251<br>Tim Helmick, pres                                 | Walhonding Valley Sand & Gravel (749)<br>(233)  | Coshocton  | sand & gravel shale | 1,627<br>561      | 1,627<br>561           | Cn-WL             | IM-2127                              |
| Wallace Road Sand & Gravel<br>P.O. Box 276<br>Petersburg, OH 44454<br>330-542-9397<br>David Sugar, pres.                                       | Wallace Road Sand & Gravel (475)  | Mahoning   | sand & gravel       | 1,380             | 1,380                  | Mg-630            | IM-1091                              |
| Waller Bros. Stone Co.<br>P.O. Box 157<br>McDermott, OH 45652<br>740-259-2356<br>F. L. Waller, pres.   | Crabtree Quarry (37)<br>Inskeep Quarry (36)<br>Miller Quarry (38)<br>New Inskeep (85) | Scioto     | sandstone           | 7,985             | 7,985                  | So-76             | IM-141                               |
| Carl Walter<br>11098 Bower Rd.<br>Minerva, OH 44657<br>330-894-2315<br>Carl Walter, owner  | Carl Walter (653)   | Columbiana | sand & gravel       | 2,600             | 2,600                  | Ca-W              | IM-1279                              |
| Ward Materials, Inc.<br>385 Oak St. R.R. 2<br>Leipsic, OH 45856<br>419-943-2450<br>Arnold W. Rosebrock, pres.                                  | Ward Materials, Inc. (714)  | Allen      | sand & gravel       | 33,482            | 36,232                 | An-W              | IM-2069                              |
| Don Wartko Construction, Inc.<br>975 Tallmadge Rd.<br>Kent, OH 44240<br>330-673-5252<br>Thomas Wartko, pres.                                   | Don Wartko Construction, Inc. (483)   | Portage    | sand & gravel       |                   |                        | Pe-92             | IM-522                               |
| Waste Management/Chambers Development of Ohio, Inc.<br>19469 County Road 7<br>Coshocton, OH 43812<br>740-787-2327<br>W. David Gallagher, pres. | Harrison County Landfill (188)  | Harrison   | clay                |                   |                        | Hn-CD             | D-1105                               |
| Waterland Trucking Service, Inc.<br>P.O. Box 930335<br>Wixom, MI 48393-0335<br>248-349-1582<br>Richard D. Massuch, pres                        | Adams County Quarry (173)   | Adams      | limestone           |                   |                        | Ads-H             | IM-805                               |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)  | County   | Commodity  | 2001 sales (tons)                           | 2001 production (tons)                      | State mine number                                       | Mining and reclamation permit number            |
|--|---|--|--|---|---|---|---|
| Waterloo Coal Co., Inc.<br>P.O. Box 626<br>Jackson, OH 45640<br>740-682-7787<br>T. L. Darlington, Jr., pres.                             | Diamond Stone (9)<br>(128)<br>Waterloo Coal Stone Plant-Zoar Mill (47)<br><br>(764)<br>(23)                           | Athens<br>Jackson  | limestone<br>clay<br>limestone<br><br>sand & gravel<br>clay  | 279,244<br>209,577<br><br>7,494<br>3,116    | 279,244<br>209,577<br><br>7,494<br>3,116    | As-533<br>Jkn-367                                       | IM-17<br>D-594, D-968,<br>D-1083                |
| Watson Gravel, Inc.<br>2728 Hamilton-Cleves Rd.<br>P.O. Box 277<br>Ross, OH 45061<br>513-863-0070<br>Ronald E. Watson, pres.             | River Pit (667)<br>Watson Pit (44)<br>Campbell Rd. (407)<br>Dry Fork (131)<br>Harrison #2 (640)<br>Harrison Pit (142) | Butler<br>Butler<br>Hamilton<br>Hamilton<br>Hamilton<br>Hamilton | sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel<br>sand & gravel | 27,136<br>1,076,894<br>650<br><br>1,071,747 | 27,136<br>1,076,894<br>650<br><br>1,071,747 | Br-57<br>Br-47<br>Hmn-69<br>Hmn-68<br>Hmn-ARH<br>Hmn-60 | IM-111<br>IM-969<br>IM-747<br>IM-1273<br>IM-761 |
| Weber Sand & Gravel, Inc.<br>14586 US 127 EW<br>Bryan, OH 43506<br>419-636-7920<br>Thomas G. Weber, pres.                                | Weber Sand & Gravel, Inc. (377)   | Williams   | sand & gravel  | 234,552                                     | 234,552                                     | Ws-11   | IM-509,<br>IM-661                               |
| Joann O. Weddle<br>2419 U.S. Route 68 N<br>Yellow Springs, OH 45387<br>937-374-1290<br>Joann Weddle, owner                               | Weddle Gravel (549)<br>(219)  | Greene   | sand & gravel<br>clay  | 29,487<br>89,558                            | 29,487<br>89,558                            | Ge-W  | IM-645  |
| Weidle Sand & Gravel, Inc.<br>P.O. Box 247<br>Germantown, OH 45327<br>937-855-2228<br>Ron Weidle, Sr., pres.                             | Weidle Sand & Gravel, Inc. (158)<br>(158)   | Montgomery   | clay<br>shale  |   |   | My-W  | IM-1207   |
| Welch Sand & Gravel, Inc.<br>10217 Columbia St.<br>Harrison, OH 45030-9751<br>513-353-3220<br>Charles H. Welch, pres.                    | Schlichter Pit (45)<br>East Miami Pit (144)<br>Fernald Pit (143)  | Butler<br>Hamilton<br>Hamilton                                   | sand & gravel<br>sand & gravel<br>sand & gravel  | 226,477<br>396,092<br>569,753               | 226,477<br>396,092<br>569,753               | Br-38<br>Hmn-48<br>Hmn-42                               | IM-218<br>IM-220<br>IM-823                      |
| White Rock Quarry, LLC<br>Div. of U.S. Aggregates<br>P.O. Box 119<br>Clay Center, OH 43408-0119<br>419-855-8388<br>Jim Fehsenfeld, pres. | White Rock Quarry (82)  | Ottawa   | limestone  | 1,172,082                                   | 1,226,446                                   | Oa-6  | IM-296  |
| Mark Williams Blacktop Co., Inc.<br>Route 4 Box 34<br>Marietta, OH 45750<br>740-373-2457<br>Mark Williams, pres.                         | Williams Pit #1 (534)<br>Williams Pit #2 (504)  | Washington<br>Washington   | sand & gravel<br>sand & gravel   |   |   | Wn-1009<br>Wn-1007                                      | IM-525<br>IM-1042                               |
| Willowbrook Sand & Gravel<br>39130 Brookfield St.<br>P.O. Box 304<br>Lisbon, OH 44432<br>330-424-0742<br>Ray Perrino, owner              | Willowbrook Sand & Gravel (538)   | Columbiana   | sand & gravel  | 34,911                                      | 34,911                                      | Ca-993  | IM-1180   |
| Gene T. Wilson<br>P.O. Box 46<br>Mt. Sterling, OH 43143<br>740-869-4406<br>Eugene T. Wilson, owner                                       | Gene T. Wilson (565)  | Pickaway   | sand & gravel  | 928   | 928   | Pky-W   | IM-1176   |
| Dennis Winzeler<br>920 Center St.<br>Bryan, OH 43506<br>419-636-4285<br>Dennis & Polly Winzeler, owners                                  | Dennis Winzeler (378)   | Williams   | sand & gravel  |   |   | Ws-14   | IM-614  |

**2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)**

| Name, address, telephone number, and president/owner/manager of company  | Name of mine (and map location number)                           | County                        | Commodity                                       | 2001 sales (tons)             | 2001 production (tons)        | State mine number        | Mining and reclamation permit number |
|--|--|-------------------------------|---|-------------------------------|-------------------------------|--------------------------|--------------------------------------|
| Wise Gravel<br>8535 W. Klinger Rd.<br>Covington, OH 45318<br>937-473-3246<br>John A. Wise, owner                                 | Wise Gravel (221)  | Miami                         | sand & gravel                                   |                               |                               | Mi-9                     | IM-408                               |
| Wyandot Dolomite, Inc.<br>P.O. Box 99<br>Carey, OH 43316-0126<br>419-396-7641<br>David J. Wolfe, pres.                           | Wyandot Dolomite, Inc. (135)                                     | Wyandot                       | limestone                                       | 1,628,451                     | 1,938,136                     | Wt-8                     | IM-273                               |
| Wylie and Sons Landscaping<br>2550 County Rd. E-F<br>P.O. Box 29<br>Swanton, OH 43558<br>419-826-1200<br>Thomas Wylie, owner     | R. K. Walters (696)<br>Keifer (754)                              | Fulton<br>Lucas               | sand & gravel<br>sand & gravel                  |                               |                               | Ftn-W<br>Ls-W            | IM-2118<br>IM-2098                   |
| Wysong Gravel Co.<br>P.O. Box 5<br>West Alexandria, OH 45381<br>937-962-2559<br>John & Carroll Wysong, owners                    | Wysong Gravel Co. (285)<br>Wysong Gravel Co. (286)               | Preble<br>Preble              | sand & gravel<br>sand & gravel                  | 252,524<br>84,589             | 252,524<br>84,589             | Pre-4<br>Pre-6           | IM-477<br>IM-478                     |
| Wysong Stone Co.<br>5897 State Route 503 N<br>P.O. Box 159<br>Lewisburg, OH 45338<br>937-962-2559<br>Carroll E. Wysong, v. pres. | Wysong Stone Co. (95)  | Preble                        | limestone                                       | 111,296                       | 113,000                       | Pre-5                    | IM-447                               |
| X L Sand & Gravel<br>P.O. Box 255<br>Negley, OH 44441<br>330-426-9876<br>Robert A. Lansberry, pres.                              | X L Sand & Gravel (68)<br>X L Sand & Gravel (705)                | Columbiana<br>Columbiana      | sand & gravel<br>sand & gravel                  | 58,197                        | 58,197                        | Ca-881<br>Ca-XL          | IM-611<br>IM-1347                    |
| Xenia Sand, Gravel, & Asphalt Co.<br>588 Dayton-Xenia Rd.<br>Xenia, OH 45385<br>937-372-2978<br>David A. Thompson, owner         | Xenia Sand & Gravel Co. (117)                                    | Greene                        | sand & gravel                                   |                               |                               | Ge-10                    | IM-518                               |
| Young's Sand & Gravel Co.<br>P.O. Box 117<br>Loudonville, OH 44842<br>419-994-3040<br>Bill Heichel, pres.                        | Young's Sand Gravel Co. (8)<br>Ayers (412)<br>Chuck Spreng (616) | Ashland<br>Ashland<br>Ashland | sand & gravel<br>sand & gravel<br>sand & gravel | 319,628<br>7,793<br>1,231,360 | 319,628<br>7,793<br>1,231,360 | Ald-7<br>Ald-15<br>Ald-Y | IM-392<br>IM-944<br>IM-1216          |
| Zerger's Quarry<br>100 N. Sycamore St.<br>Woodsfield, OH 43793<br>740-472-1675<br>Herman Zerger, owner                           | Zerger's Quarry (80)   | Noble                         | limestone                                       |                               |                               | Ne-86                    | IM-70                                |
| Zoar Mining Co.<br>P.O. Box 667<br>Zoar, OH 44697-0667<br>330-223-1511<br>David W. Johnson, pres.                                | Zoar Mine (71)   | Tuscarawas                    | clay  |                               |                               | Ts-540                   | IM-28                                |
| Zollinger Sand & Gravel Co.<br>11899 Easton Rd.<br>Rittman, OH 44270<br>330-855-2464<br>Carl Zollinger, pres.                    | Zollinger Sand & Gravel Co. (374)<br>(193)                       | Wayne                         | sand & gravel<br>clay                           | 82,996                        | 82,996                        | We-15                    | IM-398                               |

**2001 LIMESTONE/DOLOMITE COMPANIES WITH SALES OR PRODUCTION**

| Company                                    | No. of operations | Sales (tons) | Production (tons) | Company                                 | No. of operations | Sales (tons) | Production (tons) |
|--|-------------------|--------------|-------------------|---|-------------------|--------------|-------------------|
| Ayers Limestone Quarry, Inc.               | 1                 | 87,334       | 87,334            | Miami River Stone Co.                   | 3                 | 568,909      | 558,438           |
| Barrett Paving Materials, Inc.             | 5                 | 1,355,873    | 1,308,529         | Millersville Lime Inc.                  | 1                 | 524,636      | 422,790           |
| Belden Brick Co.                           | 3                 | 41,061       | 41,061            | Morrow Gravel Co.                       | 1                 | 146,631      | 254,536           |
| Bluffton Stone Co.                         | 1                 | 351,473      | 429,790           | National Lime & Stone Co.               | 8                 | 13,640,000   | 13,640,000        |
| Carmeuse Ohio Inc.                         | 1                 | 3,255,464    | 3,255,464         | North Shore Stone Quarries, Inc.        | 1                 | 4,489        | 4,489             |
| Chesterhill Stone Co.                      | 1                 | 956,786      | 940,643           | Ohio Asphaltic Limestone Corp.          | 1                 | 482,490      | 482,490           |
| Christman Quarry                           | 1                 | 65,174       | 65,174            | Olen Corp.                              | 2                 | 904,392      | 904,392           |
| Con-Ag, Inc.                               | 1                 | 253,185      | 182,184           | Piqua Materials, Inc.                   | 1                 | 772,357      | 910,699           |
| Custar Stone Co.                           | 1                 | 434,249      | 429,270           | Pleasant Valley Limestone               | 1                 | 129,618      | 129,618           |
| Demmy Construction, Inc.                   | 1                 | 20,823       | 20,823            | C. F. Poeppelman, Inc.                  | 1                 | 408,768      | 408,768           |
| C. E. Duff & Son, Inc.                     | 2                 | 433,907      | 433,907           | Precision Aggregate, Inc.               | 1                 | 221,000      | 221,000           |
| ENZ, Inc.                                  | 1                 | 207,237      | 207,237           | Precision Aggregates III, LLC           | 1                 | 225,000      | 225,000           |
| ESSROC Cement Corp.                        | 2                 | 565,274      | 565,274           | Putnam Stone Co.                        | 1                 | 253,712      | 272,553           |
| East Fairfield Coal Co.                    | 1                 | 1,005,904    | 1,019,318         | Quality Stone Co.                       | 1                 | 531,287      | 531,287           |
| Erie Blacktop, Inc.                        | 1                 | 181,997      | 181,997           | The Quarry, LLC                         | 1                 | 820          | 820               |
| Fox Stone Products, Inc.                   | 1                 | 2,500        | 3,200             | Ridge Township Quarry                   | 1                 | 67,179       | 67,179            |
| Graymont Dolime (OH) Inc.                  | 1                 | 1,317,104    | 1,460,293         | Seaway Sand & Stone, Inc.               | 1                 | 293,616      | 293,616           |
| J. M. Hamilton & Sons Co., Inc.            | 1                 | 22,287       | 22,287            | Sharon Stone Co.                        | 1                 | 128,357      | 128,357           |
| Hanson Aggregates Davon, Inc.              | 3                 | 3,942,243    | 4,042,450         | Shelly Materials, Inc.                  | 5                 | 3,308,671    | 3,337,761         |
| Hanson Aggregates Midwest, Inc.            | 6                 | 7,515,469    | 7,094,456         | Sidco Development, Inc.                 | 1                 | 1,189        | 0                 |
| Honey Creek Stone Co.                      | 1                 | 304,191      | 328,958           | Sidwell Materials, Inc.                 | 4                 | 1,242,887    | 1,242,887         |
| K.C.C.I.                                   | 1                 | 112,617      | 112,617           | Southdown Inc.                          | 3                 | 1,098,337    | 1,109,556         |
| Kellstone, Inc.                            | 1                 | 931,985      | 931,985           | Stansley Mineral Resources <sup>1</sup> | 1                 | 699,300      | 699,300           |
| Kimble Clay & Limestone Co.                | 1                 | 39,338       | 39,338            | Stoneco, Inc.                           | 7                 | 4,441,379    | 4,633,968         |
| King Limestone, Inc.                       | 1                 | 304,176      | 304,176           | Suever Stone Co., Inc.                  | 2                 | 329,250      | 329,250           |
| King Quarries, Inc.                        | 1                 | 77,820       | 77,820            | Wagner Quarries Co.                     | 1                 | 2,985,826    | 3,158,671         |
| Lafarge Corp.                              | 1                 | 757,115      | 763,115           | Waterloo Coal Co., Inc.                 | 2                 | 488,821      | 488,821           |
| Lafarge North America                      | 2                 | 3,491,921    | 4,274,709         | White Rock Quarry, LLC                  | 1                 | 1,172,082    | 1,226,446         |
| Latham Limestone, Inc.                     | 1                 | 284,125      | 285,000           | Wyandot Dolomite, Inc.                  | 1                 | 1,628,451    | 1,938,136         |
| MacRitchie Materials, Inc.                 | 1                 | 308,013      | 421,353           | Wysong Stone Co.                        | 1                 | 111,296      | 113,000           |
| Marshall Quarry, Inc.                      | 1                 | 473          | 473               | TOTAL: 65 companies                     | 121               | 80,998,236   | 81,944,288        |
| Martin Marietta Aggregates                 | 10                | 10,086,529   | 9,332,256         |   |                   |              |                   |
| Martin Marietta Magnesia Specialties, Inc. | 1                 | 2,459,555    | 2,649,953         |   |                   |              |                   |
| Maxville Quarries, Inc.                    | 2                 | 165,572      | 165,572           |   |                   |              |                   |
| The Melvin Stone Co., LLC                  | 4                 | 2,848,712    | 2,732,444         |   |                   |              |                   |

<sup>1</sup>Stansley Mineral Resources operates in the same mine as Graymont Dolime (OH) Inc.; this mine is not counted in total mines.

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## LIMESTONE/DOLOMITE OPERATORS DIRECTORY

**2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY**

*For those mines for which a state mine number has not been assigned, a letter designation is used (example: Cn-A).*

| County   | Name of operator              | Name of mine or quarry       | Township  | Geological unit                                      | Type and principal use  | State mine number |
|----------|-------------------------------|------------------------------|-----------|--|---|-------------------|
| Adams    | Hanson Aggregates Davon, Inc. | Plum Run Stone               | Meigs     | Peebles, Greenfield & Tymochtee Dolomites (Silurian) | crushed stone—unspecified   | Ads-1             |
| Allen    | Bluffton Stone Co.            | Bluffton Stone Co.           | Richland  | Tymochtee Dolomite (Silurian)                        | crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, dimension stone, aglime | An-1              |
|          | National Lime & Stone Co.     | Lima Plant                   | Bath      | Silurian   | crushed stone—portland cement concrete, railroad ballast, asphaltic concrete  | An-3              |
|          | Suever Stone Co., Inc.        | Suever Stone Co., Inc.       | Spencer   | Tymochtee Dolomite (Silurian)                        | crushed stone—road construction/resurfacing, asphaltic concrete, commercial building, extenders/fillers, aglime                                 | An-4              |
| Athens   | Waterloo Coal Co., Inc.       | Diamond Stone                | Lee       | Brush Creek limestone (Pennsylvanian)                | crushed stone—unspecified   | As-533            |
| Auglaize | Con-Ag, Inc.                  | Con-Ag, Inc.                 | Noble     | Cedarville Dolomite (Silurian)                       | crushed stone—riprap, road construction/resurfacing, asphaltic concrete   | Ae-31             |
|          | National Lime & Stone Co.     | Buckland Plant               | Moulton   | Silurian   | crushed stone—riprap, portland cement concrete, asphaltic concrete, aglime  | Ae-10             |
| Belmont  | Ayers Limestone Quarry, Inc.  | Ayers Limestone Quarry, Inc. | Pease     | Permian  | crushed stone—riprap, road construction/resurfacing   | Bt-716            |
|          | Sidwell Materials, Inc.       | Bellaire Stone               | Pultney   | Fishpot limestone (Pennsylvanian)                    | crushed stone—riprap, road construction/resurfacing   | Bt-1190           |
|          |                               | Uniontown Stone              | Wheeling  | Fishpot limestone (Pennsylvanian)                    | crushed stone—road construction/resurfacing   | Bt-N              |
| Brown    | Hanson Aggregates Davon, Inc. | Eagle Crushed Stone          | Eagle     | Brassfield Limestone (Silurian)                      | crushed stone—unspecified   | Bn-EC             |
| Clark    | Demmy Construction, Inc.      | Demmy Construction, Inc.     | Mad River |  | crushed stone—road construction/resurfacing   | Ck-501            |
| Clinton  | The Melvin Stone Co., LLC     | Melvin                       | Richland  | Cedarville Dolomite (Silurian)                       | crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, dimension stone, aglime | Cln-1             |
| Crawford | National Lime & Stone Co.     | Bucyrus Plant                | Holmes    | Columbus & Delaware Limestones (Devonian)            | crushed stone—riprap, portland cement concrete, flux, asphaltic concrete, extenders/fillers, aglime   | Cd-1              |
| Darke    | Martin Marietta Aggregates    | Fort Jefferson Limestone     | Butler    | Cedarville Dolomite (Silurian)                       | crushed stone—asphaltic concrete  | Dke-1             |
| Delaware | Martin Marietta Aggregates    | Delaware #332                | Scioto    | Columbus Limestone (Devonian)                        | crushed stone—road construction/resurfacing, asphaltic concrete   | Del-3             |

**2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County              | Name of operator                             | Name of mine or quarry                     | Township   | Geological unit   | Type and principal use | State mine number |
|---------------------|--|--|--|---|------------------------|-------------------|
| Delaware<br>(cont.) | Meredith Quarry #359                         | Radnor                                     | Columbus & Delaware Limestones (Devonian)  | crushed stone—commercial building   | Del-2                  |                   |
|                     | Shawnee #324                                 | Concord                                    | Columbus & Delaware Limestones (Devonian)  | crushed stone—riprap, road construction/<br>resurfacing   | Del-4                  |                   |
|                     | Delaware Plant                               | Scioto                                     | Columbus & Delaware Limestones (Devonian)  | crushed stone—riprap, portland cement<br>concrete, asphaltic concrete, aglime   | Del-5                  |                   |
|                     | Erie Blacktop Quarry                         | Margareta                                  |  | crushed stone—riprap, portland cement<br>concrete, road construction/resurfacing,<br>asphaltic concrete   | Ee-27                  |                   |
| Erie                | Hanson Aggregates Midwest, Inc.              | Groton                                     | Columbus & Delaware Limestones,<br>Detroit River Group (Devonian)                    | crushed stone—riprap, portland cement<br>concrete, road construction/resurfacing,<br>railroad ballast, asphaltic concrete,<br>commercial building | Ee-11                  |                   |
|                     | Kellstone, Inc.                              | Kelleys Island                             | Columbus Limestone &<br>upper Columbus & Delaware<br>Limestones (Devonian)           | crushed stone—unspecified   | Ee-K                   |                   |
|                     | Wagner Quarries Co.                          | Perkins                                    | Columbus Limestone (Devonian)  | crushed stone—road construction/<br>resurfacing   | Ee-1                   |                   |
|                     | Martin Marietta Aggregates                   | Franklin,<br>Jackson,<br>Marion<br>Norwich | Columbus Limestone #321  | crushed stone—riprap, portland cement<br>concrete, road construction/resurfacing,<br>asphaltic concrete, commercial building                      | Fn-53                  |                   |
| Franklin            | Marble Cliff #323                            | Brown                                      | Columbus Limestone (Devonian),<br>Salina Group (Silurian)<br>Salina Group (Silurian) | crushed stone—road construction/<br>resurfacing   | Fn-2                   |                   |
|                     | Hilliard Plant #1                            |  |  | crushed stone—road construction/<br>resurfacing, commercial building  | Fn-43                  |                   |
|                     | Olen Corp.                                   |  |  | crushed stone—unspecified   | Ge-17                  |                   |
|                     | Martin Marietta Aggregates<br>Southdown Inc. | Cedarville                                 | Cedarville Dolomite (Silurian)<br>upper Brassfield Limestone<br>(Silurian)           | crushed stone—commercial building,<br>portland cement manufacture   | Ge-9                   |                   |
| Greene              | Miller et al.                                | Beaver Creek<br>Bath                       | Brassfield Limestone(Silurian)   | crushed stone—portland cement<br>manufacture  | Ge-8                   |                   |
|                     | Bowersville                                  | Jefferson                                  | Cedarville Dolomite (Silurian)   | crushed stone—road construction/<br>resurfacing, asphaltic concrete,<br>commercial building   | Ge-M                   |                   |
|                     | The Quarry, LLC                              | Bath                                       | Brassfield Limestone (Silurian)  | crushed stone—road construction/<br>resurfacing   | Ge-Q                   |                   |
|                     | King Limestone, Inc.                         | Spencer                                    | Fishspot limestone (Pennsylvanian)   | crushed stone—road construction/<br>resurfacing, commercial building  | Gy-309                 |                   |
| Hancock             | Findlay Plant                                | Liberty                                    | Salina Group (Silurian)  | crushed stone—riprap, portland cement<br>concrete, asphaltic concrete   | Hk-7                   |                   |
|                     | C. E. Duff & Son, Inc.                       | Jackson                                    | Silurian   | crushed stone—riprap, portland cement<br>concrete, road construction/resurfacing,<br>commercial building  | Hdn-S                  |                   |

|           |   |                                     |                     |   |   |         |
|-----------|---|-------------------------------------|---------------------|---|---|---------|
|           | Shelly Materials, Inc.                                    | Hardin Quarry                       | Pleasant            | Tymochtee Dolomite (Silurian)                                   | crushed stone—riprap, portland cement concrete, road construction/resurfacing, commercial building, aglime                  | Hdn-2   |
| Highland  | Hanson Aggregates Davon, Inc.                             | Highland Stone                      | Hamer               | Brassfield & Dayton Limestones (Silurian)                       | crushed stone—unspecified   | Hd-2    |
|           | Marshall Quarry, Inc.                                     | Marshall Union                      | Marshall Union      | Brassfield Limestone (Silurian)                                 | crushed stone—unspecified   | Hd-4    |
|           | Martin Marietta Aggregates Ohio Asphaltic Limestone Corp. | St. Clair                           | Falls Gore          | Maxville Limestone (Mississippian)                              | crushed stone—unspecified   | Hd-M    |
| Hocking   | Maxville Quarries, Inc.                                   | Waterloo Coal Stone Plant-Zoar Mill | Madison             | Vanport limestone (Pennsylvanian)                               | crushed stone—unspecified   | Hd-3    |
| Jackson   | Waterloo Coal Co., Inc.                                   | Apex                                | Springfield         | Pittsburgh limestone (Pennsylvanian)                            | crushed stone—road construction/resurfacing   | Hg.M    |
| Jefferson | K.C.C.I.  | C. E. Duff & Son, Inc.              | Richland            | Silurian  | crushed stone—riprap, road construction/resurfacing, railroad ballast, commercial building, unspecified                     | Jkn-367 |
| Logan     | C. E. Duff & Son, Inc.                                    | East Liberty #326                   | Perry               | Columbus Limestone (Devonian)                                   | crushed stone—riprap, portland cement concrete, road construction/resurfacing, commercial building                          | Jfn-K   |
|           | Martin Marietta Aggregates                                | Belle Center Plant #8               | McArthur, Richland  | Tymochtee Dolomite (Silurian)                                   | crushed stone—road construction/resurfacing, asphaltic concrete, road construction/asphaltic concrete                       | Lgn-1   |
|           | Shelly Materials, Inc.                                    | Sylvania Quarry                     | Sylvania            | Detroit River Group & upper Dundee Limestone (Devonian)         | crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, unspecified | Lgn-2   |
| Lucas     | Barrett Paving Materials, Inc.                            | Waterville Quarry                   | Sylvania            | Detroit River & upper Dundee Limestone (Devonian)               | crushed stone—riprap, road construction/resurfacing, asphaltic concrete, commercial building                                | Ls-12   |
|           | Hanson Aggregates Midwest, Inc.                           | Seaway Sand & Stone, Inc.           | Waterville          | Bass Islands Group, Greenfield & Tymochtee Dolomites (Silurian) | crushed stone—unspecified   | Ls-3    |
|           | Stoneco, Inc.   | Maumee Quarry                       | Swanton             | Detroit River Group & upper Dundee Limestone (Devonian)         | crushed stone—unspecified   | Ls-1    |
| Mahoning  | East Fairfield Coal Co. ESSROC Cement Corp.               | Waynesfield                         | Waynesfield         | Waynesfield   | crushed stone—unspecified   | Ls-2    |
|           |   | Withers-Petersburg Bessemer Pit     | Springfield Poland  | Vanport limestone (Pennsylvanian)                               | crushed stone—portland cement manufacture   | Mg-631  |
|           |   | Carbon Pit                          | Poland, Springfield | Vanport limestone (Pennsylvanian)                               | crushed stone—portland cement manufacture   | Mg-608  |
|           | Honey Creek Stone Co.                                     | Petersburg                          | Petersburg          | Vanport limestone (Pennsylvanian)                               | crushed stone—road construction/resurfacing   | Mg-EM   |
|           | Lafarge North America                                     |                                     |                     | Vanport limestone (Pennsylvanian)                               | crushed stone—road construction/resurfacing   | Mg-54   |
|           |   |                                     |                     |   |   | Mg-L    |

**2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County     | Name of operator                | Name of mine or quarry                   | Township               | Geological unit   | Type and principal use   | State<br>mine<br>number |
|------------|---------------------------------|--|------------------------|---|--|-------------------------|
| Marion     | J. M. Hamilton & Sons Co., Inc. | J. M. Hamilton & Sons Co., Inc.          | Marion                 | Columbus & Delaware Limestones (Devonian)                     | crushed stone—road construction/<br>resurfacing  | Mn-2                    |
|            | National Lime & Stone Co.       | Marion Plant                             | Grand Prairie,         | Columbus & Delaware Limestones (Devonian)                     | crushed stone—riprap, portland cement<br>concrete, asphaltic concrete, aglime                                    | Mn-3                    |
|            | Shelly Materials, Inc.          | Tri-County Limestone Co.                 | Marion Grand           | Tymochtee Dolomite (Silurian)                                 | crushed stone—riprap, portland cement<br>concrete, asphaltic concrete  | Mn-1                    |
| Mercer     | Morrow Gravel Co.               | Rockford Quarry                          | Dublin                 | Lockport Dolomite (Silurian)                                  | crushed stone—unspecified  | Mr-2                    |
|            | Stoneco, Inc.                   | Celina Quarry                            | Jefferson              | Silurian  | crushed stone—unspecified  | Mr-1                    |
| Miami      | Barrett Paving Materials, Inc.  | Barrett Paving Materials Inc.            | Union                  | Brassfield Limestone (Silurian)                               | crushed stone—road construction/<br>resurfacing  | Mi-BPM                  |
|            | #139                            | Gregory Stone Inc.                       | Union                  | Cedarville Dolomite (Silurian)                                | crushed stone—riprap, portland cement<br>concrete, road construction/resurfacing,<br>asphaltic concrete, aglime  | Mi-502                  |
|            | C. F. Poepelman, Inc.           | C. F. Poepelman, Inc.                    | Newberry               | Brassfield Limestone, Dayton &<br>Laurel Dolomites (Silurian) | crushed stone—riprap, road construction/<br>resurfacing, flux, commercial building,<br>extenders/fillers, aglime | Mi-10                   |
| Piqua      | Piqua Minerals Division         | Piqua Minerals Division                  | Springeek,<br>Staunton | Cedarville Dolomite (Silurian)                                | crushed stone—riprap   | Me-C                    |
| Monroe     | Christman Quarry                | Christman Quarry                         | Franklin,<br>Seneca    | upper Brassfield Limestone<br>(Silurian)                      | crushed stone—riprap, road construction/<br>resurfacing, asphaltic concrete,<br>commercial building              | My-1                    |
| Montgomery | Martin Marietta Aggregates      | Phillipsburg Limestone #339              | Clay                   | Newton  | crushed stone—riprap, portland cement<br>concrete, railroad ballast, asphaltic concrete,<br>commercial building  | My-58                   |
|            | Southdown Inc.                  | G-Tract                                  | Wayne                  | Maxville Limestone (Mississippian)                            | crushed stone—dimension stone, portland<br>cement manufacture  |                         |
| Muskingum  | Chesterhill Stone Co.           | East Fultonham                           |                        | Fishpot limestone (Pennsylvanian)                             | crushed stone—riprap, portland cement<br>concrete, road construction/resurfacing,<br>commercial building         | Mum-106                 |
|            | King Limestone, Inc.            | King Limestone, Inc.                     | Rich Hill              | Maxville Limestone (Mississippian)                            | crushed stone—road construction/<br>resurfacing, commercial building   | Gy-309                  |
|            | Pleasant Valley Limestone       | Thompson Mining/Pleasant<br>Valley Stone | Hopewell               | Maxville Limestone (Mississippian)                            | crushed stone—unspecified  | Mum-907                 |
|            | Sidwell Materials, Inc.         | Dupler/Ford                              | Newton                 | Maxville Limestone (Mississippian)                            | crushed stone—riprap   | Mum-SB                  |
|            |                                 | White Cottage                            | Newton                 | Maxville Limestone (Mississippian)                            | crushed stone—road construction/<br>resurfacing  | Mum-104                 |
| Noble      | King Quarries, Inc.             | Olive<br>Noble,<br>Sharon                |                        | Fishpot limestone (Pennsylvanian)                             | crushed stone—riprap   | Ne-K1                   |
|            | Sharon Stone Co.                |  |                        |   | crushed stone—riprap, road construction/<br>resurfacing  | Ne-S                    |

|                            |   |                        |  |  |
|----------------------------|---|------------------------|--|--|
| Ottawa                     | Fox Stone Products, Inc.<br>GenLime Inc.                                | Put-In-Bay<br>Clay     | Lockport Dolomite (Silurian)                           | Oa-18<br>Oa-1 <sup>1</sup>                 |
| Lafarge North America      | Marblehead  | Danbury                | Columbus Limestone &<br>Detroit River Group (Devonian) | Oa-7                                       |
| Stansley Mineral Resources | Stansley Mineral Resources,<br>Genoa Plant                              | Clay                   | Lockport Dolomite (Silurian)                           | Oa-1A <sup>1</sup>                         |
| Stoneco, Inc.              | Rocky Ridge Quarry<br>White Rock Quarry                                 | Benton<br>Allen        | Silurian   | Oa-14<br>Oa-6                              |
| Paulding                   | Hanson Aggregates Midwest, Inc.   | Hanson Paulding Plant  | Tennille Creek Dolomite<br>(Devonian)                  | Pg-7 <sup>2</sup>                          |
|                            | Lafarge Corp.   | Paulding Quarry        | Dundee Limestone (Devonian)                            | Pg-1 <sup>2</sup>                          |
|                            | Stoneco, Inc.   | Auglaize Quarry        | Detroit River Group & Dundee<br>Limestone (Devonian)   | Pg-2                                       |
| Perry                      | Maxville Quarries, Inc.   | Downhour               | Monday Creek   | Py-23 <sup>5</sup>                         |
| Pickaway                   | The Melvin Stone Co., LLC   | Williamsport           | Perry  | Pky-4                                      |
| Pike                       | Latham Limestone, Inc.  | Latham Limestone, Inc. | Mifflin  | Columbus Limestone (Devonian)              |
| Preble                     | Wysong Stone Co.  | Wysong Stone Co.       | Twin   | Greenfield Dolomite (Silurian)             |
| Putnam                     | National Lime & Stone Co.   | Rimer Plant            | Sugar Creek<br>Pleasant,<br>Riley                      | Brassfield Limestone (Silurian)            |
|                            | Putnam Stone Co.  | Putnam Stone Co.       | Concord  | Greenfield Dolomite (Silurian)<br>Silurian |
| Ross                       | The Melvin Stone Co., LLC   | Plano Road             | Concord  | Salina Group (Silurian)                    |
| Sandusky                   | Martin Marietta Magnesia<br>Specialties, Inc.<br>Millersville Lime Inc. | Woodville Quarry       | Woodville  | Silurian                                   |
|                            |   | Millersville Plant     | Jackson  | Lockport Dolomite (Silurian)               |
|                            |   |                        |  | Sy-1<br>Sy-4                               |

<sup>1</sup>Graymont Dolime (OH), Inc., and Stansley Mineral Resources operate from the same mine.<sup>2</sup>Hanson Aggregates Midwest, Inc. and Lafarge Corp. operate from the same mine.

**2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County           | Name of operator                 | Name of mine or quarry           | Township                      | Geological unit  | Type and principal use  | State mine number |
|------------------|----------------------------------|----------------------------------|-------------------------------|--|---|-------------------|
| Sandusky (cont.) | Precision Aggregates III, LLC    | Precision Aggregates III, LLC    | Sandusky                      |  | crushed stone—portland cement concrete, commercial building   | Sy-5              |
| Seneca           | Carmeuse Ohio Inc.               | Maple Grove Works                | Liberty                       | Lockport Dolomite (Silurian)                                   | crushed stone—road construction/ resurfacing  | Sa-2              |
|                  | Hanson Aggregates Midwest, Inc.  | Bloomville Quarry                | Bloom                         | Columbus & Delaware Limestones, Detroit River Group (Devonian) | crushed stone—unspecified   | Sa-3              |
|                  | North Shore Stone Quarries, Inc. | Flat Rock Quarry                 | Thompson                      | Columbus & Delaware Limestones, Detroit River Group (Devonian) | crushed stone—unspecified   | Sa-1              |
|                  |                                  | North Shore Stone Quarries, Inc. | Thompson                      | Detroit River Group (Devonian)                                 | crushed stone—riprap, dimension stone   | Sa-8              |
| Shelby           | Barrett Paving Materials, Inc.   | River Quarry                     | Clinton                       |  | crushed stone—road construction/ resurfacing  | Shy-15            |
|                  | Miami River Stone Co.            | Miami River Stone Co.            | Orange                        |  | crushed stone—riprap, road construction/ resurfacing  | Shy-17            |
|                  |                                  | Rock Run                         | Washington                    |  | crushed stone—commercial building   | Shy-16            |
|                  |                                  | Staley Pit                       | Clinton, Salem                |  | crushed stone—commercial building   | Shy-SS            |
| Stark            | ENZ, Inc.                        | Sickafoose Pit                   | Pike, Sandy                   |  | crushed stone—riprap, road construction/ resurfacing  | Sk-208            |
| Tuscarawas       | Belden Brick Co.                 | Belden Pit                       | Sugar Creek                   | Vanport limestone (Pennsylvanian)                              | crushed stone—riprap  | Ts-1646           |
|                  |                                  | Moonaw Pit                       | Sugar Creek                   | Vanport limestone (Pennsylvanian)                              | crushed stone—riprap  | Ts-1517           |
|                  |                                  | Wallick Pit                      | Franklin, Wayne               | Pennsylvanian  | crushed stone—riprap  | Ts-1841           |
|                  | Kimble Clay & Limestone Co.      | Kimble Clay & Limestone Co.      | Dover                         | Putnam Hill & Vanport limestones (Pennsylvanian)               | crushed stone—riprap, road construction/ resurfacing  | Ts-1818           |
|                  | Sidco Development, Inc.          | Midvale Sand & Gravel            | Goshen                        | Columbus Limestone (Devonian)                                  | crushed stone—asphaltic concrete  | Ts-S2             |
| Union            | Shelly Materials, Inc.           | Ostrander Plant #10              | Mill Creek                    |  | crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, unspecified | Un-2              |
|                  |                                  | York Center #11                  | York                          |  | crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, unspecified | Un-1              |
|                  | Ridge Township Quarry            | Ridge                            | Tymochtee Dolomite (Silurian) |  | crushed stone—unspecified   | Vt-7              |
|                  | Stoneco, Inc.                    | Union                            | Tymochtee Dolomite (Silurian) |  | crushed stone—unspecified   | Vt-3              |
|                  | Suever Stone Co., Inc.           | Washington                       |                               |  | crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building              | Vt-1              |
| Vinton           | Quality Stone Co.                | Route 32                         | Clinton                       |  | crushed stone—unspecified   | Vn-193            |

|         |                            |                   |   |  |
|---------|----------------------------|-------------------|---|--|
| Wood    | Custar Stone Co.           | Milton            | crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, unspecified, aglime          | Wd-5   |
|         | MacRitchie Materials, Inc. | Perry             | Lockport Dolomite & Salina Group (Silurian)   | Wd-1   |
|         | Precision Aggregate, Inc.  | Portage           | crushed stone—Portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, dimension stone | Wd-14  |
|         | Stoneco, Inc.              | Perryburg Portage | crushed stone—unspecified<br>crushed stone—unspecified  | Wd-6<br>Wd-11  |
| Wyandot | National Lime & Stone Co.  | Crawford          | Greenfield & Lockport Dolomites (Silurian)  | Wt-1   |
|         | Olen Corp.                 | Pitt              | Lockport Dolomite (Silurian)  | crushed stone—riprap, portland cement concrete, railroad ballast, flux, asphaltic concrete; lime (burned stone)—chemical and industrial  |
|         | McCarthy Quarry            | Crawford          | Bass Islands Group (Silurian)   | crushed stone—Portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building                           |
|         | Wyandot Dolomite, Inc.     |                   | Greenfield & Lockport Dolomites (Silurian)  | crushed stone—riprap, portland cement concrete, road construction/resurfacing, railroad ballast, asphaltic concrete, commercial building |
|         |                            |                   |   | Wt-3<br>Wt-8   |

## 2001 SAND AND GRAVEL COMPANIES WITH SALES OR PRODUCTION

| Company                               | No. of operations | Sales (tons) | Production (tons) | Company                                  | No. of operations | Sales (tons) | Production (tons) |
|---------------------------------------|-------------------|--------------|-------------------|--|-------------------|--------------|-------------------|
| ATS Enterprises                       | 1                 | 335,995      | 343,140           | Erie Materials, Inc.                     | 1                 | 865          | 0                 |
| Agg Rok Materials                     | 1                 | 914,571      | 901,215           | Erie Sand & Gravel Co.                   | 1                 | 8,250        | 8,250             |
| William Albert, Inc.                  | 2                 | 39,907       | 41,917            | Feikert Sand & Gravel, Inc.              | 1                 | 96,207       | 96,207            |
| Alden Sand & Gravel Co.               | 1                 | 20,563       | 20,563            | Fenner Sand & Gravel, Inc.               | 1                 | 104,000      | 104,000           |
| Allgeier & Son, Inc.                  | 2                 | 220,000      | 220,000           | Fleming Construction Co., Inc.           | 2                 | 36,369       | 36,369            |
| American Excavating, Inc.             | 1                 | 2,645        | 31,000            | Flesher Sand & Gravel, Inc.              | 1                 | 764          | 764               |
| American Sand & Gravel, Inc.          | 2                 | 1,305,597    | 1,305,597         | Fouremann's Sand & Gravel, Inc.          | 1                 | 101,860      | 160,500           |
| Apache Aggregate & Paving Co.         | 1                 | 119,923      | 135,429           | Frye Sand & Gravel, Inc.                 | 2                 | 3,244        | 3,244             |
| Ashcraft Sand & Gravel, Inc.          | 1                 | 11,544       | 11,544            | GANS Ltd.                                | 1                 | 5,839        | 2,000             |
| Atlas Towing Co.                      | 1                 | 14,022       | 14,022            | Ganges Gravel Co.                        | 1                 | 35,844       | 41,094            |
| B & L Sand Co.                        | 1                 | 2,459        | 2,459             | John L. Garber Materials, Inc.           | 1                 | 227,162      | 235,000           |
| Baisden Sand & Gravel                 | 1                 | 138,008      | 160,008           | Gibson Sand & Gravel Co.                 | 1                 | 648          | 648               |
| Baker Sand, Inc.                      | 1                 | 644,998      | 644,998           | Gillum Bros. Excavating                  | 1                 | 5,000        | 5,000             |
| Ballentine Excavation Co.             | 1                 | 31,895       | 31,895            | Golsch Construction, Inc.                | 1                 | 4,500        | 5,000             |
| Barrett Paving Materials, Inc.        | 5                 | 1,350,725    | 1,632,724         | Joyce A. Good                            | 1                 | 2,911        | 2,911             |
| Bartley & Bolin Excavating            | 2                 | 210,098      | 210,098           | Grimes Excavating                        | 1                 | 162,930      | 162,930           |
| Beck Sand & Gravel, Inc.              | 1                 | 189,992      | 189,992           | Hanson Aggregates Davon, Inc.            | 2                 | 733,391      | 745,553           |
| Paul D. Beery Trucking Co.            | 1                 | 6,572        | 0                 | Norman Harpster                          | 1                 | 100          | 100               |
| Blue Stone Sand & Gravel, Inc.        | 1                 | 128,171      | 24,000            | Harrison Sand & Gravel Co.               | 1                 | 11,861       | 11,861            |
| D. H. Bowman & Sons, Inc.             | 1                 | 52,969       | 68,100            | Hartley Gravel                           | 1                 | 9,300        | 9,300             |
| Boyas Excavating, Inc.                | 1                 | 22,000       | 22,000            | Harvest Sand & Gravel, Inc.              | 1                 | 51,514       | 56,666            |
| Boyd Excavating                       | 1                 | 9,876        | 9,876             | Haubeil & Sons Asphalt & Materials, Inc. | 1                 | 92,225       | 92,225            |
| Briggs Sand & Gravel, Inc.            | 1                 | 5,483        | 5,483             | Haueter Sand & Gravel, Inc.              | 2                 | 191,023      | 191,023           |
| Broshear Contractors, Inc.            | 1                 | 87,255       | 87,255            | Heiser Sand & Gravel Corp.               | 1                 | 32,325       | 32,325            |
| Oscar Brugmann Sand & Gravel, Inc.    | 1                 | 509,030      | 552,000           | Hilltop Aggregate, Inc.                  | 1                 | 227,788      | 227,788           |
| Buckeye Excavating Development, Inc.  | 1                 | 11,664       | 11,664            | Hilltop Basic Resources, Inc.            | 2                 | 1,113,499    | 1,277,560         |
| James Bunnell, Inc.                   | 2                 | 1,020,724    | 1,020,724         | Hocking Valley Concrete, Inc.            | 1                 | 78,000       | 85,000            |
| Burlington Sand & Gravel Co.          | 1                 | 1,224        | 1,224             | Hollinger Excavating                     | 1                 | 65           | 65                |
| C.I.R., Inc.                          | 1                 | 1,471        | 1,471             | William A. Hoffman, Jr.                  | 1                 | 1,452        | 1,452             |
| Joe E. Carter                         | 1                 | 500          | 500               | Holmes Supply Corp.                      | 1                 | 244,477      | 244,477           |
| Carter & Carter, Inc.                 | 1                 | 4,816        | 6,000             | Hugo Sand Co.                            | 1                 | 215,609      | 215,609           |
| Central-Allied Enterprises, Inc.      | 4                 | 1,276,150    | 1,276,150         | George J. Igel & Co., Inc.               | 1                 | 800          | 800               |
| Chesterhill Stone Co.                 | 3                 | 615,946      | 653,036           | Inland South Aggregates                  | 1                 | 9,505        | 12,780            |
| Chesterville Sand & Gravel Co., Inc.  | 1                 | 245,438      | 245,539           | JALIP, LTD.                              | 1                 | 2,261        | 2,261             |
| Clemson Excavating, Inc.              | 1                 | 31,726       | 31,726            | JBM Ltd.                                 | 1                 | 88,103       | 88,103            |
| M. J. Coates Construction Co., Inc.   | 2                 | 147,726      | 147,726           | JP Sand & Gravel Co.                     | 1                 | 441,751      | 441,751           |
| Cochran Transportation Services, Inc. | 1                 | 28,506       | 28,506            | Jaclib Enterprises, Inc.                 | 1                 | 3,705        | 3,705             |
| Bill D. Colwell                       | 1                 | 24,000       | 24,000            | Janson & Sons Corp.                      | 1                 | 101,748      | 101,748           |
| Donald A. Coy                         | 1                 | 9,995        | 9,995             | Jarrett Sand Co.                         | 1                 | 1,008        | 1,008             |
| Craigton Shale Co.                    | 1                 | 106,612      | 106,612           | Jaymar, Inc.                             | 1                 | 567,256      | 567,256           |
| Crosby Gravel, Inc.                   | 1                 | 34,372       | 34,372            | Jefferson Materials Co.                  | 1                 | 396,055      | 396,055           |
| R. A. Cruise Sand & Gravel, Inc.      | 1                 | 43,865       | 43,865            | Joseph Sand & Gravel, Inc.               | 1                 | 20,202       | 20,202            |
| D & K Materials, Inc.                 | 1                 | 39,752       | 39,752            | Kilbarger Construction, Inc.             | 1                 | 21,975       | 21,975            |
| D.G.M., Inc.                          | 1                 | 48,085       | 48,085            | Kinsman Materials, LTD.                  | 1                 | 87,172       | 87,172            |
| Darby Creek Excavating, Inc.          | 1                 | 108,480      | 108,480           | Kipp's Gravel Co., Inc.                  | 1                 | 72,648       | 72,648            |
| Demmy Construction, Inc.              | 1                 | 13,659       | 13,659            | Kirby's Sand & Gravel, Inc.              | 1                 | 92,990       | 92,990            |
| Demmy Sand & Gravel                   | 1                 | 6,956        | 6,956             | T & K Kuhnle Co.                         | 1                 | 103,097      | 103,097           |
| Dingledine Basic Materials, Inc.      | 1                 | 94,176       | 65,462            | L & I Natural Resources, Inc.            | 1                 | 91,941       | 91,941            |
| James E. Downard                      | 1                 | 8,041        | 8,041             | L & M Mineral Co.                        | 1                 | 3,820        | 3,820             |
| Dravo Lime, Inc.                      | 2                 | 0            | 1,750             | LUB, Inc.                                | 1                 | 25,000       | 30,500            |
| C. E. Duff & Son, Inc.                | 2                 | 7,908        | 7,908             | Lafarge North America                    | 1                 | 739,054      | 637,731           |
| Eagle Material Supply Ltd.            | 1                 | 235,882      | 255,000           | Lakeside Sand & Gravel Co.               | 1                 | 437,481      | 437,481           |
| David E. Edgington                    | 1                 | 35,151       | 35,151            | Lancaster Limestone                      | 1                 | 1,300        | 1,300             |
| Enon Washed Sand & Gravel Co.         | 1                 | 312,480      | 357,870           | Link Trucking Co., Inc.                  | 1                 | 22,887       | 22,887            |
| Erie Blacktop, Inc.                   | 1                 | 56           | 0                 | Little Miami Sand & Gravel               | 2                 | 0            | 3,105             |

## 2001 SAND AND GRAVEL COMPANIES WITH SALES OR PRODUCTION (cont.)

| Company                                    | No. of operations | Sales (tons) | Production (tons) | Company                              | No. of operations | Sales (tons) | Production (tons) |
|--|-------------------|--------------|-------------------|--------------------------------------|-------------------|--------------|-------------------|
| Loxley Aggregates, Inc.                    | 1                 | 2,495        | 2,495             | Guy Schieve                          | 1                 | 9,100        | 9,100             |
| Lucky Sand & Gravel Co.                    | 1                 | 73,198       | 73,198            | Schloss Materials Co.                | 1                 | 186,892      | 186,892           |
| Al Mackey Enterprises, Inc.                | 2                 | 1,434        | 1,434             | Mark E. Scott                        | 1                 | 30,000       | 30,000            |
| Martin Marietta Aggregates                 | 17                | 10,786,152   | 9,708,479         | Seaway Sand & Stone, Inc.            | 1                 | 52,658       | 52,658            |
| R.J. Martin Service & Excavating           | 1                 | 906          | 906               | Seville Sand & Gravel, Inc.          | 1                 | 193,615      | 193,615           |
| Mason's Sand & Gravel Co./ George C. Smith | 1                 | 140,886      | 140,886           | Shady Bend Sand & Gravel             | 1                 | 155,302      | 155,302           |
| Massillon Materials, Inc.                  | 3                 | 689,456      | 689,456           | Shamrock Materials, Inc.             | 1                 | 613,469      | 616,758           |
| Mathews Sand & Gravel                      | 1                 | 720          | 720               | Sharon Stone Co.                     | 1                 | 40,402       | 50,000            |
| Mecco, Inc.                                | 1                 | 225,677      | 237,000           | Shelly Materials, Inc.               | 6                 | 2,275,814    | 2,275,814         |
| Mechanicsburg Sand & Gravel, Inc.          | 1                 | 192,622      | 192,622           | Sidco Development, Inc.              | 1                 | 289,488      | 309,229           |
| Meigs County Commissioners                 | 1                 | 17,221       | 15,441            | R. W. Sidley, Inc.                   | 2                 | 150,000      | 160,000           |
| The Melvin Stone Co., LLC                  | 1                 | 307,760      | 265,858           | Joe Simak & Sons Trucking, Inc.      | 3                 | 50,321       | 50,321            |
| Menuz Bros. Sand & Gravel, Inc.            | 1                 | 187,356      | 189,000           | Small's Sand & Gravel, Inc.          | 4                 | 353,585      | 353,585           |
| Miami River Stone Co.                      | 2                 | 149,036      | 189,563           | Sober Sand & Gravel Co.              | 1                 | 30,566       | 30,566            |
| Miami View Mining Co., Ltd.                | 1                 | 555,821      | 555,821           | Soehnlen Bros. Sand & Gravel, Inc.   | 1                 | 133,365      | 133,365           |
| Miller Bros. Gravel, Inc.                  | 1                 | 365,901      | 334,506           | Solomon's Mines, Inc.                | 1                 | 118,783      | 118,783           |
| Miller Sand & Gravel, Inc.                 | 1                 | 1,121        | 1,121             | Solon Excavators Sand & Gravel, Inc. | 3                 | 193,489      | 187,268           |
| Mills Rock, Sand, & Soil, Inc.             | 1                 | 30,611       | 30,611            | Soltis Sand & Gravel                 | 1                 | 5,057        | 5,057             |
| Moore's Excavating Co.                     | 3                 | 33,333       | 17,735            | South Central Sand & Gravel          | 1                 | 28,934       | 28,934            |
| Moraine Materials Co., Inc.                | 2                 | 582,919      | 582,919           | Southern Ohio Aggregates, Inc.       | 1                 | 20,526       | 20,526            |
| Morrow Gravel Co.                          | 2                 | 227,251      | 227,251           | Spring Creek Corp.                   | 1                 | 455,000      | 529,000           |
| Muskingum River Gravel Co.                 | 5                 | 843,442      | 873,367           | Spring Run Gravel                    | 1                 | 13,396       | 13,396            |
| National Aggregates, Inc.                  | 1                 | 446,184      | 446,184           | Stewart & Reichman, Inc.             | 1                 | 75,101       | 75,101            |
| National Lime & Stone Co.                  | 2                 | 407,000      | 407,000           | Stocker Sand & Gravel Co.            | 2                 | 1,099,368    | 1,099,368         |
| Neer's Sand & Gravel                       | 1                 | 153,012      | 176,448           | Stoneco, Inc.                        | 1                 | 15,410       | 15,410            |
| Nelson Sand & Gravel, Inc.                 | 1                 | 87,500       | 87,500            | Tackett Builders                     | 1                 | 328          | 328               |
| New Carlisle Sand & Gravel Co.             | 1                 | 640          | 640               | Teague Gravel Co., Inc.              | 1                 | 45,695       | 45,695            |
| Newton Asphalt Paving, Inc.                | 1                 | 148,994      | 148,994           | Thiel Construction Co.               | 1                 | 2,494        | 2,494             |
| Nick's Trucking                            | 1                 | 3,500        | 3,500             | Thomas Sand & Gravel                 | 1                 | 140          | 680               |
| Andy Nixon Contractors, Inc.               | 1                 | 88,384       | 88,384            | Tipp Stone Co., Inc.                 | 2                 | 122,089      | 122,089           |
| Northern Ohio Paving Co.                   | 1                 | 587,710      | 587,710           | Trout Sand & Gravel Co.              | 1                 | 18,685       | 35,472            |
| Northwest Ohio Property Developments, Ltd. | 1                 | 13,268       | 13,268            | Tuffco Sand & Gravel, Inc.           | 1                 | 187,229      | 187,500           |
| Carl E Oeder & Sons Sand & Gravel          | 1                 | 423,102      | 423,102           | Twinsburg Development Corp.          | 1                 | 215,148      | 265,541           |
| Olen Corp.                                 | 4                 | 3,074,213    | 3,498,024         | U.S. Aggregates, Inc.                | 1                 | 52,500       | 0                 |
| Oneida Sand & Gravel, Inc.                 | 1                 | 104,440      | 104,440           | United Aggregates, Inc.              | 1                 | 223,905      | 168,707           |
| Osborne Materials Co.                      | 1                 | 169,762      | 169,762           | Valley Materials Co.                 | 2                 | 79,970       | 42,913            |
| Oster Sand & Gravel, Inc.                  | 3                 | 966,036      | 966,036           | Van Wey Sand & Gravel, Inc.          | 1                 | 839,580      | 860,000           |
| Ours Sand & Gravel                         | 1                 | 4,789        | 4,789             | Walcottville Sand & Gravel Corp.     | 1                 | 107,173      | 128,156           |
| Phillips Sand & Gravel                     | 1                 | 361,204      | 361,204           | Walhonding Sand & Gravel             | 1                 | 1,627        | 1,627             |
| Power Development Corp.                    | 1                 | 1,430        | 1,430             | Wallace Road Sand & Gravel           | 1                 | 1,380        | 1,380             |
| Prairie Lane Sand & Gravel Co.             | 1                 | 211,707      | 209,842           | Carl Walter                          | 1                 | 2,600        | 2,600             |
| Precision Aggregate, Inc.                  | 2                 | 121,730      | 121,730           | Ward Materials, Inc.                 | 1                 | 33,482       | 36,232            |
| Precision Aggregates III, LLC              | 1                 | 43,800       | 43,800            | Waterloo Coal Co., Inc.              | 1                 | 7,494        | 7,494             |
| Quality Ready Mix, Inc.                    | 1                 | 32,603       | 32,603            | Watson Gravel, Inc.                  | 4                 | 2,176,427    | 2,176,427         |
| Gary Roberts Excavating                    | 1                 | 2,150        | 2,150             | Weber Sand & Gravel, Inc.            | 1                 | 234,552      | 234,552           |
| R. L., Ltd.                                | 1                 | 2,867        | 2,867             | Welch Sand & Gravel, Inc.            | 3                 | 1,192,322    | 1,192,322         |
| Rainbow Sand & Gravel, Inc.                | 1                 | 119,971      | 119,971           | Gene T. Wilson                       | 1                 | 928          | 928               |
| Red Brush Peat Co.                         | 1                 | 47           | 47                | Joann O. Weddle                      | 1                 | 29,487       | 29,487            |
| Riverside Sand & Gravel Co., Inc.          | 1                 | 20,298       | 20,298            | Willowbrook Sand & Gravel            | 1                 | 34,911       | 34,911            |
| Rockwell Sand & Gravel, Inc.               | 1                 | 257,604      | 257,604           | Wysong Gravel Co.                    | 2                 | 337,113      | 337,113           |
| Roy M. Roush                               | 1                 | 927          | 1,000             | X L Sand & Gravel                    | 1                 | 58,197       | 58,197            |
| Rupp Construction, Inc.                    | 1                 | 249,456      | 249,456           | Young's Sand & Gravel Co.            | 3                 | 1,558,781    | 1,558,781         |
| S & S Aggregate, Inc.                      | 3                 | 611,006      | 658,943           | Zollinger Sand & Gravel Co.          | 1                 | 82,996       | 82,996            |
| Samco, Inc.                                | 1                 | 271,445      | 271,445           | TOTAL: 218 companies                 | 302               | 56,829,272   | 56,848,867        |
| Sandman Trucking, Inc.                     | 1                 | 169,861      | 169,861           |                                      |                   |              |                   |

**2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY***For those mines for which a state mine number has not been assigned, a letter designation is used (example: Ald-G).*

| County    | Name of operator  | Name of pit   | Township  | Type and principal use  | State mine number   |
|-----------|---|---|---|---|---|
| Allen     | Ward Materials, Inc.  | Ward Materials, Inc.  | Monroe  | sand—portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified<br>gravel—building, unspecified   | An-W  |
| Ashland   | Bartley & Bolin Excavating<br><br>Joyce A. Good<br><br>Young's Sand & Gravel Co.  | Bartley & Bolin, Inc. Plant #2<br><br>Joyce A. Good<br><br>Young's Sand Gravel Co.<br><br>Ayers<br><br>Chuck Spreng   | Mohican<br><br>Jackson<br><br>Green<br><br>Green  | gravel—building, bank run<br>sand—road construction/resurfacing<br>gravel—road construction/resurfacing<br>sand—building, road construction/resurfacing, unspecified<br>gravel—building, road construction/resurfacing, unspecified<br>sand—building, road construction/resurfacing, unspecified<br>gravel—building, asphaltic concrete, unspecified<br>sand—building, road construction/resurfacing, unspecified<br>gravel—building, road construction/resurfacing, unspecified                        | Ald-9<br>Ald-G<br>Ald-7<br>Ald-15<br>Ald-Y  |
| Ashtabula | Clemson Excavating, Inc.<br><br>Frye Sand & Gravel, Inc.<br><br>Kinsman Materials, LTD.<br><br>Mathews Sand & Gravel<br><br>Nelson Sand & Gravel, Inc.<br><br>R. W. Sidley, Inc.<br><br>Joe Simak & Sons Trucking, Inc. | Clemson<br><br>Frye Sand & Gravel, Inc.<br>Frye Sand & Gravel, Inc.<br>Kinsman Materials, LTD.<br>Mathews Sand & Gravel<br>Nelson Sand & Gravel, Inc.<br>Sidley-Kingsville Pit<br><br>Amboy Pit<br>Basen Pit<br><br>North Ridge Pit | Hartsgrove<br><br>Denmark<br>Monroe<br>Wayne<br><br>North Kingsville<br><br>Kingsville<br>Kingsville<br>Kingsville<br><br>Dover | sand—fill<br>gravel—filtration, decorative, fill<br>gravel—bank run<br>gravel—bank run<br>sand—building<br>gravel—building<br>sand—unspecified<br>gravel—unspecified<br>sand—building<br>gravel—building<br>sand—building, portland cement concrete<br>gravel—building<br>sand—building, asphaltic concrete, fill<br>gravel—filtration<br>sand—building, fill, ice control<br>gravel—building, filtration<br>sand—unspecified<br>gravel—unspecified<br>sand—portland cement concrete<br>gravel—building | Asa-C<br>Asa-10<br>Asa-F<br>Asa-20<br>Asa-M<br>Asa-N1<br>Asa-15<br>Asa-ST<br>Asa-ST1<br>Asa-18<br>As-595<br>As-W<br>Ae-23<br>Ae-30<br>Ae-16 |
| Athens    | Cochran Transportation Services, Inc.<br><br>Olen Corp.   | Circle Hill Sand & Gravel, Inc.<br><br>Stewart Plant #4<br><br>Joseph Sand & Gravel, Inc.<br><br>Wapakoneta Plant<br><br>Quality Ready Mix, Inc.  | Rome<br><br>Union<br>Union<br>Pusheta   | sand—fill<br>gravel—filtration, fill<br>sand—portland cement concrete, fill<br>gravel—fill<br>sand—building, portland cement concrete<br>gravel—building, portland cement concrete  |   |
| Auglaize  |   |   |   |   |   |

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SAND & GRAVEL OPERATORS DIRECTORIES

113

|           |                                   |                   |                 |   |        |
|-----------|-----------------------------------|-------------------|-----------------|---|--------|
| Butler    | Broshear Contractors, Inc.        | Green Heron       | Ross            | sand—pipe bedding<br>gravel—road construction/resurfacing<br>gravel—pipe bedding<br>sand—fill | Br-B   |
|           | Bill D. Colwell                   | St. Clair         | St. Clair       | gravel—unspecified  | Br-36  |
|           | Dingledine Basic Materials, Inc.  | Milford           | Fairfield, Ross | sand—unspecified  | Br-50  |
|           | Martin Marietta Aggregates        | St. Clair         | Fairfield, Ross | gravel—unspecified  | Br-35  |
|           | Hamilton                          | Fairfield, Ross   | Fairfield       | sand—unspecified  | Br-5   |
|           | Ross Sand & Gravel                | Lemon             | Portland        | sand—unspecified  | Br-29  |
|           | Mecco, Inc.                       |                   | Cement          | sand—building, portland cement concrete, asphaltic  | Br-15  |
|           | Moraine Materials Co., Inc.       | Madison           | Concrete        | concrete, portland cement concrete, asphaltic   | Br-6   |
|           | Shamrock                          | Madison           | Building        | gravel—building, portland cement concrete, asphaltic  | Br-52  |
|           | Watson Gravel, Inc.               | Fairfield         | Construction    | concrete, road construction/resurfacing   | Br-57  |
| Carroll   | Moraine Materials Co., Inc.       | Fairfield         | Resurfacing     | sand—unspecified  | Br-47  |
|           | Shamrock Materials, Inc.          | Fairfield         | Concrete        | gravel—unspecified  | Br-38  |
|           | River Pit                         | Fairfield         | Fill            | sand—unspecified  | Br-38  |
|           | Watson Pit                        | Fairfield         | Construction    | gravel—building, asphaltic concrete, road construction/                                       | Br-47  |
|           |                                   | Fairfield         | Resurfacing     | resurfacing   | Br-47  |
|           | Schlichter Pit                    | Fairfield         | Concrete        | sand—building, asphaltic concrete, road construction/   | Br-47  |
|           | Welch Sand & Gravel, Inc.         | Brown             | Fill            | concrete, fill  | Br-47  |
|           | Oneida Sand & Gravel, Inc.        | Brown             | Construction    | gravel—building, road construction/resurfacing  | Br-47  |
|           | Power Development Corp.           | Union             | Resurfacing     | sand—building   | Br-47  |
|           | Mechanicsburg Sand & Gravel, Inc. | Salem             | Concrete        | sand—construction/resurfacing   | Br-47  |
| Champaign | Moore's Excavating Co.            | Salem, Wayne      | Building        | gravel—construction/resurfacing   | Br-47  |
|           | Moore's Excavating Co.            | Urbana            | Construction    | sand—construction/resurfacing   | Br-47  |
|           | Morrow Gravel Co.                 | Bethel            | Resurfacing     | gravel—construction/resurfacing   | Br-47  |
|           | American Excavating, Inc.         | German            | Concrete        | sand—portland cement concrete   | Br-47  |
|           | Baisden                           | Mad River         | Building        | gravel—building, portland cement concrete, asphaltic  | Br-47  |
|           | Barrett Paving Materials Inc.     | Mad River         | Concrete        | concrete  | Br-47  |
|           | Demmy Construction, Inc.          | Mad River         | Filtration      | sand—unspecified  | Br-47  |
|           | Demmy Sand & Gravel               | Mad River         | Building        | sand—building   | Br-47  |
|           | Enon Washed Sand & Gravel Co.     | Bethel, Mad River | Concrete        | gravel—portland cement concrete, asphaltic concrete,  | Br-47  |
|           |                                   |                   | Unspecified     | unspecified   | Br-47  |
| Clark     |                                   |                   |                 |   | Ck-A   |
|           |                                   |                   |                 |   | Ck-B   |
|           |                                   |                   |                 |   | Ck-28  |
|           |                                   |                   |                 |   | Ck-501 |
|           |                                   |                   |                 |   | Ck-502 |
|           |                                   |                   |                 |   | Ck-3   |
|           |                                   |                   |                 |   |        |
|           |                                   |                   |                 |   |        |
|           |                                   |                   |                 |   |        |
|           |                                   |                   |                 |   |        |

**2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County           | Name of operator               | Name of pit                        | Township           | Type and principal use   | State mine number |
|------------------|--------------------------------|------------------------------------|--------------------|--|-------------------|
| Clark<br>(cont.) | Martin Marietta Aggregates     | Fairborn Gravel                    | Bethel             | sand—unspecified   | Ck-13             |
|                  | Moore's Excavating Co.         | Moorefield                         |                    | gravel—unspecified   | Ck-29             |
|                  | Shelly Materials, Inc.         | Springfield Plant #3               | Springfield        | sand—building  | Ck-25             |
| Clermont         | Barrett Paving Materials, Inc. | Barrett Paving Materials-Perintown | Union              | gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration | Ct-9              |
|                  | Dravo Lime, Inc.               | Jones Pit                          | Washington         | sand—unspecified   | Ct-11             |
|                  | Kipp's Gravel Co., Inc.        | Kipp's Gravel Co., Inc.            | Stonelick          | gravel—reclamation sand—unspecified  | Ct-7              |
| Columbiana       | Hartley Gravel                 | Hartley Gravel                     | Knox               | gravel—unspecified   | Ca-H1             |
|                  | Harvest Sand & Gravel, Inc.    | Harvest Sand & Gravel, Inc.        | Salem              | sand—pipe bedding  | Ca-H              |
|                  | Inland South Aggregates        | Inland South Aggregates            | Middleton          | gravel—pipe bedding  | Ca-351            |
|                  | Solomon's Mines, Inc.          | Solomon's Mines, Inc.              | Salem              | gravel—road construction/resurfacing   | Ca-S              |
|                  | Carl Walter                    | Carl Walter                        | West               | gravel—road construction/resurfacing   | Ca-W              |
|                  | Willowbrook Sand & Gravel      | Willowbrook Sand & Gravel          | Elk Run            | gravel—road construction/resurfacing, fill   | Ca-993            |
|                  | X L Sand & Gravel              | X L Sand & Gravel                  | Middleton          | gravel—bank run  | Ca-81             |
| Coshocton        | William Albert, Inc.           | William Albert, Inc.               | Franklin Lafayette | gravel—bank run  | Cn-828            |
|                  |                                | William Albert, Inc.               |                    | sand—unspecified   | Cn-WA             |
|                  | Apache Aggregate & Paving Co.  | Apache Aggregate & Paving Co.      | Jackson            | gravel—building, road construction/resurfacing, fill, unspecified  | Cn-718            |
|                  | Shady Bend Sand & Gravel       | Shady Bend Sand and Gravel         | Oxford             | gravel—building, road construction/resurfacing, filtration   | Cn-624            |
|                  | Shelly Materials, Inc.         | Coshocton Plant #5                 | Bethlehem          | sand—portland cement concrete, asphaltic concrete, road construction/resurfacing   | Cn-694            |
|                  | Walhonding Sand & Gravel       | Walhonding Valley Sand & Gravel    | New Castle         | gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration   | Cn-WL             |
| Crawford         | Gibson Sand & Gravel Co.       | Gibson Sand & Gravel Co.           | Jefferson          | gravel—building  | Cd-G              |

**SAND & GRAVEL OPERATORS DIRECTORIES**

115

|                                      |  |   |                                |   |                           |
|--------------------------------------|--|---|--------------------------------|---|---------------------------|
| Cuyahoga                             | Boyas Excavating, Inc.   | Boyas Excavating, Inc.  | Independence                   | sand—fill   | Cya-42                    |
| Darke                                | Foureman's Sand & Gravel, Inc.   | Foureman's Sand & Gravel, Inc.  | Greenville                     | sand—unspecified<br>gravel—unspecified<br>gravel—farm ballast   | Dke-4<br>Dke-10<br>Ee-18  |
| Hollinger Excavating                 | Hollinger Gravel   | Harrison  | Groton,<br>Margareta<br>Groton | gravel—road construction/resurfacing<br>sand—landscaping  | Ee-29                     |
| Erie                                 | Borchardt  | Rush Creek  | Rush Creek                     | sand—backfill<br>sand—unspecified   | Fd-16<br>Fd-14            |
| Jarrett Sand Co.                     | Jarrett Sand Co.   | Berne   | Berne                          | gravel—unspecified<br>sand—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, fill, unspecified<br>gravel—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, filtration | Fd-13                     |
| Fairfield                            | James E. Downard<br>Paul D. Beery Trucking Co.   | Downard Pit<br>Paul D. Beery Trucking Co.   | Berne                          | sand—building, portland cement concrete, asphaltic<br>concrete<br>gravel—building, asphaltic concrete, road construction/<br>resurfacing  | Fn-36                     |
| Shelly Materials, Inc.               | Lancaster Plant #14  | Franklin  | Hamilton                       | sand—unspecified<br>gravel—unspecified<br>sand—portland cement concrete, asphaltic concrete,<br>construction  | Fn-52                     |
| Franklin                             | Agg Rok Materials  | JP Sand & Gravel Co.  | Marion                         | gravel—asphaltic concrete, construction<br>sand—building  | Fn-6                      |
|                                      |  | Columbus #319   | Hamilton                       | sand—portland cement concrete, asphaltic concrete,<br>construction  | Fn-23                     |
|                                      |  | Lockbourne #213   | Hamilton                       | gravel—asphaltic concrete, construction<br>sand—building  | Fn-11                     |
|                                      | Mason's Sand & Gravel Co.<br>George C. Smith<br>Olen Corp.   | Mason's Sand & Gravel Co.<br>Columbus Plant #3                                    | Hamilton                       | sand—building, portland cement concrete, asphaltic<br>concrete<br>gravel—building, portland cement concrete, asphaltic<br>concrete  | Fn-58                     |
| Fulton                               | Al Mackey Enterprises, Inc.<br>Northwest Ohio Property<br>Developments, Ltd.<br>Sandman Trucking, Inc. | Mackey<br>Northwest Ohio Property<br>Developments, Ltd.<br>Sandman Trucking, Inc. | Swan Creek<br>Dover            | sand—building<br>sand—bedding   | Ftn-M2<br>Ftn-NW          |
| Gallia                               | Jacib Enterprise, Inc.<br>Ours Sand & Gravel   | Cheshire Pit<br>Ours Sand & Gravel  | Swan Creek<br>Cheshire<br>Ohio | sand—building<br>gravel—filtration<br>sand—unspecified  | Ftn-SA<br>Ga-JE<br>Ga-O   |
| Geauga                               | Haueter Sand & Gravel, Inc.  | Haueter Sand & Gravel, Inc.   | Burton, Newbury                | sand—building, oversize<br>gravel—building, portland cement concrete  | Gea-29                    |
| T & K Kuhnlle Co.                    |  | Haueter Sand & Gravel, Inc.   | Auburn                         | sand—building<br>gravel—building  | Gea-H                     |
| Solon Excavators Sand & Gravel, Inc. | May<br>Soltis Sand & Gravel  | Munn Rd. Sand & Gravel<br>May<br>Soltis Sand & Gravel                             | Auburn                         | sand—unspecified<br>gravel—building, asphaltic concrete<br>sand—fill<br>gravel—bank run   | Gea-TK<br>Gea-43<br>Gea-9 |

**2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County                     | Name of operator  | Name of pit  | Township  | Type and principal use   | State mine number     |
|----------------------------|---|--|---|--|-----------------------|
| Geauga (cont.)             | Teague Gravel Co., Inc.   | Teague Gravel Co., Inc.  | Newbury   | sand—building, portland cement concrete<br>gravel—building, road construction/resurfacing, filtration  | Gea-35                |
| Greene                     | M. J. Coates Construction Co., Inc.<br>M. J. Coates Construction Co., Inc.<br>Hilltop Basic Resources, Inc. | M. J. Coates Construction Co.<br>M. J. Coates Construction Co., Inc.<br>Fairborn Aggregate Plant | Spring Valley<br>Spring Valley<br>Bath  | gravel—road construction/resurfacing<br>gravel—road construction/resurfacing<br>sand—building, portland cement concrete<br>gravel—portland cement concrete, asphaltic concrete,<br>unspecified | Ge-47<br>Ge-G<br>Ge-4 |
| Martin Marietta Aggregates | Haines Rd.  | Beaver Creek   | Spring Valley   | sand—unspecified   | Ge-32                 |
|                            | Spring Valley Gravel  | Spring Valley  | Spring Valley   | gravel—unspecified<br>sand—unspecified   | Ge-42                 |
|                            | Spring Valley North   | Spring Valley  | Spring Valley   | gravel—unspecified<br>sand—unspecified   | Ge-38                 |
|                            | Xenia Gravel  | Beaver Creek, Xenia  | Spring Valley<br>Beaver Creek   | gravel—unspecified<br>sand—unspecified   | Ge-33                 |
|                            | R.J. Martin Service & Excavating<br>Phillips Sand & Gravel  | Xenia  | Spring Valley<br>Xenia  | gravel—bank run<br>sand—unspecified<br>gravel—building<br>sand—unspecified   | Ge-40<br>Ge-36        |
|                            | Joann O. Weddle   | Weddle Gravel  |   | ge-W   |                       |
| Hamilton                   | Allgeier & Son, Inc.  | Miami  | sand—building   | Hmn-C  |                       |
|                            | Allgeier & Son, Inc. Pit 2  | Whitewater   | gravel—building   | Hmn-AS   |                       |
|                            | Ashcraft Sand & Gravel, Inc.  | Whitewater   | sand—building   | Hmn-54   |                       |
|                            | James Bunnell, Inc.   | Harrison, Whitewater   | gravel—building   | Hmn-50   |                       |
|                            | James Bunnell, Inc.   | Whitewater   | sand—building   | Hmn-59   |                       |
|                            | Lost Bridge   | Whitewater   | gravel—unspecified<br>sand—fill   | Hmn-JC   |                       |
|                            | Crosby Gravel, Inc.   | Crosby   | gravel—filtration<br>sand—golf course   | Hmn-44   |                       |
|                            | Newtown Golsch  | Anderson<br>Whitewater<br>Harrison   | gravel—building<br>sand—reclamation<br>gravel—fill  | Hmn-11<br>Hmn-G<br>Hmn-17  |                       |
|                            | Harrison Sand & Gravel Co.  |  | sand—building, portland cement concrete, fill, ice control<br>construction/resurfacing, filtration, landscape |  |                       |
| Martin Marietta Aggregates | Camp Dennison Gravel  | Symmes   | gravel—unspecified<br>sand—unspecified  | Hmn-5  |                       |
|                            | E-town Sand & Gravel  | Whitewater   | gravel—unspecified<br>sand—unspecified  | Hmn-71   |                       |
|                            | E-town Sand & Gravel  | Miami  | gravel—unspecified<br>sand—unspecified  | Hmn-P  |                       |
|                            | Harrison Sand & Gravel  | Harrison   | gravel—unspecified<br>sand—unspecified  | Hmn-37   |                       |

**SAND & GRAVEL OPERATORS DIRECTORIES**

|                                |   |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|
| R. L., Ltd.                    | Crosby<br>Whitewater<br>Harrison<br>Whitewater                | sand—building<br>gravel—building<br>sand—unspecified<br>gravel—unspecified<br>gravel—building<br>sand—building, portland cement concrete, asphaltic<br>concrete, fill<br>gravel—building, portland cement concrete, road<br>construction/resurfacing<br>sand—building<br>gravel—building<br>sand—building<br>gravel—building | Hmn-67<br>Hmn-SO<br>Hmn-69<br>Hmn-60   |  |  |  |
| Southern Ohio Aggregates, Inc. | East Miami Pit  | Colerain<br>Crosby   | Hmn-48<br>Hmn-42   |  |  |  |
| Watson Gravel, Inc.            | Fernald Pit   | Roundhead  | Hdn-H  |  |  |  |
| Welch Sand & Gravel, Inc.      | Harpster Pit  | Green<br>Falls<br>Marion<br>Green, Starr   | Hg-262<br>Hg-329<br>Hg-L<br>Hg-301   |  |  |  |
| Hardin                         | Norman Harpster   | Hocking Valley Concrete, Inc.<br>Kilbarger Construction, Inc.<br>Lancaster Limestone<br>Muskingum River Gravel Co.   | Lakeville Sand & Gravel<br>Feikert Sand & Gravel, Inc.<br>Holmes Supply Corp.<br>Menuz Bros. Sand & Gravel, Inc.<br>Spring Run Gravel<br>Erie Blacktop, Inc.<br>Waterloo Coal Co., Inc.<br>Olen Corp.<br>Small's Sand & Gravel, Inc. | Washington<br>Salt Creek<br>Prairie<br>Hardy<br>Killbuck<br>Norwalk<br>Madison<br>Morris<br>Howard | sand—portland cement concrete, block<br>gravel—portland cement concrete, block<br>sand—road construction/resurfacing<br>gravel—bank run<br>sand—asphaltic concrete, road construction/resurfacing,<br>unspecified<br>gravel—building, asphaltic concrete, road construction/<br>resurfacing, unspecified<br>sand—portland cement concrete<br>gravel—building<br>sand—building, portland cement concrete, road<br>construction/resurfacing<br>gravel—building, portland cement concrete, road<br>construction/resurfacing<br>sand—portland cement concrete, asphaltic concrete,<br>road construction/resurfacing, fill<br>gravel—building, asphaltic concrete, road construction/<br>resurfacing, filtration<br>sand—portland cement concrete, asphaltic concrete, fill,<br>ice control<br>gravel—portland cement concrete, asphaltic concrete,<br>road construction/resurfacing, filtration, fill<br>sand—unspecified<br>sand—building<br>gravel—unspecified<br>sand—portland cement concrete, asphaltic concrete,<br>gravel—building, portland cement concrete, asphaltic<br>concrete<br>sand—portland cement concrete, asphaltic concrete, asphaltic<br>concrete<br>gravel—unspecified | Hs-C<br>Hs-511<br>Hs-J<br>Hs-82<br>Hs-96<br>Hrn-16<br>Jkn-367<br>Kx-16<br>Kx-S |
| Hocking                        | Hocking Valley Concrete, Inc.                                 |  |  |  |  |  |
|                                | Kilbarger Construction, Inc.                                  |  |  |  |  |  |
|                                | Lancaster Limestone   |  |  |  |  |  |
|                                | Muskingum River Gravel Co.                                    |  |  |  |  |  |
| Holmes                         | Craigton Shale Co.  |  |  |  |  |  |
|                                | Feikert Sand & Gravel, Inc.                                   |  |  |  |  |  |
|                                | Holmes Supply Corp.   |  |  |  |  |  |
|                                | Menuz Bros. Sand & Gravel, Inc.                               |  |  |  |  |  |
| Huron                          | Spring Run Gravel   |  |  |  |  |  |
| Jackson                        | Erie Blacktop, Inc.   |  |  |  |  |  |
| Knox                           | Waterloo Coal Stone Plant-Zoar Mill<br>Fredericktown Plant #2 |  |  |  |  |  |
|                                | Small's Sand & Gravel, Inc.                                   |  |  |  |  |  |

**2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County          | Name of operator   | Name of pit   | Township                              | Type and principal use   | State mine number     |
|-----------------|--|---|---------------------------------------|--|-----------------------|
| Knox<br>(cont.) | Small's Sand & Gravel, Inc.<br>(cont.)                   | Small's Sand & Gravel, Inc.                           | Harrison                              | sand—asphaltic concrete, unspecified   | Kx-15                 |
|                 |  | Small's Sand & Gravel, Inc.                           | Harrison                              | gravel—asphaltic concrete, unspecified   | Kx-17                 |
|                 |  | Small's Sand & Gravel, Inc.                           | Union                                 | gravel—unspecified   | Kx-5                  |
|                 | United Aggregates, Inc.                                  | United Aggregates, Inc.                               | Clinton                               | gravel—building  | Kx-3                  |
| Lake            | C.I.R. Inc.<br>R. W. Sidley, Inc.                        | Harmon<br>Painesville Plant                           | Madison<br>Painesville                | gravel—fill<br>sand—fill, top soil   | Lke-CIR<br>Lke-7      |
| Lake Erie       | Erie Sand & Gravel Co.<br>Osborne Materials Co.          | Erie Sand & Gravel Co.<br>Osborne Materials Co.       | Vermilion-Lorain area "A"<br>Fairport | sand—unspecified<br>sand—building, portland cement concrete, asphaltic<br>concrete, fill           | Eehedge<br>Lke-dredge |
| Lawrence        | B & L Sand Co.<br>Burlington Sand & Gravel Co.           | B & L Sand Co.<br>Burlington Sand & Gravel Co.        | Perry<br>Perry                        | sand—building<br>sand—fill   | Le-430<br>Le-426      |
| Licking         | Eagle Material Supply Ltd.<br>Olen Corp.                 | Eagle Material Supply Ltd.<br>St. Louisville Plant #5 | St. Albans<br>Washington              | sand—building<br>gravel—building<br>sand—building, portland cement concrete, asphaltic<br>concrete | Lg-W<br>Lg-31         |
|                 | Gary Roberts Excavating                                  | Gary Roberts Excavating                               | Madison                               | gravel—building, asphaltic concrete  | Lg-504                |
|                 | Van Wey Sand & Gravel, Inc.                              | Van Wey Sand & Gravel, Inc.                           | Newton                                | sand—bank run  | Lg-10                 |
| Logan           | Boyd Excavating  | Boyd Excavating                                       | Monroe                                | gravel—unspecified   | Lgn-B                 |
|                 | C. E. Duff & Son, Inc.                                   | C. E. Duff & Son, Inc.<br>Duff Sand Co.               | Lake<br>Washington                    | sand—building  | Lgn-36                |
|                 | Neer's Sand & Gravel                                     | Neer's Sand & Gravel                                  | Union                                 | sand—building, portland cement concrete  | Lgn-31                |
|                 | Guy Schieve  | Guy Schieve Pit                                       | Henrietta                             | gravel—unspecified   | Lgn-6                 |
| Lorain          | Al Mackey Enterprises, Inc.<br>Seaway Sand & Stone, Inc. | Schaeffer Pit<br>Seaway Sand & Stone, Inc.            | Spencer<br>Swanton                    | sand—building  | Ln-12                 |
| Lucas           | Tuffco Sand & Gravel, Inc.                               | Tuffco Sand & Gravel, Inc.                            | Darby                                 | sand—unspecified   | Ls-M1<br>Ls-13        |
| Madison         | Wallace Road Sand & Gravel                               | Wallace Road Sand & Gravel                            | Springfield                           | sand—unspecified   | Mdn-11                |
| Mahoning        | Fleming Construction Co., Inc.                           | Pit #1  | Prospect                              | sand—portland cement concrete, mason sand  | Mg-630                |
| Marion          | Fleming Construction Co., Inc.                           | Pit #2  | Prospect                              | gravel—fill, decorative<br>sand—fill   | Mn-16<br>Mn-19        |

**SAND & GRAVEL OPERATORS DIRECTORIES**

|                            |   |  |  |                                    |
|----------------------------|---|--|--|------------------------------------|
| Medina                     | Baker Sand, Inc.  | Harrisville, Westfield                   | sand—building, portland cement concrete<br>gravel—road construction/resurfacing<br>sand—building, asphaltic concrete, fill<br>gravel—building, road construction/resurfacing,<br>filtration  | Ma-20<br>Ma-22                     |
|                            | Seville Sand & Gravel, Inc.                             | Harrisville, Westfield                   |  |                                    |
| Meigs                      | Jaymar, Inc.  | Olive                                    | sand—unspecified<br>gravel—unspecified<br>sand—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, fill<br>gravel—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, fill<br>sand—backfill<br>gravel—road construction/resurfacing<br>sand—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, filtration | Ms-308<br>Ms-205                   |
|                            | Martin Marietta Aggregates                              | Apple Grove Plant                        |  | Ms-301                             |
| Meigs County Commissioners | Meigs County Commissioners                              | Letart                                   |  | Ms-298                             |
|                            | Shelly Materials, Inc.                                  | Racine Plant #6                          |  |                                    |
| Miami                      | Fenner Sand & Gravel, Inc.                              | Newton                                   | sand—unspecified<br>gravel—unspecified<br>sand—unspecified<br>gravel—unspecified<br>gravel—fill<br>gravel—fill   | Mi-4                               |
|                            | Martin Marietta Aggregates                              | Concord                                  |  | Mi-3                               |
| Montgomery                 | New Carlisle Sand & Gravel Co.<br>Tipp Stone Co., Inc.  | Bethel<br>Elizabeth                      |  | Mi-501<br>Mi-12                    |
|                            | Barrett Paving Materials, Inc.                          | Madison                                  |  | My-B                               |
| Carter & Carter, Inc.      | Carter & Carter, Inc.                                   | Miami                                    |  | My-CW                              |
|                            | Hilltop Basic Resources, Inc.                           | Jefferson, Miami                         |  | My-19                              |
| Morrow                     | Martin Marietta Aggregates<br>Miller Bros. Gravel, Inc. | Rip Rap Rd.<br>Miller Bros. Gravel, Inc. |  | My-66<br>My-52                     |
|                            | Moraine Materials Co., Inc.                             | German<br>Butler                         | mason sand, unspecified<br>gravel—building, portland cement concrete, ice control,<br>mason sand, unspecified<br>gravel—building, portland cement concrete, road<br>construction/resurfacing, filtration, unspecified<br>sand—unspecified<br>gravel—unspecified<br>gravel—fill   | My-41<br>My-61<br>Mon-588<br>Mon-L |
| Morgan                     | Tipp Stone Co., Inc.                                    | Windsor                                  |  |                                    |
|                            | Chesterhill Stone Co.<br>Link Trucking Co., Inc.        | Bloom                                    |  |                                    |
| Morrow                     | Chesterville Sand & Gravel Co., Inc.                    | Chester                                  | sand—building, fill<br>gravel—building, road construction/resurfacing, filtration  | Mw-10                              |

**2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County    | Name of operator                   | Name of pit                          | Township          | Type and principal use   | State mine number |
|-----------|------------------------------------|--------------------------------------|-------------------|--|-------------------|
| Muskingum | LUB, Inc.                          | LUB, Inc.                            | Muskingum         | sand—pipe backfill   | Mum-LB            |
|           | Muskingum River Gravel Co.         | S & S Aggregate #1                   | Wayne             | gravel—filtration<br>sand—building, asphaltic concrete, unspecified  | Mum-288           |
|           | Shelly Materials, Inc.             | Dresden Plant #9                     | Cass              | gravel—building, asphaltic concrete, road construction/<br>resurfacing, unspecified                              | Mum-799           |
| Pickaway  | Darby Creek Excavating, Inc.       | Darby Creek Excavating Inc.          | Muhlenberg        | sand—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, fill, unspecified | Pky-DC            |
|           | William A. Hoffman, Jr.            | Hoffman Pit                          | Wayne             | sand—unspecified<br>sand—fill  | Pky-H             |
|           | George J. Igel & Co., Inc.         | Valley Sand & Gravel, Inc.           | Darby             | gravel—road construction/resurfacing   | Pky-C             |
|           | The Melvin Stone Co., LLC          | Circleville                          | Wayne             | sand—building, portland cement concrete, asphaltic<br>concrete   | Pky-R             |
|           | Roy M. Roush                       | R Farm S & G                         | Darby             | gravel—building, asphaltic concrete, road construction/<br>resurfacing, farm & residential                       | Pky-RR            |
|           | Gene T. Wilson                     | Gene T. Wilson                       | Darby             | sand—road construction/resurfacing   | Pky-W             |
|           | Hanson Aggregates Davon, Inc.      | Piketon Sand & Gravel                | Scioto            | sand—building<br>gravel—building   | Pke-24            |
|           | South Central Sand & Gravel        | South Central Sand & Gravel          | Scioto            | sand—portland cement concrete  | Pke-30            |
|           | Valley Materials Co.               | Valley Materials #1                  | Scioto            | gravel—road construction/resurfacing   | Pke-26            |
|           |                                    | Valley Materials #2                  | Scioto            | sand—building, road construction/resurfacing, fill   | Pke-V             |
| Portage   | Ballentine Excavation Co.          | Ballentine Lake                      | Shalersville      | gravel—road construction/resurfacing   | Pe-BA             |
|           | Beck Sand & Gravel, Inc.           | Beck Sand & Gravel, Inc.             | Shalersville      | sand—unspecified<br>sand—building, portland cement concrete  | Pe-50             |
|           | Blue Stone Sand & Gravel, Inc.     | Blue Stone Pit #1                    | Mantua            | gravel—building, asphaltic concrete<br>sand—building, asphaltic concrete, landscaping                            | Pe-B1             |
|           | Oscar Brugmann Sand & Gravel, Inc. | Oscar Brugmann Sand & Gravel, Inc.   | Shalersville      | sand—unspecified   | Pe-9              |
|           | R. A. Cruise Sand & Gravel, Inc.   | R. A. Cruise Sand & Gravel, Inc.     | Franklin, Ravenna | sand—building, asphaltic concrete  | Pe-45             |
|           | D & K Materials, Inc.              | D & K Materials, Inc.                | Brimfield         | gravel—building  | Pe-101            |
|           | GANS Ltd.                          | GANS Ltd. dba Brimfield Sand & Soils | Brimfield         | gravel—road construction/resurfacing<br>sand—building  | Pe-102            |

**SAND & GRAVEL OPERATORS DIRECTORIES**

121

|                                      |                                      |                      |   |         |
|--------------------------------------|--------------------------------------|----------------------|---|---------|
| Hilltop Aggregate, Inc.              | Hilltop Aggregate, Inc.              | Suffield             | sand—unspecified  | Pe-56   |
| Hugo Sand Co.                        | Hugo Sand Co.                        | Franklin             | gravel—unspecified<br>sand—building, road construction/resurfacing,<br>unspecified  | Pe-10   |
| Janson & Sons Corp.                  | Janson & Sons Corp.                  | Mantua               | gravel—building, unspecified  | Pe-J    |
| Jefferson Materials Co.              | Jefferson Materials Co.              | Streetsboro          | sand—asphaltic concrete   | Pe-63   |
| Lafarge North America                | Shalersville Plant-Northern Division | Shalersville         | gravel—portland cement concrete, asphaltic concrete, fill<br>sand—building          | Pe-68   |
| Lakeside Sand & Gravel Co.           | Lakeside Sand & Gravel Co.           | Shalersville         | gravel—building   | Pe-LS   |
| Lucky Sand & Gravel Co.              | Lucky Sand & Gravel Co.              | Mantua               | sand—portland cement concrete   | Pe-L    |
| Miller Sand & Gravel, Inc.           | Miller Sand & Gravel, Inc.           | Windham              | gravel—building, asphaltic concrete, road construction/<br>resurfacing, landscaping | Pe-39   |
| Mills Rock, Sand, & Soil, Inc.       | 303 Sand & Gravel                    | Shalersville         | sand—building, fill   | Pe-M    |
| Muskingum River Gravel Co.           | S & S Agg #16                        | Ravenna              | gravel—building, road construction/resurfacing,<br>filtration, fill                 | Pe-15   |
| Rainbow Sand & Gravel, Inc.          | Rainbow Sand & Gravel, Inc.          | Shalersville         | sand—building, asphaltic concrete, road construction/resurfacing,<br>unspecified    | Pe-64   |
| Red Brush Peat Co.                   | Red Brush Peat Co.                   | Franklin             | sand—building, portland cement concrete   | Pe-61   |
| Rockwell Sand & Gravel, Inc.         | Rockwell Sand & Gravel, Inc.         | Streetsboro          | gravel—fill   | Pe-85   |
| S & S Aggregate, Inc.                | Twin Lakes-S & S Ag #10              | Streetsboro          | sand—building, portland cement concrete   | Pe-67   |
| Schloss Materials Co.                | Schloss Materials Co.                | Mantua               | gravel—building   | Pe-60   |
| Sober Sand & Gravel Co.              | Sober Sand & Gravel Co.              | Rootstown            | sand—unspecified  | Pe-18   |
| Solon Excavators Sand & Gravel, Inc. | Brugman                              | Shalersville         | gravel—asphaltic concrete   | Pe-S1   |
| Twinsburg Development Corp.          | Burke                                | Mantua, Shalersville | sand—building, road construction/resurfacing  | Pe-36   |
| Twinsburg Development Corp.          | Twinsburg Development Corp.          | Aurora               | gravel—building, asphaltic concrete   | Pe-84   |
| Loxley Aggregates, Inc.              | Loxley Aggregates, Inc.              | Twin                 | sand—building   | Pre-9   |
| Thomas Sand & Gravel                 | Thomas Sand & Gravel                 | Lanier               | gravel—building   | Pre-T   |
| U.S. Aggregates, Inc.                | U.S. Aggregates/Richmond Plant       | Jefferson            | sand—fill   | Pre-AAC |
| Wysong Gravel Co.                    | Wysong Gravel Co.                    | Somers               | gravel—unspecified  | Pre-4   |
| Wysong Gravel Co.                    | Wysong Gravel Co.                    | Twin                 | sand—building   | Pre-6   |

## 2001 OHIO MINERAL INDUSTRIES REPORT

**2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County   | Name of operator   | Name of pit  | Township               | Type and principal use  | State mine number |
|----------|--|--|------------------------|---|-------------------|
| Richland | Bartley & Bolin Excavating<br>D.H. Bowman & Sons, Inc.                 | Bartley & Bolin, Inc.<br>D.H. Bowman & Sons, Inc.                      | Weller<br>Jefferson    | gravel—bank run<br>sand—asphaltic concrete, fill<br>gravel—building, asphaltic concrete, road construction/<br>resurfacing, filtration, private drives, ice control | Rd-20<br>Rd-4     |
|          | Ganges Gravel Co.  | Ganges Gravel Co.  | Cass                   | sand—building   | Rd-18             |
|          | John L. Garber Materials, Inc.   | John L. Garber Materials, Inc.   | Troy                   | gravel—building   | Rd-14             |
|          | S & S Aggregate, Inc.  | S & S Agg #14  | Monroe                 | sand—asphaltic concrete, road construction/resurfacing,<br>unspecified  | Rd-5              |
|          |  |  |                        | gravel—asphaltic concrete, road construction/resurfacing,<br>unspecified  |                   |
| Ross     | David E. Edgington   | Edgington Pit  | Concord                | sand—building<br>gravel—building  | Rs-E              |
|          | Gillum Bros. Excavating<br>Haubiel & Sons Asphalt & Materials,<br>Inc. | Gillum Bros. Excavating<br>Haubiel & Sons Asphalt & Materials,<br>Inc. | Liberty<br>Springfield | gravel—bank run<br>sand—building, portland cement concrete, asphaltic<br>concrete   | Rs-G<br>Rs-H      |
|          | Muskingum River Gravel Co.   | S & S Aggregate Plant #7   | Jefferson              | gravel—asphaltic concrete, road construction/resurfacing,<br>filtration   | Rs-M              |
|          | Mark E. Scott  | Scott Pit  | Green                  | sand—asphaltic concrete, road construction/resurfacing,<br>unspecified  | Rs-P              |
|          | Shelly Materials, Inc.   | Chillicothe Plant #21  | Springfield            | gravel—building   | Rs-27             |
|          | Tackett Builders   | Tackett's Pit  | Springfield            | sand—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, fill, unspecified  | Rs-T              |
|          | Precision Aggregates III, LLC  |  | Sandusky               | gravel—building, portland cement concrete, asphaltic<br>concrete, road construction/resurfacing, fill, unspecified  | Sy-5              |
| Sandusky | ATS Enterprises  | Precision Aggregates III, LLC  | Green                  | sand—building, portland cement concrete, road<br>construction/resurfacing   | So-79             |
|          | D.G.M., Inc.   | ATS Enterprises  | Morgan                 | gravel—building, road construction/resurfacing  | So-DGM            |
|          | Hanson Aggregates Davon, Inc.  | Tow Path Ready Mix   | Valley                 | sand—building, portland cement concrete   | So-100            |
|          |  | Scioto Valley Resources  |                        | sand—unspecified  |                   |
| Shelby   | Barrett Paving Materials, Inc.   | Jones Deposit  | Washington             | gravel—unspecified  | Shy-18            |
|          |  | Pence Pit  | Washington             | sand—unspecified  | Shy-11            |
|          |  |  |                        | gravel—unspecified  |                   |

**SAND & GRAVEL OPERATORS DIRECTORIES**

123

|                                  |   |                                     |                         |
|----------------------------------|---|-------------------------------------|-------------------------|
| Miami River Stone Co.            | Miami River Stone Co.   | Orange                              | Shy-17                  |
| Spring Creek Corp.               | Staley Pit<br>Morelock Pit  | Clinton, Salem<br>Washington        | Shy-SS<br>Shy-SC        |
| American Sand & Gravel, Inc.     | Plant 2   | Jackson                             | Sk-203                  |
| Central-Allied Enterprises, Inc. | Plant 4   | Jackson                             | Sk-243                  |
|                                  | Canton Aggregate Div.   | Plain                               | Sk-681                  |
|                                  | Central Aggregate Div.  | Perry                               | Sk-CA                   |
|                                  | Massillon Washed Gravel Div.  | Bethlehem                           | Sk-607                  |
|                                  | Massillon Washed Gravel Div.  | Bethlehem                           | Sk-MW                   |
| Heiser Sand & Gravel Corp.       | Heiser Sand & Gravel Corp.  | Jackson                             | Sk-HS1                  |
| Massillon Materials, Inc.        | Massillon Materials, Inc.   | Perry                               | Sk-M                    |
| National Aggregates, Inc.        | MMI Warmington Plant<br>National Aggregates, Inc.                                 | Perry<br>Sandy                      | Sk-M1<br>Sk-1017        |
| Northern Ohio Paving Co.         | Allied Plant #3   | Perry                               | Sk-N                    |
| Oster Sand & Gravel, Inc.        | Massillon Plant   | Jackson, Perry                      | Sk-165                  |
|                                  | Mudbrook Plant  | Jackson                             | Sk-R                    |
|                                  | Alden Excavating  | Northampton                         | St-55                   |
| Summit                           | Donald A. Coy<br>Flesher Sand & Gravel, Inc.<br>Riverside Sand & Gravel Co., Inc. | Norton<br>Norton<br>Stow, Tallmadge | St-DC<br>St-52<br>St-24 |
|                                  | S & S Aggregate, Inc.   | Coventry                            | St-44                   |
|                                  | Nick's Trucking<br>Springbrook  | Mesopotamia<br>Mesopotamia          | Tl-16<br>Tl-12          |
| Trumbull                         | Nick's Trucking<br>Samco, Inc.  | Goshen                              | Ts-2018                 |
| Tuscarawas                       | JBM Ltd.  |                                     |                         |

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

| County                | Name of operator                   | Name of pit                         | Township        | Type and principal use   | State mine number |
|-----------------------|------------------------------------|-------------------------------------|-----------------|--|-------------------|
| Tuscarawas<br>(cont.) | L & M Mineral Co.                  | Spring Industries                   | Goshen, Warwick | sand—building gravel—building  | Ts-SI             |
|                       | Massillon Materials, Inc.          | MMI Sandyville Plant                | Sandy Dover     | gravel—road construction/resurfacing sand—asphaltic concrete   | Ts-MM             |
|                       | Newton Asphalt Paving, Inc.        | 516                                 | Sandy           | gravel—asphaltic concrete  | Ts-2001           |
|                       | Oster Sand & Gravel, Inc.          | Oster Sand & Gravel, Inc.-Bolivar   | Goshen          | sand—building, portland cement concrete, asphaltic concrete, unspecified   | Ts-2036           |
|                       | Sidco Development, Inc.            | Midvale Sand & Gravel               | Wayne           | gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified sand—portland cement concrete, road construction/resurfacing, fill               | Ts-S2             |
|                       | Soehnlen Bros. Sand & Gravel, Inc. | Soehnlen Bros. Sand & Gravel, Inc.  | Warwick         | gravel—portland cement concrete, road construction/resurfacing, block manufacturing sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration | Ts-1826           |
|                       | Stewart & Reichman, Inc.           | Stocker Sand & Gravel Co.-Gnaden    | Clay            | gravel—building, road construction/resurfacing, fill, industrial   | Ts-111            |
|                       | Stocker Sand & Gravel Co.          | Stocker Sand & Gravel Co.-Island    | Clay            | sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing   | Ts-69             |
|                       | Carl E. Oeder & Sons Sand & Gravel | Carl E. Oeder & Sons Sand & Gravel  | Turtle Creek    | sand—building  | Ts-125            |
|                       | L & I Natural Resources, Inc.      | L & I Pit & Mill                    | Union           | sand—unspecified   | Wan-41            |
|                       | Little Miami Sand & Gravel         | Little Miami Sand & Gravel Plant #1 | Salem           | gravel—unspecified   | Wan-50            |
|                       | Martin Marietta Aggregates         | Little Miami Sand & Gravel Plant #2 | Salem           | sand—building  |                   |
|                       | Miami View Mining Co., Ltd.        | Franklin Gravel                     | Franklin        | sand—unspecified   |                   |
|                       | Morrow Gravel Co.                  | Miami View                          | Union           | gravel—unspecified   |                   |
|                       | Atlas Towing Co.                   | Morrow Plant                        | Salem           | sand—unspecified   |                   |
|                       | Briggs Sand & Gravel, Inc.         | Belpre Bank Run                     | Belpre          | sand—bank run  |                   |
|                       | Chesterhill Stone Co.              | Briggs Sand & Gravel, Inc.          | Warren          | gravel—bank run  |                   |
|                       | Grimes Excavating                  | Mount Farm                          | Waterford       | sand—building  |                   |
|                       |                                    | Willow Island                       | Newport         | sand—unspecified   |                   |
|                       |                                    | Grimes Sand and Gravel              | Grandview       | gravel—unspecified   |                   |

SAND & GRAVEL OPERATORS DIRECTORIES

125

|                            |   |   |  |       |
|----------------------------|---|---|--|-------|
| Muskingum River Gravel Co. | Plant #2  | Grandview   | sand—unspecified<br>gravel—asphaltic concrete, road construction/<br>resurfacing, unspecified<br>sand—road construction/resurfacing, fill  | Wn-38 |
| Sharon Stone Co.           | Belpre Sand & Gravel  | Belpre  | Wn-SS  |       |
| Trout Sand & Gravel Co.    | Trout Sand & Gravel Co.   | Warren  | Wn-510   |       |
| Wayne                      | Buckeye Excavating Development, Inc.<br>Prairie Lane Sand & Gravel Co.  | Steven Steiner<br>Prairie Lane Sand & Gravel Co.                | gravel—bank run<br>sand—building, foundry<br>gravel—building, landscape  | We-23 |
|                            | Rupp Construction, Inc.   | Rupp Construction, Inc.   | sand—building, portland cement concrete, asphaltic<br>concrete<br>gravel—building, portland cement concrete, asphaltic<br>concrete<br>sand—building, portland cement concrete<br>gravel—fill | We-11 |
|                            | Zollinger Sand & Gravel Co.   | Zollinger Sand & Gravel Co.                                     | Chippewa   | We-7  |
| Williams                   | Andy Nixon Contractors, Inc.<br>Stoneco, Inc.<br>Thiel Construction Co. | Nixon Pit<br>Montpelier S.-Takacs Pit<br>Thiel Construction Co. | Madison<br>Superior<br>Superior<br>Superior<br>St. Joseph  | Wn-15 |
|                            | Walcottville Sand & Gravel Corp.  | Walcottville Aggregates-Enon Pit                                | Madison<br>sand—portland cement concrete<br>sand—unspecified<br>gravel—unspecified   | Ws-N  |
|                            | Weber Sand & Gravel, Inc.   | Weber Sand & Gravel, Inc.                                       | Superior<br>sand—unspecified<br>gravel—unspecified<br>sand—building, portland cement concrete<br>gravel—building, fill   | Ws-T  |
| Wood                       | Precision Aggregate, Inc.   | Precision Aggregate II  | Portage  | Ws-21 |
| Wyandot                    | JALIP, LTD.<br>Kirby's Sand & Gravel, Inc.                              | JALIP, LTD.<br>Kirby's Sand & Gravel, Inc.                      | Pitt<br>Crane, Eden<br>Eden  | Ws-22 |
|                            | National Lime & Stone Co.   | Upper Sandusky Plant  | Eden   | Ws-11 |
|                            | Precision Aggregate, Inc.   | Precision Aggregate I   | Eden   | Wd-14 |
|                            |   |   |  | Wt-J  |
|                            |   |   |  | Wt-17 |
|                            |   |   |  | Wt-15 |
|                            |   |   |  | Wt-4  |

**2001 SANDSTONE/CONGLOMERATE  
COMPANIES WITH SALES OR PRODUCTION**

| Company                                 | No. of operations | Sales (tons)     | Production (tons) |
|---|-------------------|------------------|-------------------|
| Best Sand Corp.                         | 2                 | 815,864          | 875,221           |
| Briar Hill Stone Co.                    | 6                 | 26,162           | 26,162            |
| City Stone LLC                          | 1                 | 160,000          | 240,000           |
| Cleveland Quarries/American Stone Corp. | 1                 | 6,878            | 6,878             |
| D. & D. Mining Co.                      | 1                 | 680              | 680               |
| E. A. Construction, Inc.                | 1                 | 40,797           | 40,797            |
| J. L. & Son Excavating, Inc.            | 1                 | 1,500            | 1,500             |
| Keeney Sand & Stone, Inc.               | 1                 | 84,352           | 84,352            |
| Mesenburg Bros., Inc.                   | 1                 | 3,716            | 3,716             |
| Mt. Eaton Reclamation, Inc.             | 1                 | 35,776           | 35,776            |
| Oglebay Norton Industrial Sands, Inc.   | 2                 | 308,456          | 308,456           |
| Oscar Brugmann Sand & Gravel, Inc.      | 1                 | 35,639           | 36,200            |
| Pine Grove Regional Facility            | 1                 | 27,000           | 27,000            |
| R. W. Sidley, Inc.                      | 2                 | 120,450          | 150,450           |
| Riverside Sand & Gravel Co., Inc.       | 1                 | 3,196            | 3,196             |
| Samco, Inc.                             | 1                 | 525              | 525               |
| Schrader and Son, Inc.                  | 1                 | 33,327           | 33,327            |
| Sidwell Materials, Inc.                 | 1                 | 10,219           | 10,219            |
| Solomon's Mines, Inc.                   | 1                 | 27,974           | 27,974            |
| U.S. Silica Co.                         | 1                 | 12,750           | 15,000            |
| Waller Bros. Stone Co.                  | 2                 | 13,440           | 13,440            |
| <b>TOTAL: 21 companies</b>              | <b>30</b>         | <b>1,768,701</b> | <b>1,940,869</b>  |

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## SANDSTONE/CONGLOMERATE OPERATORS DIRECTORIES

**2001 OHIO DIRECTORY OF SANDSTONE/CONGLOMERATE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY**

*For those mines for which a state mine number has not been assigned, a letter designation is used (example: Gea-N).*

| County                 | Name of operator   | Name of quarry  | Township   | Geological unit   | Type and principal use   | State mine number                             |
|------------------------|--|---|--|---|--|---|
| Belmont                | Sidwell Materials, Inc.                                      | Bellaire Stone  | Pultney  | Pennsylvanian   | crushed or broken stone—riprap   | Bt-1190                                       |
| Columbiana             | D & D Mining Co.<br>Solomon's Mines, Inc.                    | D & D Strip<br>Solomon's Mines, Inc.                              | Unity<br>Salem                                   |   | crushed or broken stone<br>crushed or broken stone   | Ca-888<br>Ca-S                                |
| Coshocton              | Briar Hill Stone Co.   | Quarry #26<br>Quarry #32<br>Quarry #54<br>Quarry #55<br>Quarry #3 | Monroe<br>Monroe<br>Monroe<br>Monroe<br>Tiverton | Massillon (Pennsylvanian)<br>Massillon (Pennsylvanian)<br>Massillon (Pennsylvanian)<br>Massillon (Pennsylvanian)<br>Berea (Mississippian) | dimension stone—rough construction<br>dimension stone—rough construction<br>dimension stone—rough construction<br>dimension stone—rough construction<br>dimension stone—rough construction | Cn-13<br>Cn-686<br>Cn-809<br>Cn-815<br>Cn-659 |
| Erie                   | Cleveland Quarries/American Stone Corp.                      | Birmingham Quarry   | Florence   | Cuyahoga (Mississippian)  | dimension stone—rough construction, rubble,<br>finished stone  | Ee-21   |
| Fairfield              | Pine Grove Regional Facility                                 |   | Clear Creek,<br>Madison                          |   | crushed or broken stone—other  | Fd-PG   |
| Geauga                 | Best Sand Corp.  |   | Munson   | Sharon conglomerate<br>(Pennsylvanian)  | crushed or broken stone—foundry sand, glass sand,<br>metallurgical pebble, refractory, polishing/ grinding<br>sand, engine sand, construction, industrial sand                             | Gea-3   |
| Geauga                 | R. W. Sidley, Inc.   | Hambden Pit<br>Thompson Pit                                       | Hambden<br>Thompson                              | Sharon conglomerate<br>(Pennsylvanian)<br>Sharon conglomerate<br>(Pennsylvanian)  | crushed or broken stone—construction   | Gea-S   |
| Huron                  | Mesenburgh Bros, Inc.  | Mesenburgh Bros, Inc.   | Townsend   | Berea (Mississippian)   | crushed or broken stone—aggregate, construction  | Gea-1   |
| Knox                   | Briar Hill Stone Co.<br>Oggbay Norton Industrial Sands, Inc. | Quarry #6<br>Millwood Plant                                       | Jefferson<br>Butler, Union                       | Massillon (Pennsylvanian)<br>Black Hand (Mississippian)   | dimension stone—rough construction   | Hrn-8   |
| Lake                   | Keeney Sand & Stone, Inc.                                    | Keeney Sand & Stone, Inc.   | Leroy  | Berea (Mississippian)   | dimension stone—rough construction   | Kx-12   |
| Perry                  | Oggbay Norton Industrial Sands, Inc.                         | Glass Rock Plant  | Hopewell   | Massillon (Pennsylvanian)   | crushed or broken stone—glass sand, silica flour,<br>engine sand, industrial sand  | Kx-1  |
| Pike                   | Best Sand Corp.  |   | Jackson  | Sharon conglomerate<br>(Pennsylvanian)  | crushed or broken stone—foundry sand, refractory<br>sand, silica flour   | Py-344  |
| Schroder and Son, Inc. | Schrader & Son, Inc.   |   | Jackson  | Sharon conglomerate<br>(Pennsylvanian)  | crushed or broken stone—foundry sand<br>industrial sand  | Pke-S   |
| Portage                | Oscar Brugmann Sand & Gravel, Inc.                           | Oscar Brugmann Sand & Gravel, Inc.                                | Shalersville                                     |   | crushed or broken stone—unspecified  | Pe-9  |
| Scioto                 | Waller Bros. Stone Co.                                       | Crabtree Quarry<br>New Inskeep                                    | Union<br>Rush                                    | Buena Vista (Mississippian)<br>Buena Vista (Mississippian)  | dimension stone—rough construction<br>dimension stone—rough construction   | So-76<br>So-W                                 |
| Summit                 | Riverside Sand & Gravel Co., Inc.                            | Riverside Sand & Gravel Co., Inc.                                 | Stow,<br>Tallmadge                               |   | crushed or broken stone—riprap   | St-24   |
| Trumbull               | City Stone LLC<br>Sameco, Inc.                               | City Stone LLC<br>Springbrook                                     | Brookfield<br>Mesopotamia                        |   | crushed or broken stone—aggregate, construction<br>crushed or broken stone—unspecified   | Tl-CA<br>Tl-12                                |
| Tuscarawas             | J. L. & Son Excavating, Inc.<br>U.S. Silica Co.              | Beach City Pit<br>Dundee Mine                                     | Franklin<br>Wayne                                | Massillon (Pennsylvanian)   | crushed or broken stone—unspecified<br>crushed or broken stone—foundry sand  | Ts-2032<br>Ts-1660                            |
| Wayne                  | E. A. Construction, Inc.<br>Mt. Eaton Reclamation, Inc.      | #1<br>Mt. Eaton Reclamation, Inc.                                 | Clinton<br>Paint                                 | Middle Kittanning<br>(Pennsylvanian)  | crushed or broken stone—unspecified<br>crushed or broken stone—unspecified   | We-EA<br>We-26                                |

**2001 CLAY COMPANIES WITH  
SALES OR PRODUCTION**

| Company                                  | No. of operations | Sales (tons)     | Production (tons) |
|--|-------------------|------------------|-------------------|
| Athens Hocking Reclamation Center        | 1                 | 1,025            | 1,025             |
| Bearcreek Clay Co.                       | 2                 | 30,463           | 30,463            |
| Belden Brick Co.                         | 4                 | 254,668          | 254,668           |
| Blue Jay Enterprises of Ts. Co., Inc.    | 2                 | 18,855           | 18,855            |
| Bowerston Shale Co.                      | 1                 | 16,559           | 16,559            |
| Boyas Excavating, Inc.                   | 1                 | 30,489           | 30,489            |
| Browning-Ferris Industries of Ohio, Inc. | 1                 | 153,177          | 153,177           |
| Buckeye Industrial Mining Co.            | 4                 | 177,245          | 177,237           |
| Cedar Heights Clay Co.                   | 1                 | 44,989           | 44,989            |
| Cherokee Run Landfill                    | 1                 | 120,923          | 120,923           |
| Cochran Transportation Services, Inc.    | 1                 | 35               | 35                |
| D. & D. Mining Co.                       | 1                 | 3,138            | 3,138             |
| E. A. Construction, Inc.                 | 1                 | 4,155            | 4,155             |
| ENZ, Inc.                                | 1                 | 109,087          | 109,087           |
| ESSROC Cement Corp.                      | 1                 | 16,864           | 16,864            |
| East Fairfield Coal Co.                  | 1                 | 4,428            | 4,428             |
| Envirosafe Services of Ohio, Inc.        | 1                 | 69,255           | 69,255            |
| Harvest Sand & Gravel, Inc.              | 1                 | 285              | 314               |
| Holmes Limestone Co.                     | 2                 | 23,384           | 23,384            |
| Honey Creek Stone Co.                    | 1                 | 63,036           | 63,036            |
| L & M Mineral Co.                        | 1                 | 9,350            | 9,350             |
| Lafarge Corp.                            | 1                 | 132,036          | 132,036           |
| Laidlaw Waste Systems (Celina), Inc.     | 1                 | 20,725           | 20,725            |
| Loxley Aggregates, Inc.                  | 1                 | 1,696            | 1,696             |
| Luburgh Inc.                             | 1                 | 34,500           | 34,500            |
| Andy Nixon Contractors, Inc.             | 1                 | 145              | 145               |
| Nuway Services, Inc.                     | 1                 | 60,650           | 60,650            |
| Patrick Excavating, Inc.                 | 1                 | 2,186            | 2,186             |
| Pine Grove Regional Facility             | 1                 | 33,335           | 33,335            |
| Rumpke Waste, Inc.                       | 1                 | 51,161           | 51,161            |
| Sandkuhl Clay Works, Inc.                | 1                 | 5,554            | 5,554             |
| Joe Simak & Sons Trucking, Inc.          | 1                 | 9,505            | 9,505             |
| Soltis Sand & Gravel                     | 1                 | 728              | 728               |
| Southdown Inc.                           | 1                 | 396              | 396               |
| State Line Resources, Inc.               | 1                 | 77,531           | 77,531            |
| Stone Creek Brick Co.                    | 1                 | 38,420           | 38,420            |
| Tuffco Sand & Gravel, Inc.               | 1                 | 32               | 32                |
| Valley Clay Mining Co.                   | 2                 | 17,467           | 17,467            |
| Waterloo Coal Co., Inc.                  | 1                 | 3,116            | 3,116             |
| Joann O. Weddle                          | 1                 | 89,558           | 89,558            |
| <b>TOTAL: 40 companies</b>               | <b>50</b>         | <b>1,730,151</b> | <b>1,730,172</b>  |

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## CLAY OPERATORS DIRECTORIES

129

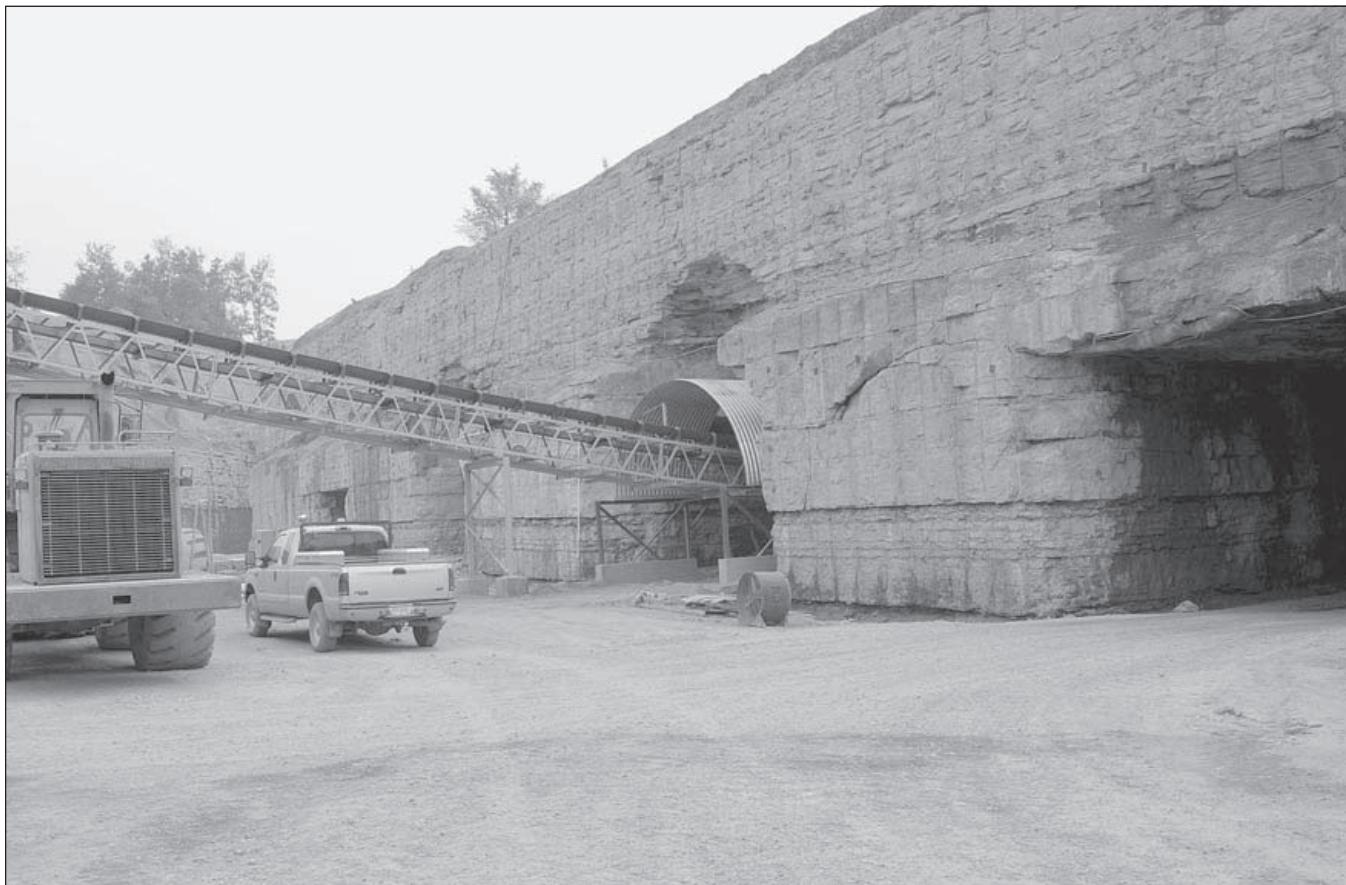
**2001 OHIO DIRECTORY OF CLAY-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY**

*For those mines for which a state mine number has not been assigned, a letter designation is used (example: Cn-B).*

| County     | Name of operator  | Name of mine or quarry  | Township                                     | Geological unit | Principal use  | State mine number                     |
|------------|---|---|--|-----------------|--|---------------------------------------|
| Ashland    | Joe Simak & Sons Trucking, Inc.   | North Ridge Pit   | Kingsville                                   |                 | construction   | Asa-18                                |
| Athens     | Athens Hocking Reclamation Center Cochran Transportation Services, Inc. | Athens Hocking Reclamation Center Circle Hill Sand & Gravel, Inc. | York Dover                                   |                 | well plugging unspecified  | As-594                                |
| Auglaize   | Sandkuhl Clay Works, Inc.   | Sandkuhl Clay Works, Inc.   | Salem  | Pleistocene     | common clay products   | As-595                                |
| Brown      | Rumpke Waste, Inc.  | Rumpke Waste, Inc.  | Pleasant                                     |                 | landfill   | Ae-7                                  |
| Columbiana | Buckeye Industrial Mining Co.   | Clay West Point D. & D. Strip Harvest Sand & Gravel, Inc.         | Madison Madison Unity Salem Middleton        |                 | vitrified products landfill cement manufacture construction common clay products | Bn-W Ca-BIM Ca-987 Ca-348 Ca-H Ca-505 |
| Cuyahoga   | D. & D. Mining Co.  | State Line Resources, Inc.  | Independence                                 |                 | common clay products   | Cya-422                               |
| Fairfield  | Boyas Excavating, Inc.  | Boyas Excavating, Inc.  | Clear Creek, Madison Parkman                 |                 | landfill construction  | Fd-PG Gea-9                           |
| Geauga     | Pine Grove Regional Facility  | Pine Grove Regional Facility                                      | Xenia Bath                                   |                 | unspecified cement manufacture   | Ge-W Ge-8                             |
| Greene     | Soltis Sand & Gravel  | Soltis Sand & Gravel  | Hardy  |                 | common clay products   | Hs-67                                 |
| Holmes     | Joann O. Weddle Southdown Inc.  | Weddle Gravel Miller et al.                                       | Harrison Waterloo Coal Stone Plant-Zoar Mill |                 | unspecified  | Jkn-CH2 Jkn-367                       |
| Jackson    | Holmes Limestone Co.  | 241 Plant   | McKean                                       |                 | common clay products   | Lg-NU Lgn-C                           |
| Licking    | Cedar Heights Clay Co.  | Hopewell Cherokee Run Landfill                                    | Lake, Rush Creek                             |                 | landfill   | Ls-E                                  |
| Logan      | Waterloo Coal Co., Inc.   | Johlin Property Clay Mine   | Oregon                                       |                 | landfill   | Mdn-11                                |
| Lucas      | Nuway Services, Inc.  | Tuffco Sand & Gravel, Inc.  | Darby  |                 | unspecified  |                                       |
| Madison    | Cherokee Run Landfill   | Bessemer Pit Withers-Petersburg Honey Creek Stone Co.             | Poland Springfield Springfield               |                 | cement manufacture refractories unspecified                                      | Mg-608 Mg-631 Mg-54                   |
| Mahoning   | Envirosafe Services of Ohio, Inc.                                       | Johlin Property Clay Mine   | Franklin                                     |                 | landfill   | Mr-C                                  |
| Mercer     | Tuffco Sand & Gravel, Inc.  | Tuffco Sand & Gravel, Inc.  |  |                 | common clay products   | Mum-776                               |
| Muskingum  | ESSROC Cement Corp.   | Bessemer Pit Withers-Petersburg Honey Creek Stone Co.             | Frazeysburg                                  |                 | landfill   | Mum-L Mum-904                         |
|            | East Fairfield Coal Co.   | Laidlaw Waste Systems (Celina), Inc.                              | Laidlaw Waste Systems (Celina), Inc.         |                 | common clay products   | Oa-BF                                 |
|            | Honey Creek Stone Co.   |   | Jackson                                      |                 | landfill   |                                       |
|            | Laidlaw Waste Systems (Celina), Inc.                                    |   | Monroe Newton                                |                 | common clay products   |                                       |
|            | Bowerston Shale Co.   |   | Erie   |                 | landfill   |                                       |
|            | Lubburgh Inc.   |   |  |                 | common clay products   |                                       |
|            | Valley Clay Mining Co.  |   |  |                 | landfill   |                                       |
| Ottawa     | Browning-Ferris Industries of Ohio, Inc.                                | Ottawa County Landfill  |  |                 |  |                                       |
| Paulding   | Lafarge Corp.   | Paulding Quarry   | Crane  |                 | cement manufacture   | Pg-1                                  |

**2001 OHIO DIRECTORY OF CLAY-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)**

| County     | Name of operator   | Name of mine or quarry                         | Township                                      | Geological unit   | Principal use        | State<br>mine<br>number |
|------------|--|--|---|---|----------------------|-------------------------|
| Perry      | Bearcreek Clay Co.<br>Valley Clay Mining Co.                       | Dutch Ridge Rd.<br>Nelson/Common<br>Tague Mine | Monday Creek<br>Clayton<br>Harrison           | Middle Kittanning (Pennsylvanian)<br>Lower Kittanning (Pennsylvanian) | common clay products | Py-338                  |
| Portage    | Patrick Excavating, Inc.   | Patrick  | Charlesstown                                  | construction  | common clay products | Py-D1                   |
| Preble     | Loxley Aggregates, Inc.  | Loxley Aggregates, Inc.                        | Twin  | construction  | common clay products | Py-V                    |
| Stark      | Buckeye Industrial Mining Co.<br>ENZ, Inc.<br>Holmes Limestone Co. | Baird<br>Close<br>Sickafuse Pit<br>Bolivar     | Paris<br>Pike<br>Pike, Sandy<br>Bethlehem     | Pleistocene   | vitrified products   | Pe-P                    |
| Tuscarawas | Belden Brick Co.   | Belden Pit                                     | Sugar Creek                                   | Lower Kittanning (Pennsylvanian)<br>Brookville (Pennsylvanian)        | vitrified products   | Sk-B4                   |
|            |  | Moomaw Pit<br>Shanesville Pit<br>Wallick Pit   | Sugar Creek<br>Sugar Creek<br>Franklin, Wayne | Brookville & Tionesta (Pennsylvanian)<br>Brookville (Pennsylvanian)   | landfill             | Sk-B                    |
|            |  |  |   | Brookville & Lower Kittanning (Pennsylvanian)                         | common clay products | Sk-208                  |
|            |  |  |   | Tionesta (Pennsylvanian)  | common clay products | Sk-235                  |
|            |  |  |   | Brookville & Tionesta (Pennsylvanian)                                 | common clay products | Ts-1646                 |
|            |  |  |   | Brookville & Tionesta (Pennsylvanian)                                 | common clay products | Ts-1517                 |
|            |  |  |   | Brookville & Tionesta (Pennsylvanian)                                 | common clay products | Ts-1939                 |
|            |  |  |   | Brookville & Lower Kittanning (Pennsylvanian)                         | common clay products | Ts-1841                 |
|            |  |  |   | Brookville & Tionesta (Pennsylvanian)                                 | common clay products | Ts-BJ                   |
|            |  |  |   | Brookville & Tionesta (Pennsylvanian)                                 | common clay products | Ts-520                  |
|            |  |  |   | Brookville & Tionesta (Pennsylvanian)                                 | vitrified products   | Ts-1914                 |
|            |  |  |   | #1  | construction         | Ts-1557                 |
| Wayne      | E. A. Construction, Inc.   | #1   | Nixon Pit                                     | Clinton   | construction         | We-BA                   |
| Williams   | Andy Nixon Contractors, Inc.                                       |  |   | Madison   | common clay products | Ws-N                    |



The mine openings at the East Fairfield Coal Co. underground limestone mine in Mahoning County. The entry portal is on the right and the exit portal for the belt carrying aggregate from the mine to the processing plant is on the left.

**2001 SHALE COMPANIES WITH  
SALES OR PRODUCTION**

| Company                               | No. of operations | Sales (tons)     | Production (tons) |
|---------------------------------------|-------------------|------------------|-------------------|
| Barrett Paving Materials, Inc.        | 1                 | 852              | 852               |
| Bearcreek Clay Co.                    | 2                 | 41,710           | 41,710            |
| Belden Brick Co.                      | 4                 | 207,138          | 207,138           |
| Blue Jay Enterprises of Ts. Co., Inc. | 2                 | 9,386            | 9,386             |
| Bowerston Shale Co.                   | 2                 | 51,235           | 51,235            |
| Carlisle Equipment Group L.P.         | 1                 | 12,000           | 12,000            |
| Dome Minerals, Inc.                   | 1                 | 28,253           | 28,253            |
| ESSROC Cement Corp.                   | 1                 | 66,174           | 66,174            |
| Glen-Gery Corp.                       | 1                 | 207,762          | 207,762           |
| Holmes Limestone Co.                  | 2                 | 41,682           | 41,682            |
| Hydraulic Press Brick Co.             | 1                 | 245,658          | 212,358           |
| Janson's Soil Service, Inc.           | 1                 | 200              | 200               |
| Knox County Board of Commissioners    | 1                 | 2,700            | 2,700             |
| L & M Mineral Co.                     | 1                 | 51,242           | 51,242            |
| Richland Moulded Brick Co.            | 1                 | 15,189           | 15,189            |
| Rumpke Mountain Mining Co.            | 1                 | 430,201          | 430,201           |
| Rumpke Waste, Inc.                    | 1                 | 49,113           | 49,113            |
| Samco, Inc.                           | 1                 | 25,000           | 25,000            |
| Sidwell Materials, Inc.               | 1                 | 171              | 171               |
| Stone Creek Brick Co.                 | 1                 | 5,500            | 5,500             |
| Summitville Tiles, Inc.               | 1                 | 36,180           | 36,180            |
| Towne Square Products                 | 1                 | 160              | 160               |
| Walhonding Sand & Gravel              | 1                 | 561              | 561               |
| <b>TOTAL: 23 companies</b>            | <b>30</b>         | <b>1,528,067</b> | <b>1,494,767</b>  |

# 2001 OHIO DIRECTORY OF SHALE-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

*For those mines for which a state mine number has not been assigned, a letter designation is used (example: Kx-K).*

**USER HINT:**

To rotate this page use the "View" menu or the rotate buttons in the tool bar above.



## SHALE OPERATORS DIRECTORIES

133

| County              | Name of operator  | Name of mine  | Township             | Geological unit                               | Principal use                      | State mine number |
|---------------------|---|---|----------------------|---|------------------------------------|-------------------|
| Ashtabula           | Janson's Soil Service, Inc.                               | Janson's Soil Service, Inc.                         | Morgan               |   | lightweight aggregate construction | Asa-14            |
| Belmont             | Sidwell Materials, Inc.                                   | Bellaire Stone                                      | Pultney              | Pennsylvanian                                 | landfill                           | Bt-1190           |
| Brown               | Rumpke Waste, Inc.  | Rumpke Waste, Inc.                                  | Pleasant             | upper Ordovician                              | common clay products               | Bn-W              |
| Columbiana          | Summitville Tiles, Inc.                                   | Summitville Tiles, Inc.                             | Franklin             | brick pavers                                  | Ca-205                             | Ca-947            |
| Dome Minerals, Inc. | Dome Minerals, Inc.                                       | Franklin  |                      |   | lightweight aggregate              | Cn-WL             |
| Coshocton           | Walhonding Sand & Gravel                                  | Walhonding Valley Sand & Gravel                     | New Castle           | Chagrin (Devonian)                            | lightweight aggregate              | Cya-19            |
| Cuyahoga            | Hydraulic Press Brick Co.                                 | Hydraulic Press Brick Co.                           | Independence         | upper Ordovician                              | landfill                           | Hmn-72<br>Hmn-CE  |
| Hamilton            | Rumpke Mountain Mining Co., Carlisle Equipment Group L.P. | Rumpke Mountain Mining Co., Landmark Baptist Temple | Colerain Springfield | Coremaugh Group (Pennsylvanian)               | construction                       | Hn-152            |
| Harrison            | Bowerston Shale Co.                                       | Bowerston   | Monroe               | Pennsylvanian                                 | common clay products               | Hs-67             |
| Holmes              | Holmes Limestone Co.                                      | 241 Plant   | Hardy                | Common  | common clay products               | Kx-K              |
| Knox                | Knox County Board of Commissioners                        | Apple Valley  | Brown                | Common  | landfill                           | Lg-501            |
| Licking             | Bowerston Shale Co.                                       | Hanover   | Hanover              | Logan Formation (Mississippian)               | common clay products               | Ls-12             |
| Lucas               | Barrett Paving Materials, Inc.                            | Sylvania Quarry                                     | Sylvania             | Silica Formation (Devonian)                   | construction                       | Mg-608            |
| Mahoning            | ESSROC Cement Corp.                                       | Bessemer Pit  | Poland               | Pennsylvanian                                 | cement manufacture                 | Mn-7              |
| Marion              | Glen-Gery Corp.   | Iberia Quarry                                       | Tully                | Bedford (Mississippian)                       | common clay products               | Ne-66             |
| Noble               | Towne Square Products                                     | Towne Square Products                               | Buffalo              | Monday Creek                                  | common clay products               | Py-338            |
| Perry               | Bearcreek Clay Co.  | Dutch Ridge Rd.                                     | Clayton              | Middle Kittanning (Pennsylvanian)             | common clay products               | Py-D1             |
| Richland            | Richland Moulded Brick Co.                                | Richland Moulded Brick Co.                          | Franklin, Weller     | Cuyahoga Formation (Mississippian)            | common clay products               | Rd-R              |
| Trumbull            | Samco, Inc.   | Springbrook   | Mesopotamia          | Brookville & Tionesta (Pennsylvanian)         | lightweight aggregate              | Tl-12             |
| Tuscarawas          | Belden Brick Co.  | Moomaw Pit  | Sugar Creek          | Pennsylvanian                                 | common clay products,              | Ts-1517           |
|                     |   | Belden Pit  | Sugar Creek          | Brookville & Lower Kittanning (Pennsylvanian) | landfill                           | Ts-1646           |
|                     |   | Wallick Pit   | Franklin, Wayne      | Brookville (Pennsylvanian)                    | common clay products,              | Ts-1841           |
|                     |   | Shanesville Pit                                     | Sugar Creek          | Brookville & Tionesta (Pennsylvanian)         | landfill                           | Ts-1939           |
|                     |   |   | Sandy                | Brookville & Tionesta (Pennsylvanian)         | common clay products               | Ts-520            |
|                     |   |   | Sandy                | Blue Jay #1                                   | common clay products               | Ts-BJ             |
|                     |   |   | Rush                 | L&M Rainsburg                                 | common clay products               | Ts-H1             |
|                     |   |   | Rush                 | Evans, Heil                                   | common clay products               | Ts-1884           |
|                     |   |   | Jefferson            | Stone Creek Brick Shale Pit                   | vitrified products                 | Ts-1558           |

**2001 OHIO DIRECTORY OF SALT-MINE AND SALT-BRINING-PLANT OPERATORS  
REPORTING SALES OR PRODUCTION, BY COUNTY**

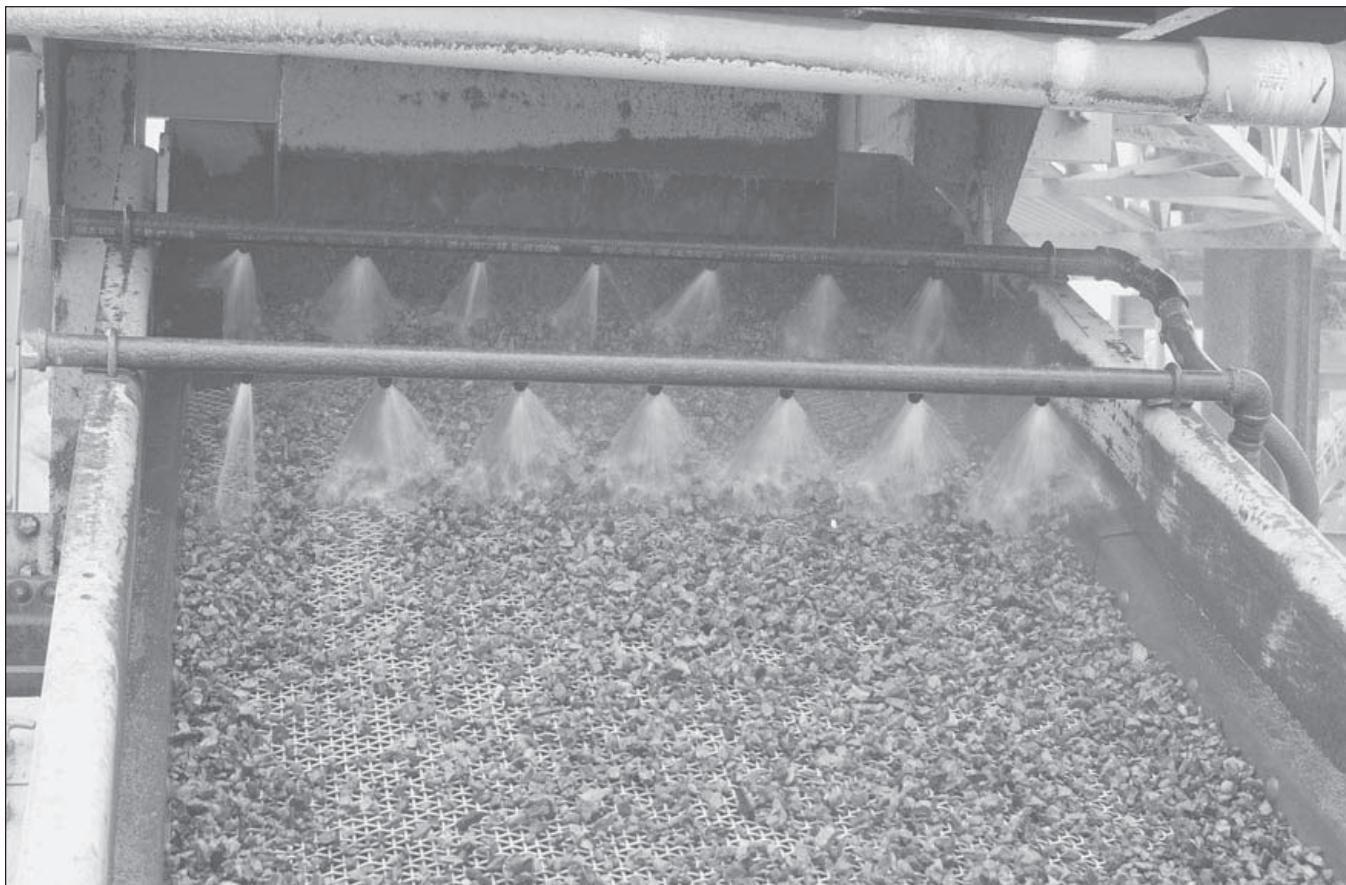
| County   | Name of operator           | Name of mine           | Township          | Geological unit and product        | State mine number |
|----------|----------------------------|------------------------|-------------------|------------------------------------|-------------------|
| Cuyahoga | Cargill Incorporated       | Cargill Salt, Inc.     | City of Cleveland | Salina (Silurian)—rock salt        | Cya-30            |
| Lake     | Morton International, Inc. | Fairport Mine          | Painesville       | Salina (Silurian)—rock salt        | Lke-6             |
| Licking  | R. H. Penick Co.           | R. H. Penick Co.       | Newark            | “Newburg” (Silurian)—natural brine | Lg-45             |
| Summit   | Cargill Incorporated       | Cargill Incorporated   | Coventry          | Salina (Silurian)—artificial brine | St-9127           |
| Wayne    | Morton International, Inc. | Morton Salt Well Field | Milton            | Salina (Silurian)—artificial brine | We-9129           |

**2001 OHIO DIRECTORY OF GYPSUM-MINE OPERATORS  
REPORTING SALES OR PRODUCTION**

| County | Name of operator | Name of mine | Township | Geological unit | State mine number |
|--------|------------------|--------------|----------|-----------------|-------------------|
| Ottawa | BPB-Celotex      | American #2  | Portage  | Silurian        | Oa-2              |

**2001 OHIO DIRECTORY OF PEAT-MINE OPERATORS  
REPORTING SALES OR PRODUCTION, BY COUNTY**

| County | Name of operator | Name of mine                        | Township | Type and principal use | State mine number |
|--------|------------------|-------------------------------------|----------|------------------------|-------------------|
|        |                  | No peat sales or production in 2001 |          |                        |                   |



Size no. 8 ( $\frac{3}{32}$  inch to  $\frac{3}{8}$  inch) aggregate is washed on the secondary screen at the East Fairfield Coal Co. processing plant in Mahoning County. The no. 8's are double washed to assure quality in the final product.

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**COAL ● ○**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                      |
|---------------------|----------------------|--------------------------|---|--|
| 3                   | Belmont              | Bt-68                    | D-0360  | Ohio Valley Coal Co.                         |
| 27                  | Belmont              | Bt-1074                  | D-0340  | Ohio River Collieries, Inc.                  |
| 57                  | Belmont              | Bt-P                     | D-0500  | Marietta Coal Co.                            |
| 150                 | Harrison             | Hn-700                   | D-51, D-54, D-334, D-414, D-784                               | CONSOL Energy, Inc.                          |
| 165                 | Jackson              | Jkn-367                  | D-0594, D-968, D-1083, D-1167,<br>D- 2059                     | Waterloo Coal Co., Inc.                      |
| 213                 | Meigs                | Ms-294                   | D-0355  | Southern Ohio Coal Co., CONSOL Energy, Inc.  |
| 228                 | Morgan, Noble        | Ne-41                    | D-0678, D-1034, D-1084, D-2047                                | Central Ohio Coal Co., CONSOL Energy, Inc.   |
| 246                 | Stark                | Sk-208                   | D-1015  | ENZ, Inc.                                    |
| 261                 | Tuscarawas           | Ts-1646                  | IM-44   | Belden Brick Co.                             |
| 262                 | Tuscarawas           | Ts-1727                  | IM-9  | Kimble Clay & Limestone Co.                  |
| 267                 | Tuscarawas           | Ts-1914                  | D-0701  | L & M Mineral Co.                            |
| 300                 | Meigs                | Ms-293                   | D-0354, D-0463  | Southern Ohio Coal Co., CONSOL Energy, Inc.  |
| 357                 | Vinton               | Vn-172                   | D-0445  | Waterloo Coal Co., Inc.                      |
| 363                 | Stark                | Sk-235                   | D-0865  | Holmes Limestone Co.                         |
| 420                 | Vinton               | Vn-184                   | D-0609  | Waterloo Coal Co., Inc.                      |
| 424                 | Belmont              | Bt-1150                  | D-0478, D-0597  | Marietta Coal Co.                            |
| 441                 | Columbiana           | Ca-348                   | D-1002  | D. & D. Mining Co.                           |
| 493                 | Washington           | Ne-1008                  | D-0706  | B & N Coal, Inc.                             |
| 514                 | Noble                | Ne-151                   | D-0807  | B & N Coal, Inc.                             |
| 567                 | Belmont              | Bt-1186                  | D-0877  | Oxford Mining Co., Inc.                      |
| 580                 | Harrison             | Hn-710                   | D-0426  | Harrison Mining Corp., AEP Ohio Coal, L.L.C. |
| 598                 | Tuscarawas           | Ts-2019                  | D-0852  | Kimble Clay & Limestone Co.                  |
| 602                 | Vinton               | Vn-191                   | D-0867, D-0957, D-1004  | Waterloo Coal Co., Inc.                      |
| 603                 | Belmont              | Bt-1190                  | IM-1089, D-1061   | Sidwell Materials, Inc.                      |
| 625                 | Mahoning             | Mg-608                   | IM-4  | ESSROC Cement Corp.                          |
| 627                 | Noble                | Ne-155                   | D-0958  | B & N Coal, Inc.                             |
| 657                 | Jefferson            | Jfn-823                  | D-0949  | Sterling Mining Co.                          |
| 667                 | Tuscarawas           | Ts-1517                  | IM-46   | Belden Brick Co.                             |
| 683                 | Belmont              | Bt-B                     | D-0998  | Sidwell Materials, Inc.                      |
| 696                 | Guernsey             | Gy-318                   | D-1025  | Valley Mining, Inc.                          |
| 709                 | Jefferson            | Jfn-831                  | D-1026  | Valley Mining, Inc.                          |
| 720                 | Tuscarawas           | Ts-1841                  | IM-45   | Belden Brick Co.                             |
| 723                 | Tuscarawas           | Ts-2043                  | D-1047  | Holmes Limestone Co.                         |
| 732                 | Belmont              | Bt-VM                    | D-1059  | Valley Mining, Inc.                          |
| 758                 | Jefferson            | Jfn-ST                   | D-1019  | Sterling Mining Co.                          |
| 760                 | Noble                | Ne-BN                    | D-1038  | B & N Coal, Inc.                             |
| 764                 | Perry                | Py-O                     | D-1086  | Oxford Mining Co., Inc.                      |
| 784                 | Tuscarawas           | Ts-K4                    | D-1079  | Kimble Clay & Limestone Co.                  |
| 787                 | Gallia               | Ga-629                   | D-1095  | Sands Hill Coal Co., Inc.                    |
| 790                 | Columbiana           | Ca-1003                  | D-0928  | Buckeye Industrial Mining Co.                |
| 795                 | Harrison             | Hn-767                   | D-1124  | Schiappa Coal Co., Inc.                      |
| 796                 | Jefferson            | Jfn-K                    | IM-1164   | K.C.C.I.                                     |
| 799                 | Noble                | Ne-BN2                   | D-1122  | B & N Coal, Inc.                             |
| 802                 | Stark                | Sk-B                     | D-1123  | Buckeye Industrial Mining Co.                |
| 810                 | Belmont              | Bt-1171                  | D-0674  | Marietta Coal Co.                            |
| 812                 | Belmont              | Bt-M4                    | D-1135  | Marietta Coal Co.                            |
| 825                 | Jackson              | Jkn-S3                   | D-1137  | Sands Hill Coal Co., Inc.                    |
| 826                 | Jefferson            | Jfn-FM                   | D-1147  | F. & M. Coal Co.                             |
| 828                 | Tuscarawas           | Ts-BJ                    | IM-1285   | Blue Jay Enterprises of Ts. Co., Inc.        |
| 830                 | Tuscarawas           | Ts-K5                    | D-1133  | Kimble Clay & Limestone Co.                  |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**COAL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>       |
|---------------------|----------------------|--------------------------|---|-------------------------------|
| 832                 | Belmont              | Bt-BE                    | D-1159  | Bennoc, Inc.                  |
| 833                 | Belmont              | Bt-M7                    | D-1171  | Marietta Coal Co.             |
| 841                 | Holmes               | Hs-H1                    | D-1176  | Holmes Limestone Co.          |
| 843                 | Jackson, Vinton      | Jkn-S2                   | D-1087  | Sands Hill Coal Co., Inc.     |
| 844                 | Jefferson            | Jfn-AN                   | D-1173  | Anthony Mining Co., Inc.      |
| 846                 | Mahoning             | Mg-E                     | IM-1103   | East Fairfield Coal Co.       |
| 850                 | Tuscarawas           | Ts-H4                    | D-1149  | Holmes Limestone Co.          |
| 851                 | Athens               | As-B                     | D-1163  | Buckingham Coal Co., Inc.     |
| 852                 | Belmont              | Bt-M8                    | D-1190  | Marietta Coal Co.             |
| 854                 | Carroll              | Cl-M2                    | D-2014  | Myers Mining                  |
| 855                 | Columbiana           | Ca-505                   | IM-13, IM-936   | State Line Resources, Inc.    |
| 856                 | Columbiana           | Ca-B1                    | D-2003  | Buckeye Industrial Mining Co. |
| 860                 | Harrison             | Hn-D                     | D-1181  | Daron Coal Co., Inc.          |
| 861                 | Harrison             | Hn-SM                    | D-1186  | Schaney Mining                |
| 862                 | Jackson              | Jkn-S4                   | D-2009  | Sands Hill Coal Co., Inc.     |
| 863                 | Jefferson            | Jfn-V2                   | D-1185  | Varkony Mining Co.            |
| 864                 | Mahoning             | Mg-T                     | D-1168  | Thompson Bros. Mining Co.     |
| 866                 | Noble                | Ne-BN3                   | D-1194  | B & N Coal, Inc.              |
| 868                 | Tuscarawas           | Ts-K6                    | D-1183  | Kimble Clay & Limestone Co.   |
| 869                 | Vinton               | Vn-S2                    | D-1193  | Sands Hill Coal Co., Inc.     |
| 870                 | Belmont              | Bt-M9                    | D-2075  | Marietta Coal Co.             |
| 871                 | Belmont              | Bt-MC                    | D-2055  | Marietta Coal Co.             |
| 872                 | Belmont              | Bt-MC1                   | D-2077  | Marietta Coal Co.             |
| 873                 | Carroll              | Cl-S                     | D-2070  | Sterling Mining Co.           |
| 874                 | Coshcocton           | Cn-HL1                   | D-2019  | Holmes Limestone Co.          |
| 875                 | Gallia               | Ga-SH                    | D-2018  | Sands Hill Coal Co., Inc.     |
| 876                 | Jefferson            | Jfn-BI                   | D-1180  | Buckeye Industrial Mining Co. |
| 877                 | Stark                | Sk-B2                    | D-2048  | Buckeye Industrial Mining Co. |
| 878                 | Stark                | Sk-B3                    | D-2062  | Buckeye Industrial Mining Co. |
| 879                 | Stark                | Sk-H1                    | D-2011  | Holmes Limestone Co.          |
| 880                 | Tuscarawas           | Ts-F                     | D-1189  | Franklin Mineral              |
| 881                 | Tuscarawas           | Ts-H5                    | D-0533  | Holmes Limestone Co.          |
| 883                 | Vinton               | Vn-S3                    | D-2058  | Sands Hill Coal Co., Inc.     |
| 884                 | Belmont              | Bt-C2                    | D-2028  | Cravat Coal Co.               |
| 885                 | Belmont              | Bt-OX                    | D-0676  | Oxford Mining Co., Inc.       |
| 886                 | Harrison             | Hn-OX                    | D-2022  | Oxford Mining Co., Inc.       |
| 887                 | Muskingum            | Mum-OX                   | D-1196  | Oxford Mining Co., Inc.       |
| 888                 | Tuscarawas           | Ts-H6                    | D-1188  | Kimble Clay & Limestone Co.   |
| 889                 | Tuscarawas           | Ts-V2                    | D-2013  | Valley Mining, Inc.           |
| 890                 | Belmont              | Bt-67                    | D-0425  | American Energy Corp.         |
| 891                 | Belmont              | Bt-C3                    | D-2087  | Cravat Coal Co.               |
| 892                 | Belmont              | Bt-M10                   | D-2124  | Marietta Coal Co.             |
| 893                 | Belmont              | Bt-OX1                   | D-0680  | Oxford Mining Co., Inc.       |
| 894                 | Belmont              | Bt-OX2                   | D-2122  | Oxford Mining Co., Inc.       |
| 895                 | Columbiana           | Ca-CE2                   | D-2097  | C & E Coal, Inc.              |
| 896                 | Columbiana           | Ca-S1                    | D-2063  | State Line Resources, Inc.    |
| 897                 | Carroll              | Cl-B2                    | D-2103  | Buckeye Industrial Mining Co. |
| 898                 | Coshcocton           | Cn-H2                    | D-2115  | Holmes Limestone Co.          |
| 899                 | Harrison             | Hn-CON                   | D-2100  | CONSOL Energy, Inc.           |
| 900                 | Harrison             | Hn-C4                    | D-2131  | Cravat Coal Co.               |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**COAL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                        |
|---------------------|----------------------|--------------------------|---|--|
| 901                 | Belmont, Harrison    | Hn-O                     | D-2121  | Oxford Mining Co., Inc.                        |
| 902                 | Harrison             | Hn-SC                    | D-1151  | Schaney Mining                                 |
| 903                 | Jefferson            | Jfn-C                    | D-2095  | Cravat Coal Co.                                |
| 904                 | Jefferson            | Jfn-V1                   | D-1156  | Valley Mining, Inc.                            |
| 905                 | Muskingum            | Mum-OX1                  | D-2008  | Oxford Mining Co., Inc.                        |
| 906                 | Muskingum            | Mum-OX2                  | D-2110  | Oxford Mining Co., Inc.                        |
| 907                 | Stark                | Sk-B5                    | D-2096  | Buckeye Industrial Mining Co.                  |
| 908                 | Stark                | Sk-B6                    | D-2129  | Buckeye Industrial Mining Co.                  |
| 909                 | Tuscarawas           | Ts-K7                    | D-2079  | Kimble Clay & Limestone Co.                    |
| 910                 | Tuscarawas           | Ts-M                     | D-2066  | Marietta Coal Co., Kimble Clay & Limestone Co. |
| 911                 | Vinton               | Vn-S4                    | D-2114  | Sands Hill Coal Co., Inc.                      |

**COAL-PREPARATION PLANTS** •

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                          |
|---------------------|----------------------|--------------------------|---|--|
| 3                   | Belmont              | Bt-936                   | D-0216  | Marietta Coal Co.                                |
| 4                   | Belmont              | Bt-68                    | D-0360  | Ohio Valley Coal Co.                             |
| 5                   | Columbiana           | Ca-879                   | D-0806  | Buckeye Industrial Mining Co.                    |
| 7                   | Coshocton            | Cn-810                   | D-0599  | Conesville Coal Preparation Co.                  |
| 10                  | Jackson              | Jkn-367                  | D-0285  | Waterloo Coal Co., Inc.                          |
| 14                  | Meigs                | Ms-293                   | D-0354  | Southern Ohio Coal Co., CONSOL Energy, Inc.      |
| 16                  | Morgan               | Ne-41                    | D-0420  | Central Ohio Coal Co., CONSOL Energy, Inc.       |
| 20                  | Tuscarawas           | Ts-1938                  | D-0264  | Central Fuel Co.                                 |
| 21                  | Tuscarawas           | Ts-1942                  | D-0287  | Holmes Limestone Co.                             |
| 24                  | Vinton               | Vn-641                   | D-0169  | Sands Hill Coal Co., Inc.                        |
| 30                  | Harrison             | Hn-169                   | D-0424  | Harrison Processing Corp., AEP Ohio Coal, L.L.C. |
| 32                  | Tuscarawas           | Ts-HC                    | D-0981  | Holmes Limestone Co.                             |
| 33                  | Columbiana           | Ca-505                   | D-0223  | State Line Resources, Inc.                       |

**LIMESTONE/DOLOMITE** ■

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>       |
|---------------------|----------------------|--------------------------|---|-------------------------------|
| 1                   | Adams                | Ads-1                    | IM-237  | Hanson Aggregates Davon, Inc. |
| 3                   | Allen                | An-1                     | IM-485  | Bluffton Stone Co.            |
| 5                   | Allen                | An-3                     | IM-484  | National Lime & Stone Co.     |
| 7                   | Allen                | An-4                     | IM-491  | Suever Stone Co., Inc.        |
| 9                   | Athens               | As-533                   | IM-17   | Waterloo Coal Co., Inc.       |
| 10                  | Auglaize             | Ae-31                    | IM-744  | Con-Ag, Inc.                  |
| 11                  | Auglaize             | Ae-10                    | IM-486  | National Lime & Stone Co.     |
| 12                  | Belmont              | Bt-716                   | IM-1  | Ayers Limestone Quarry, Inc.  |
| 17                  | Clinton              | Cln-1                    | IM-241  | The Melvin Stone Co., LLC     |
| 18                  | Crawford             | Cd-1                     | IM-404  | National Lime & Stone Co.     |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**LIMESTONE/DOLOMITE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                                    |
|---------------------|----------------------|--------------------------|---|--|
| 19                  | Darke                | Dke-1                    | IM-362  | Martin Marietta Aggregates                                 |
| 20                  | Delaware             | Del-4                    | IM-262  | Martin Marietta Aggregates                                 |
| 21                  | Delaware             | Del-5                    | IM-207  | National Lime & Stone Co.                                  |
| 22                  | Delaware             | Del-3                    | IM-327  | Martin Marietta Aggregates                                 |
| 23                  | Delaware             | Del-2                    | IM-299  | Martin Marietta Aggregates                                 |
| 24                  | Erie                 | Ee-27                    | IM-608  | Erie Blacktop, Inc.  |
| 25                  | Erie                 | Ee-11                    | IM-263  | Hanson Aggregates Midwest, Inc.                            |
| 26                  | Erie                 | Ee-1                     | IM-310  | Wagner Quarries Co.  |
| 27                  | Fayette              | Fe-2                     | IM-169  | Martin Marietta Aggregates                                 |
| 28                  | Fayette              | Fe-1                     | IM-831  | The Melvin Stone Co., LLC                                  |
| 30                  | Franklin             | Fn-2                     | IM-261  | Martin Marietta Aggregates                                 |
| 31                  | Franklin             | Fn-53                    | IM-185  | Martin Marietta Aggregates                                 |
| 32                  | Greene               | Ge-17                    | IM-435  | Martin Marietta Aggregates                                 |
| 34                  | Greene               | Ge-9                     | IM-364  | Southdown Inc.   |
| 38                  | Hardin               | Hdn-2                    | IM-443  | Shelly Materials, Inc.                                     |
| 41                  | Highland             | Hd-2                     | IM-230  | Hanson Aggregates Davon, Inc.                              |
| 42                  | Highland             | Hd-3                     | IM-253  | Ohio Asphaltic Limestone Corp.                             |
| 43                  | Highland             | Hd-4                     | IM-406  | Marshall Quarry, Inc.                                      |
| 44                  | Holmes               | Hs-67                    | IM-3, IM-768  | Holmes Limestone Co.                                       |
| 47                  | Jackson              | Jkn-367                  | D-594, D-968, D-1083  | Waterloo Coal Co., Inc.                                    |
| 49                  | Logan                | Lgn-1                    | IM-574  | Martin Marietta Aggregates                                 |
| 50                  | Logan                | Lgn-15                   | IM-453  | C. E. Duff & Son, Inc.                                     |
| 51                  | Logan                | Lgn-2                    | IM-494  | Shelly Materials, Inc.                                     |
| 52                  | Lucas                | Ls-1                     | IM-575  | Hanson Aggregates Midwest, Inc.                            |
| 53                  | Lucas                | Ls-3                     | IM-580  | Hanson Aggregates Midwest, Inc.                            |
| 54                  | Lucas                | Ls-2                     | IM-503  | Stoneco, Inc.  |
| 56                  | Mahoning             | Mg-54                    | IM-93   | Honey Creek Stone Co.                                      |
| 57                  | Mahoning             | Mg-608                   | IM-4  | ESSROC Cement Corp.  |
| 59                  | Marion               | Mn-2                     | IM-423  | J. M. Hamilton & Sons Co., Inc., National Lime & Stone Co. |
| 60                  | Marion               | Mn-3                     | IM-168  | National Lime & Stone Co.                                  |
| 61                  | Marion               | Mn-1                     | IM-250  | Shelly Materials, Inc.                                     |
| 62                  | Mercer               | Mr-1                     | IM-592  | Stoneco, Inc.  |
| 63                  | Mercer               | Mr-2                     | IM-430  | Morrow Gravel Co.  |
| 64                  | Miami                | Mi-1                     | IM-382  | Piqua Materials, Inc.                                      |
| 66                  | Miami                | Mi-502                   | IM-414  | Barrett Paving Materials, Inc.                             |
| 67                  | Miami                | Mi-10                    | IM-335  | C. F. Poeppelman, Inc.                                     |
| 70                  | Montgomery           | My-1                     | IM-374  | Martin Marietta Aggregates                                 |
| 71                  | Montgomery           | My-23                    | IM-368  | Martin Marietta Aggregates                                 |
| 72                  | Montgomery           | My-58                    | IM-330  | Southdown Inc.   |
| 73                  | Morgan               | Mon-600                  | D-1034  | Central Ohio Coal Co.                                      |
| 75                  | Muskingum            | Mum-106                  | IM-297  | Chesterhill Stone Co.                                      |
| 78                  | Muskingum            | Mum-104                  | IM-277  | Sidwell Materials, Inc.                                    |
| 80                  | Noble                | Ne-86                    | IM-70   | Zerger's Quarry  |
| 82                  | Ottawa               | Oa-6                     | IM-296  | White Rock Quarry, LCC                                     |
| 83                  | Ottawa               | Oa-14                    | IM-320  | Stoneco, Inc.  |
| 84                  | Ottawa               | Oa-7                     | IM-440  | Lafarge North America                                      |
| 85                  | Ottawa               | Oa-1, Oa-1A              | IM-292  | Graymont Dolime (OH) Inc., Stansley Mineral Resources      |
| 86                  | Paulding             | Pg-7                     |   | Hanson Aggregates Midwest, Inc.                            |
| 87                  | Paulding             | Pg-1                     | IM-513  | Lafarge Corp.  |
| 88                  | Paulding             | Pg-2                     | IM-481  | Stoneco, Inc.  |
| 89                  | Perry                | Py-235                   | IM-515  | Maxville Quarries, Inc.                                    |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**LIMESTONE/DOLOMITE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                    |
|---------------------|----------------------|--------------------------|---|--|
| 91                  | Pike                 | Pke-13                   | IM-213  | Latham Limestone, Inc.                     |
| 92                  | Pickaway             | Pky-4                    | IM-209  | The Melvin Stone Co., LLC                  |
| 95                  | Preble               | Pre-5                    | IM-447  | Wysong Stone Co.                           |
| 98                  | Putnam               | Pm-2                     | IM-570  | Putnam Stone Co.                           |
| 101                 | Sandusky             | Sy-5                     | IM-0259   | Precision Aggregates III, LLC              |
| 102                 | Sandusky             | Sy-1                     | IM-537  | Martin Marietta Magnesia Specialties, Inc. |
| 103                 | Sandusky             | Sy-4                     | IM-381  | Millersville Lime Inc.                     |
| 104                 | Sandusky             | Sy-3                     | IM-282  | Millersville Lime Inc.                     |
| 106                 | Seneca               | Sa-2                     | IM-352  | Carmeuse Ohio Inc.                         |
| 107                 | Seneca               | Sa-1                     | IM-347  | Hanson Aggregates Midwest, Inc.            |
| 108                 | Seneca               | Sa-3                     | IM-349  | Hanson Aggregates Midwest, Inc.            |
| 109                 | Seneca               | Sa-8                     | IM-313  | North Shore Stone Quarries, Inc.           |
| 110                 | Shelby               | Shy-17                   | IM-389  | Miami River Stone Co.                      |
| 111                 | Shelby               | Shy-16                   | IM-411  | Miami River Stone Co.                      |
| 112                 | Shelby               | Shy-15                   | IM-387  | Barrett Paving Materials, Inc.             |
| 117                 | Tuscarawas           | Ts-1818                  | IM-9  | Kimble Clay & Limestone Co.                |
| 119                 | Union                | Un-1                     | IM-208  | Shelly Materials, Inc.                     |
| 120                 | Union                | Un-2                     | IM-236  | Shelly Materials, Inc.                     |
| 121                 | Van Wert             | Vt-3                     | IM-495  | Stoneco, Inc.                              |
| 122                 | Van Wert             | Vt-7                     | IM-642  | Ridge Township Quarry                      |
| 123                 | Van Wert             | Vt-1                     | IM-500  | Suever Stone Co., Inc.                     |
| 129                 | Wood                 | Wd-5                     | IM-473  | Custar Stone Co.                           |
| 130                 | Wood                 | Wd-1                     | IM-548  | MacRitchie Materials, Inc.                 |
| 131                 | Wood                 | Wd-6                     | IM-480  | Stoneco, Inc.                              |
| 132                 | Wood                 | Wd-11                    | IM-475  | Stoneco, Inc.                              |
| 133                 | Wyandot              | Wt-3                     | IM-298  | McCarthy Stone Quarry, Olen Corp.          |
| 134                 | Wyandot              | Wt-1                     | IM-405  | National Lime & Stone Co.                  |
| 135                 | Wyandot              | Wt-8                     | IM-273  | Wyandot Dolomite, Inc.                     |
| 147                 | Guernsey, Muskingum  | Gy-309                   | IM-1030   | King Limestone, Inc.                       |
| 148                 | Vinton               | Vn-190                   | D-0761  | Quality Stone Co.                          |
| 149                 | Hancock              | Hk-7                     | IM-1002   | National Lime & Stone Co.                  |
| 152                 | Belmont              | Bt-1190                  | IM-1089   | Sidwell Materials, Inc.                    |
| 154                 | Franklin             | Fn-43                    | IM-188  | Olen Corp.                                 |
| 156                 | Hardin               | Hdn-S                    | IM-1034   | C. E. Duff & Son, Inc.                     |
| 159                 | Lawrence             | Le-B                     | IM-1188, D-0746   | Belville Mining Co., Inc.                  |
| 160                 | Lucas                | Ls-12                    | IM-953  | Barrett Paving Materials, Inc.             |
| 162                 | Mahoning             | Mg-EM                    | IM-1056   | ESSROC Cement Corp.                        |
| 163                 | Monroe               | Me-C                     | IM-1088   | Christman Quarry                           |
| 164                 | Monroe               | Me-509                   | IM-1094   | Rubel Quarry, Inc.                         |
| 167                 | Noble                | Ne-S                     | IM-913  | Sharon Stone Co.                           |
| 168                 | Perry                | Py-343                   | IM-1061   | Maxville Quarries, Inc.                    |
| 170                 | Tuscarawas           | Ts-1982                  | IM-621  | L & M Mineral Co.                          |
| 171                 | Mahoning             | Mg-631                   | IM-1103   | East Fairfield Coal Co.                    |
| 173                 | Adams                | Ads-H                    | IM-805  | Waterland Trucking Service, Inc.           |
| 174                 | Erie                 | Ee-K                     | IM-727  | Kellstone, Inc.                            |
| 175                 | Highland             | Hd-M                     | IM-1170   | Martin Marietta Aggregates                 |
| 176                 | Jefferson            | Jfn-K                    | IM-1164   | K.C.C.I.                                   |
| 177                 | Miami                | Mi-BPM                   | IM-1169   | Barrett Paving Materials, Inc.             |
| 178                 | Montgomery           | My-Q                     | IM-860  | Quarry Trails                              |
| 179                 | Noble                | Ne-B                     | IM-897  | B & N Coal, Inc.                           |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**LIMESTONE/DOLOMITE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                               |
|---------------------|----------------------|--------------------------|---|---|
| 180                 | Ottawa               | Oa-18                    | IM-635  | Fox Stone Products, Inc.                              |
| 181                 | Tuscarawas           | Ts-B                     | IM-49   | Belden Brick Co.                                      |
| 182                 | Vinton               | Vn-193                   |   | Quality Stone Co.                                     |
| 183                 | Wood                 | Wd-14                    | IM-1157   | Precision Aggregate, Inc.                             |
| 184                 | Brown                | Bn-EC                    | IM-1195   | Hanson Aggregates Davon, Inc.                         |
| 185                 | Muskingum            | Mum-907                  | IM-1200   | Pleasant Valley Limestone                             |
| 186                 | Muskingum            | Mum-SB                   | IM-1212, IM-1269  | Sidwell Materials, Inc.                               |
| 187                 | Tuscarawas           | Ts-1517                  | IM-46   | Belden Brick Co.                                      |
| 188                 | Lucas                | Ls-13                    | IM-492  | Seaway Sand & Stone, Inc.                             |
| 191                 | Tuscarawas           | Ts-BB                    | IM-1221   | Belden Brick Co.                                      |
| 192                 | Columbiana           | Ca-BIM                   | IM-1271   | Buckeye Industrial Mining Co.                         |
| 194                 | Noble                | Ne-K                     | IM-1254   | King Quarries, Inc.                                   |
| 195                 | Belmont              | Bt-N                     | IM-1283   | Sidwell Materials, Inc.                               |
| 196                 | Hancock              | Hk-A                     | IM-1299   | National Lime & Stone Co., Stansley Mineral Resources |
| 197                 | Noble                | Ne-K1                    | IM-1292   | King Quarries, Inc.                                   |
| 198                 | Ottawa               | Oa-BC                    | IM-1288   | Baycliffs Corp.                                       |
| 199                 | Ross                 | Rs-MC1                   | IM-1298   | The Melvin Stone Co., LLC                             |
| 200                 | Tuscarawas           | Ts-BJ                    | IM-1285   | Blue Jay Enterprises of Ts. Co., Inc.                 |
| 201                 | Belmont              | Bt-B                     | D-998   | Sidwell Materials, Inc.                               |
| 202                 | Greene               | Ge-8                     | IM-364  | Southdown Inc.  |
| 203                 | Muskingum            | Mum-SD                   | IM-1313   | Sidco Development, Inc.                               |
| 205                 | Stark                | Sk-208                   | D-1015  | ENZ, Inc.   |
| 206                 | Tuscarawas           | Ts-1939                  | IM-47   | Belden Brick Co.                                      |
| 207                 | Tuscarawas           | Ts-520                   | IM-214  | Blue Jay Enterprises of Ts. Co., Inc.                 |
| 209                 | Tuscarawas           | Ts-1646                  | IM-44   | Belden Brick Co.                                      |
| 210                 | Carroll              | Cl-TC                    | IM-1319   | TCNC Industries, Inc.                                 |
| 211                 | Hamilton             | Hmn-GR                   | IM-1363   | Gray Road Fill, Inc.                                  |
| 212                 | Mahoning             | Mg-L                     | IM-1353   | Lafarge North America                                 |
| 213                 | Shelby               | Shy-SC1                  | IM-2017   | Barrett Paving Materials, Inc.                        |
| 214                 | Tuscarawas           | Ts-S2                    | IM-1356   | Sidco Development, Inc.                               |
| 216                 | Clark                | Ck-501                   | IM-340  | Demmy Construction, Inc.                              |
| 217                 | Greene               | Ge-M                     | IM-2052   | The Melvin Stone Co., LLC                             |
| 218                 | Hardin               | Hdn-N                    | IM-2072   | National Lime & Stone Co.                             |
| 219                 | Highland             | Hd-D                     | IM-2071   | Hanson Aggregates Davon, Inc.                         |
| 220                 | Highland             | Hd-O                     | IM-2056   | Ohio Asphaltic Limestone Corp.                        |
| 221                 | Highland             | Hd-O1                    | IM-2068   | Ohio Asphaltic Limestone Corp.                        |
| 222                 | Hocking              | Hg-M                     | IM-2057   | Maxville Quarries, Inc.                               |
| 224                 | Shelby               | Shy-SS                   | IM-438  | Miami River Stone Co.                                 |
| 225                 | Stark                | Sk-205                   | D-1144  | ENZ, Inc.   |
| 226                 | Greene               | Ge-Q                     | IM-2090   | The Quarry, LLC                                       |
| 227                 | Hamilton             | Hmn-CE                   | IM-2113   | Carlisle Equipment Group L.P.                         |
| 228                 | Mahoning             | Mg-EF                    | IM-2093, IM-2101  | East Fairfield Coal Co.                               |
| 229                 | Muskingum            | Mum-SW                   | IM-2092   | Sidwell Materials, Inc.                               |
| 230                 | Noble                | Ne-C1                    | IM-2134   | Central Ohio Coal Co.                                 |
| 231                 | Putnam               | Pm-N                     | IM-0479   | National Lime & Stone Co.                             |
| 232                 | Tuscarawas           | Ts-1841                  | IM-45   | Belden Brick Co.                                      |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL DREDGING OPERATION △**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i> |
|---------------------|----------------------|--------------------------|---|-------------------------|
| 1                   | Lake Erie            | Ee-dredge                |   | Erie Sand & Gravel Co.  |
| 2                   | Lake Erie            | Lke-dredge               |   | Osborne Materials Co.   |

**SAND AND GRAVEL ▲**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>           |
|---------------------|----------------------|--------------------------|---|-----------------------------------|
| 6                   | Ashland              | Ald-9                    | IM-745  | Bartley & Bolin Excavating        |
| 8                   | Ashland              | Ald-7                    | IM-392  | Young's Sand & Gravel Co.         |
| 9                   | Ashtabula            | Asa-10                   | IM-198  | Frye Sand & Gravel, Inc.          |
| 10                  | Ashtabula            | Asa-14                   | IM-563  | Janson's Soil Service, Inc.       |
| 14                  | Ashtabula            | Asa-12                   | IM-1130   | Nelson Sand & Gravel, Inc.        |
| 15                  | Ashtabula            | Asa-15                   | IM-783  | R. W. Sidley, Inc.                |
| 19                  | Athens               | As-588                   | IM-630  | Black Top Contracting, Inc.       |
| 21                  | Athens               | As-1161                  | IM-97   | East Clayton Asphalt, Inc.        |
| 23                  | Auglaize             | Ae-23                    | IM-508  | Joseph Sand & Gravel, Inc.        |
| 24                  | Auglaize             | Ae-30                    | IM-598  | National Lime & Stone Co.         |
| 25                  | Auglaize             | Ae-16                    | IM-595  | Quality Ready Mix, Inc.           |
| 26                  | Belmont              | Bt-74                    | IM-288  | Tri-State Asphalt Products        |
| 28                  | Butler               | Br-36                    | IM-649  | Bill D. Colwell                   |
| 29                  | Butler               | Br-5                     | IM-153  | Martin Marietta Aggregates        |
| 30                  | Butler               | Br-35                    | IM-200  | Martin Marietta Aggregates        |
| 31                  | Butler               | Br-48                    | IM-562  | Broshear Contractors, Inc.        |
| 32                  | Butler               | Br-50                    | IM-739  | Dingedine Basic Materials, Inc.   |
| 33                  | Butler               | Br-14                    | IM-147  | Martin Marietta Aggregates        |
| 34                  | Butler               | Br-29                    | IM-149  | Martin Marietta Aggregates        |
| 37                  | Butler               | Br-40                    | IM-493  | Gaston Bowling, Inc.              |
| 38                  | Butler               | Br-52                    | IM-814  | Shamrock Materials, Inc.          |
| 39                  | Butler               | Br-15                    | IM-316  | Mecco, Inc.                       |
| 41                  | Butler               | Br-6                     | IM-177  | Moraine Materials Co., Inc.       |
| 42                  | Butler               | Br-3                     | IM-719  | Roy B. Schweitzer                 |
| 44                  | Butler               | Br-47                    | IM-111  | Watson Gravel, Inc.               |
| 45                  | Butler               | Br-38                    | IM-218  | Welch Sand & Gravel, Inc.         |
| 47                  | Carroll              | Cl-204                   | IM-554  | Oneida Sand & Gravel, Inc.        |
| 48                  | Champaign            | Cpn-1                    | IM-371  | Morrow Gravel Co.                 |
| 49                  | Champaign            | Cpn-21                   | IM-616  | D & W Sand & Gravel               |
| 50                  | Champaign            | Cpn-22                   | IM-889  | Mechanicsburg Sand & Gravel, Inc. |
| 51                  | Champaign            | Cpn-20                   | IM-482  | Moore's Excavating Co.            |
| 52                  | Clark                | Ck-13                    | IM-366  | Martin Marietta Aggregates        |
| 54                  | Clark                | Ck-502                   | IM-375  | Demmy Sand & Gravel               |
| 57                  | Clark                | Ck-3                     | IM-463  | Enon Washed Sand & Gravel Co.     |
| 58                  | Clark                | Ck-25                    | IM-358  | Shelly Materials, Inc.            |
| 59                  | Clermont             | Ct-9                     | IM-526  | Barrett Paving Materials, Inc.    |
| 61                  | Clermont             | Ct-7                     | IM-432  | Kipp's Gravel Co., Inc.           |
| 68                  | Columbiana           | Ca-881                   | IM-611  | X L Sand & Gravel                 |
| 69                  | Coshocton            | Cn-718                   | IM-227  | Apache Aggregate & Paving Co.     |
| 70                  | Coshocton            | Cn-783                   | IM-717  | Apache Aggregate & Paving Co.     |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                   |
|---------------------|----------------------|--------------------------|---|---|
| 71                  | Coshocton            | Cn-694                   | IM-293  | Shelly Materials, Inc.                    |
| 72                  | Coshocton            | Cn-624                   | IM-243  | Shady Bend Sand & Gravel                  |
| 80                  | Darke                | Dke-4                    | IM-433  | Foureman's Sand & Gravel, Inc.            |
| 81                  | Darke                | Dke-10                   | IM-326  | Hollinger Excavating                      |
| 83                  | Erie                 | Ee-18                    | IM-676  | Erie Materials, Inc.                      |
| 84                  | Erie                 | Ee-29                    |   | Jarrett Sand Co.                          |
| 92                  | Fairfield            | Fd-13                    | IM-848, IM-1331   | Shelly Materials, Inc.                    |
| 94                  | Franklin             | Fn-36                    | IM-302  | Agg Rok Materials                         |
| 95                  | Franklin             | Fn-6                     | IM-185  | Martin Marietta Aggregates                |
| 96                  | Franklin             | Fn-23                    | IM-183  | Martin Marietta Aggregates                |
| 97                  | Franklin             | Fn-14                    | IM-832  | D.B.M. Materials, LLC                     |
| 98                  | Franklin             | Fn-52                    | IM-191  | JP Sand & Gravel Co.                      |
| 100                 | Franklin             | Fn-11                    | IM-234  | Mason's Sand & Gravel Co./George C. Smith |
| 101                 | Franklin             | Fn-24                    | IM-266  | S & S Aggregate, Inc.                     |
| 108                 | Geauga               | Gea-29                   | IM-215  | Haueter Sand & Gravel, Inc.               |
| 109                 | Geauga               | Gea-35                   | IM-321  | Teague Gravel Co., Inc.                   |
| 110                 | Greene               | Ge-33                    | IM-379  | Martin Marietta Aggregates                |
| 112                 | Greene               | Ge-4                     | IM-394  | Hilltop Basic Resources, Inc.             |
| 115                 | Greene               | Ge-36                    | IM-305  | Phillips Sand & Gravel                    |
| 117                 | Greene               | Ge-10                    | IM-518  | Xenia Sand, Gravel, & Asphalt Co.         |
| 118                 | Hamilton             | Hmn-37                   | IM-170  | Martin Marietta Aggregates                |
| 120                 | Hamilton             | Hmn-54                   | IM-710  | Ashcraft Sand & Gravel, Inc.              |
| 121                 | Hamilton             | Hmn-44                   | IM-120  | Crosby Gravel, Inc.                       |
| 123                 | Hamilton             | Hmn-50                   | IM-205, IM-1139   | James Bunnell, Inc.                       |
| 124                 | Hamilton             | Hmn-59                   | IM-812, IM-815  | James Bunnell, Inc.                       |
| 127                 | Hamilton             | Hmn-5                    | IM-148  | Martin Marietta Aggregates                |
| 128                 | Hamilton             | Hmn-11                   | IM-133  | Dravo Lime, Inc.                          |
| 131                 | Hamilton             | Hmn-68                   | IM-747  | Watson Gravel, Inc.                       |
| 132                 | Hamilton             | Hmn-46                   | IM-396  | Eaton Sand & Gravel Co.                   |
| 134                 | Hamilton             | Hmn-71                   | IM-771  | Martin Marietta Aggregates                |
| 135                 | Hamilton             | Hmn-17                   | IM-295  | Harrison Sand & Gravel Co.                |
| 137                 | Hamilton             | Hmn-67                   | IM-529  | R. L., Ltd.                               |
| 139                 | Hamilton             | Hmn-10                   | IM-226  | Rack Sand, Inc.                           |
| 141                 | Hamilton             | Hmn-28                   | IM-353  | Roy B. Schweitzer                         |
| 142                 | Hamilton             | Hmn-60                   | IM-761  | Watson Gravel, Inc.                       |
| 143                 | Hamilton             | Hmn-42                   | IM-823  | Welch Sand & Gravel, Inc.                 |
| 144                 | Hamilton             | Hmn-48                   | IM-220  | Welch Sand & Gravel, Inc.                 |
| 151                 | Hocking              | Hg-262                   | IM-41   | Hocking Valley Concrete, Inc.             |
| 152                 | Hocking              | Hg-301                   | IM-458  | Muskingum River Gravel Co.                |
| 153                 | Holmes               | Hs-82                    | IM-707  | Menuez Bros. Sand & Gravel, Inc.          |
| 154                 | Holmes               | Hs-511                   | IM-1048, IM-1240  | Feikert Sand & Gravel, Inc.               |
| 161                 | Knox                 | Kx-16                    | IM-793  | Olen Corp.                                |
| 162                 | Knox                 | Kx-5                     | IM-884, IM-1307   | Small's Sand & Gravel, Inc.               |
| 163                 | Knox                 | Kx-3                     | IM-300  | United Aggregates, Inc.                   |
| 165                 | Knox                 | Kx-15                    | IM-967  | Small's Sand & Gravel, Inc.               |
| 166                 | Lake                 | Lke-7                    | IM-162  | R. W. Sidley, Inc.                        |
| 167                 | Lawrence             | Le-430                   | IM-844  | B & L Sand Co.                            |
| 170                 | Lawrence             | Le-426                   | IM-856  | Burlington Sand & Gravel Co.              |
| 174                 | Licking              | Lg-2                     | IM-184  | Doug Mill                                 |
| 176                 | Licking              | Lg-31                    | IM-246  | Olen Corp.                                |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>              |
|---------------------|----------------------|--------------------------|---|--------------------------------------|
| 179                 | Licking              | Lg-10                    | IM-217  | Van Wey Sand & Gravel, Inc.          |
| 182                 | Logan                | Lgn-31                   | IM-454  | C. E. Duff & Son, Inc.               |
| 183                 | Logan                | Lgn-39                   | IM-887  | C. E. Duff & Son, Inc.               |
| 189                 | Logan                | Lgn-6                    | IM-459  | Neer's Sand & Gravel                 |
| 191                 | Lorain               | Ln-12                    | IM-731  | Guy Schieve                          |
| 195                 | Lucas                | Ls-13                    | IM-492  | Seaway Sand & Stone, Inc.            |
| 196                 | Mahoning             | Mg-632                   | IM-808  | Solomon's Mines, Inc.                |
| 197                 | Marion               | Mn-16                    | IM-171  | Fleming Construction Co., Inc.       |
| 198                 | Marion               | Mn-4                     | IM-290  | Martin Marietta Aggregates           |
| 203                 | Medina               | Ma-20                    | IM-448  | Baker Sand, Inc.                     |
| 206                 | Medina               | Ma-22                    | IM-425, IM-442, IM-650, IM-651                                | Seville Sand & Gravel, Inc.          |
| 209                 | Meigs                | Ms-205                   | IM-30   | Martin Marietta Aggregates           |
| 211                 | Meigs                | Ms-301                   | IM-619  | Meigs County Commissioners           |
| 212                 | Meigs                | Ms-298                   | IM-32   | Shelly Materials, Inc.               |
| 217                 | Miami                | Mi-501                   |   | New Carlisle Sand & Gravel Co.       |
| 219                 | Miami                | Mi-3                     | IM-462, IM-658  | Martin Marietta Aggregates           |
| 221                 | Miami                | Mi-9                     | IM-408  | Wise Gravel                          |
| 222                 | Miami                | Mi-4                     | IM-472  | Fenner Sand & Gravel, Inc.           |
| 224                 | Montgomery           | My-66                    | IM-677  | Martin Marietta Aggregates           |
| 225                 | Montgomery           | My-65                    | IM-594  | Broadway Sand & Gravel, Inc.         |
| 232                 | Montgomery           | My-19                    | IM-401, IM-916  | Hilltop Basic Resources, Inc.        |
| 233                 | Montgomery           | My-52                    | IM-348  | Miller Bros. Gravel, Inc.            |
| 236                 | Montgomery           | My-55                    | IM-571  | Taylorsville Rd. Hardfill            |
| 238                 | Montgomery           | My-61                    | IM-468  | Tipp Stone Co., Inc.                 |
| 239                 | Montgomery           | My-41                    | IM-360  | Moraine Materials Co., Inc.          |
| 240                 | Morgan               | Mon-588                  | IM-35   | Chesterhill Stone Co.                |
| 242                 | Morrow               | Mw-10                    | IM-258  | Chesterville Sand & Gravel Co., Inc. |
| 244                 | Muskingum            | Mum-799                  | IM-317, IM-264  | Shelly Materials, Inc.               |
| 247                 | Muskingum            | Mum-228                  | IM-421  | Muskingum River Gravel Co.           |
| 248                 | Muskingum            | Mum-216                  | IM-689  | James Bros., Inc.                    |
| 252                 | Pike                 | Pke-26                   | IM-142  | Valley Materials Co.                 |
| 254                 | Pike                 | Pke-30                   | IM-786  | South Central Sand & Gravel          |
| 255                 | Pike                 | Pke-24                   | IM-222  | Hanson Aggregates Davon, Inc.        |
| 256                 | Portage              | Pe-50                    | IM-96   | Beck Sand & Gravel, Inc.             |
| 257                 | Portage              | Pe-15                    | IM-104  | Muskingum River Gravel Co.           |
| 258                 | Portage              | Pe-9                     | IM-119  | Oscar Brugmann Sand & Gravel, Inc.   |
| 260                 | Portage              | Pe-84                    | IM-868  | Twinsburg Development Corp           |
| 261                 | Portage              | Pe-45                    | IM-139  | R. A. Cruise Sand & Gravel, Inc.     |
| 262                 | Portage              | Pe-56                    | IM-127  | Hilltop Aggregate, Inc.              |
| 264                 | Portage              | Pe-10                    | IM-138  | Hugo Sand Co.                        |
| 265                 | Portage              | Pe-63                    | IM-82   | Jefferson Materials Co.              |
| 268                 | Portage              | Pe-40                    | IM-190  | Lakeside Sand & Gravel Co.           |
| 272                 | Portage              | Pe-39                    | IM-1078   | Miller Sand & Gravel, Inc.           |
| 273                 | Portage              | Pe-85                    | IM-700  | Rockwell Sand & Gravel, Inc.         |
| 274                 | Portage              | Pe-60                    | IM-78   | Schloss Materials Co.                |
| 275                 | Portage              | Pe-18                    | IM-193  | Sober Sand & Gravel Co.              |
| 276                 | Portage              | Pe-36                    | IM-90   | Solon Excavators Sand & Gravel, Inc. |
| 277                 | Portage              | Pe-68                    | IM-660, IM-1047, IM-1107, IM-1124                             | Lafarge North America                |
| 280                 | Portage              | Pe-64                    | IM-1017   | Rainbow Sand & Gravel, Inc.          |
| 281                 | Portage              | Pe-59                    | IM-210  | S & S Aggregate, Inc.                |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>            |
|---------------------|----------------------|--------------------------|---|------------------------------------|
| 282                 | Portage              | Pe-67                    | IM-202  | S & S Aggregate, Inc.              |
| 284                 | Preble               | Pre-7                    | IM-306  | Southern Ohio Aggregates, Inc.     |
| 285                 | Preble               | Pre-4                    | IM-477  | Wysong Gravel Co.                  |
| 286                 | Preble               | Pre-6                    | IM-478  | Wysong Gravel Co.                  |
| 287                 | Richland             | Rd-4                     | IM-279, IM-1255   | D. H. Bowman & Sons, Inc.          |
| 289                 | Richland             | Rd-18                    | IM-670  | Ganges Gravel Co.                  |
| 290                 | Richland             | Rd-14                    | IM-436  | John L. Garber Materials, Inc.     |
| 292                 | Richland             | Rd-5                     | IM-470  | S & S Aggregate, Inc.              |
| 303                 | Scioto               | So-98                    | IM-474  | E. E. Blair Construction Co.       |
| 304                 | Scioto               | So-83                    | IM-211  | Cunningham Asphalt Paving, Inc.    |
| 305                 | Scioto               | So-78                    |   | E. H. Schilling & Sons, Inc.       |
| 306                 | Scioto               | So-79                    | IM-221  | ATS Enterprises                    |
| 311                 | Shelby               | Shy-17                   | IM-389  | Miami River Stone Co.              |
| 312                 | Shelby               | Shy-13                   | IM-412  | Miami River Stone Co.              |
| 314                 | Shelby               | Shy-11                   | IM-743  | Barrett Paving Materials, Inc.     |
| 315                 | Shelby               | Shy-18                   | IM-388  | Barrett Paving Materials, Inc.     |
| 316                 | Stark                | Sk-N                     | IM-156  | Northern Ohio Paving Co.           |
| 318                 | Stark                | Sk-681                   | IM-164  | Central-Allied Enterprises, Inc.   |
| 319                 | Stark                | Sk-689                   | IM-173  | Central-Allied Enterprises, Inc.   |
| 320                 | Stark                | Sk-694                   | IM-858  | A. J. Diana Sons, Inc.             |
| 325                 | Stark                | Sk-607                   | IM-102  | Central-Allied Enterprises, Inc.   |
| 326                 | Stark                | Sk-165                   | IM-192  | Oster Sand & Gravel, Inc.          |
| 327                 | Summit               | St-52                    | IM-900  | Flesher Sand & Gravel, Inc.        |
| 333                 | Summit               | St-24                    | IM-239  | Riverside Sand & Gravel Co., Inc.  |
| 336                 | Summit               | St-44                    | IM-178  | S & S Aggregate, Inc.              |
| 340                 | Trumbull             | Tl-12                    | IM-131  | Samco, Inc.                        |
| 343                 | Tuscarawas           | Ts-1826                  | IM-88   | Soehnlen Bros. Sand & Gravel, Inc. |
| 344                 | Tuscarawas           | Ts-1771                  | IM-77   | Spring Industries, Inc.            |
| 346                 | Tuscarawas           | Ts-111                   | IM-55   | Stewart & Reichman, Inc.           |
| 347                 | Tuscarawas           | Ts-69                    | IM-51   | Stocker Sand & Gravel Co.          |
| 348                 | Tuscarawas           | Ts-125                   | IM-50   | Stocker Sand & Gravel Co.          |
| 349                 | Warren               | Wan-38                   | IM-615  | Martin Marietta Aggregates         |
| 352                 | Warren               | Wan-41                   | IM-629  | Carl E. Oeder & Sons Sand & Gravel |
| 356                 | Warren               | Wan-47                   | IM-846  | C. & S. Contractors, Inc.          |
| 364                 | Washington           | Wn-55                    | IM-669  | Beverly Slag Co.                   |
| 365                 | Washington           | Wn-508                   | IM-57   | Briggs Sand & Gravel, Inc.         |
| 367                 | Washington           | Wn-38                    | IM-701  | Muskingum River Gravel Co.         |
| 369                 | Washington           | Wn-510                   | IM-25   | Trout Sand & Gravel Co.            |
| 372                 | Wayne                | We-11                    | IM-547  | Prairie Lane Sand & Gravel Co.     |
| 373                 | Wayne                | We-7                     | IM-471  | Rupp Construction, Inc.            |
| 374                 | Wayne                | We-15                    | IM-398  | Zollinger Sand & Gravel Co.        |
| 375                 | Williams             | Ws-6                     | IM-497  | Stoneco, Inc.                      |
| 376                 | Williams             | Ws-9                     | IM-498  | Stoneco, Inc.                      |
| 377                 | Williams             | Ws-11                    | IM-509, IM-661  | Weber Sand & Gravel, Inc.          |
| 378                 | Williams             | Ws-14                    | IM-614  | Dennis Winzeler                    |
| 379                 | Wyandot              | Wt-4                     | IM-520  | Precision Aggregate, Inc.          |
| 380                 | Wyandot              | Wt-15                    | IM-376, IM-551  | National Lime & Stone Co.          |
| 382                 | Wyandot              | Wt-17                    | IM-604  | Kirby's Sand & Gravel, Inc.        |
| 385                 | Clark                | Ck-501                   | IM-340  | Demmy Construction, Inc.           |
| 386                 | Stark                | Sk-203                   | IM-654  | American Sand & Gravel, Inc.       |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>               |
|---------------------|----------------------|--------------------------|---|---------------------------------------|
| 387                 | Portage              | Pe-95                    | IM-212  | American Sand & Gravel, Inc.          |
| 389                 | Tuscarawas           | Ts-1976                  | IM-1235   | Goshen Sand & Gravel                  |
| 390                 | Miami                | Mi-T                     | IM-696  | Lloyd B. Fry                          |
| 391                 | Warren               | Wan-B                    | IM-679  | Little Miami Sand & Gravel            |
| 395                 | Scioto               | So-100                   | IM-950  | Hanson Aggregates Davon, Inc.         |
| 401                 | Fairfield            | Fd-14                    | IM-933  | Paul D. Beery Trucking Co.            |
| 403                 | Greene               | Ge-40                    | IM-923  | R.J. Martin Service & Excavating      |
| 404                 | Greene               | Ge-42                    | IM-954  | Martin Marietta Aggregates            |
| 405                 | Greene               | Ge-32                    | IM-400  | Martin Marietta Aggregates            |
| 407                 | Hamilton             | Hmn-69                   | IM-969  | Watson Gravel, Inc.                   |
| 408                 | Knox                 | Kx-17                    | IM-968  | Small's Sand & Gravel, Inc.           |
| 409                 | Richland             | Rd-20                    | IM-617  | Bartley & Bolin Excavating            |
| 412                 | Ashland              | Ald-15                   | IM-944  | Young's Sand & Gravel Co.             |
| 413                 | Ashtabula            | Asa-18                   | IM-949  | Joe Simak & Sons Trucking, Inc.       |
| 415                 | Geauga               | Gea-9                    | IM-132  | Soltis Sand & Gravel                  |
| 416                 | Holmes               | Hs-96                    | IM-997  | Spring Run Gravel                     |
| 417                 | Huron                | Hrn-16                   | IM-975  | Erie Blacktop, Inc.                   |
| 419                 | Licking              | Lg-504                   | IM-991  | Gary Roberts Excavating               |
| 420                 | Logan                | Lgn-36                   | IM-1007   | C. E. Duff & Son, Inc.                |
| 423                 | Marion               | Mn-19                    | IM-990  | Fleming Construction Co., Inc.        |
| 424                 | Monroe               | Me-508                   | IM-1000   | Ohio-West Virginia Excavation         |
| 427                 | Summit               | St-54                    | IM-934  | R. & S., Inc.                         |
| 428                 | Tuscarawas           | Ts-2001                  | IM-1004   | Newton Asphalt Paving, Inc.           |
| 429                 | Warren               | Wan-46                   | IM-842  | Little Miami Sand & Gravel            |
| 430                 | Warren               | Wan-50                   | IM-1006   | L & I Natural Resources, Inc.         |
| 432                 | Washington           | Wn-54                    | IM-383  | Atlas Towing Co.                      |
| 435                 | Stark                | Sk-173                   | IM-879  | Allied Corp., Inc.                    |
| 437                 | Clark                | Ck-7                     | IM-449  | City of Springfield                   |
| 438                 | Coshocton            | Cn-828                   | IM-1026   | William Albert, Inc.                  |
| 440                 | Gallia               | Ga-626                   | IM-1046   | Cremeans Concrete & Supply, Inc.      |
| 441                 | Greene               | Ge-38                    | IM-333  | Martin Marietta Aggregates            |
| 444                 | Logan                | Lgn-12                   | IM-1071   | C. E. Duff & Son, Inc.                |
| 446                 | Miami                | Mi-12                    | IM-467  | Tipp Stone Co., Inc.                  |
| 447                 | Miami                | Mi-504                   | IM-1032   | Miller Bros. Gravel, Inc.             |
| 448                 | Muskingum            | Mum-262                  | IM-422  | Muskingum River Gravel Co.            |
| 451                 | Portage              | Pe-89                    | IM-1142   | Green Oaks Potting Products, Inc.     |
| 452                 | Ross                 | Rs-M                     | IM-114  | Muskingum River Gravel Co.            |
| 453                 | Stark                | Sk-241                   | IM-582  | Lafarge North America                 |
| 455                 | Stark                | Sk-243                   | IM-908  | American Sand & Gravel, Inc.          |
| 458                 | Athens               | As-595                   | IM-1083   | Cochran Transportation Services, Inc. |
| 459                 | Athens               | As-W                     | IM-979  | Olen Corp.                            |
| 460                 | Butler               | Br-S                     | IM-1053   | Southern Ohio Aggregates, Inc.        |
| 461                 | Clark                | Ck-28                    | IM-1100, IM-2120  | Barrett Paving Materials, Inc.        |
| 463                 | Columbiana           | Ca-982                   | IM-1108   | Leetonia Sand & Gravel Co., Inc.      |
| 465                 | Franklin             | Fn-58                    | IM-1023   | Olen Corp.                            |
| 466                 | Gallia               | Ga-O                     | IM-1028   | Ours Sand & Gravel                    |
| 467                 | Hamilton             | Hmn-AS                   | IM-1106   | Allgeier & Son, Inc.                  |
| 468                 | Hamilton             | Hmn-D                    | IM-1079   | Martin Marietta Aggregates            |
| 470                 | Holmes               | Hs-J                     | IM-1043   | Holmes Supply Corp.                   |
| 472                 | Lucas                | Ls-G                     | IM-1090   | H. T. Griffin Excavating, Inc.        |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                  |
|---------------------|----------------------|--------------------------|---|--|
| 474                 | Madison              | Mdn-11                   | IM-1063   | Tuffco Sand & Gravel, Inc.               |
| 475                 | Mahoning             | Mg-630                   | IM-1091   | Wallace Road Sand & Gravel               |
| 480                 | Pickaway             | Pky-H                    | IM-1039   | William A. Hoffman, Jr.                  |
| 481                 | Pickaway             | Pky-R                    | IM-993  | The Melvin Stone Co., LLC                |
| 482                 | Portage              | Pe-61                    | IM-1064   | Red Brush Peat Co.                       |
| 483                 | Portage              | Pe-92                    | IM-522  | Don Wartko Construction, Inc.            |
| 488                 | Preble               | Pre-9                    | IM-1095   | Loxley Aggregates, Inc.                  |
| 490                 | Ross                 | Rs-27                    | IM-1098   | Shelly Materials, Inc.                   |
| 491                 | Ross                 | Rs-H                     | IM-1052   | Haubeil & Sons Asphalt & Materials, Inc. |
| 493                 | Shelby               | Shy-S                    | IM-1005   | Sidney Sand & Gravel Co.                 |
| 494                 | Shelby               | Shy-SC                   | IM-1018   | Spring Creek Corp.                       |
| 495                 | Stark                | Sk-M                     | IM-1031   | Massillon Materials, Inc.                |
| 496                 | Summit               | St-55                    | IM-589  | Alden Sand & Gravel Co.                  |
| 500                 | Tuscarawas           | Ts-2018                  | IM-1076   | JBM Ltd.                                 |
| 501                 | Warren               | Wan-M                    | IM-728, IM-1065   | Morrow Gravel Co.                        |
| 502                 | Warren               | Wan-M1                   | IM-1051   | Morrow Gravel Co.                        |
| 503                 | Warren               | Wan-M2                   | IM-837  | Morrow Gravel Co.                        |
| 504                 | Washington           | Wn-1007                  | IM-1042   | Mark Williams Blacktop Co., Inc.         |
| 506                 | Williams             | Ws-T                     | IM-1022   | Stoneco, Inc.                            |
| 508                 | Ashland              | Ald-G                    | IM-1121   | Joyce A. Good                            |
| 509                 | Ashland              | Ald-16                   | IM-1120   | Bartley & Bolin Excavating               |
| 517                 | Geauga               | Gea-N                    | IM-1123   | Newbury Sand & Gravel                    |
| 518                 | Geauga               | Gea-TK                   | IM-902  | T & K Kuhnle Co.                         |
| 520                 | Hamilton             | Hmn-C                    | IM-1132   | Allgeier & Son, Inc.                     |
| 521                 | Hamilton             | Hmn-AS1                  | IM-797  | Allgeier & Son, Inc.                     |
| 523                 | Hocking              | Hg-329                   | IM-1112   | Kilbarger Construction, Inc.             |
| 528                 | Portage              | Pe-SSC                   | IM-318  | Sunshine Sand Co.                        |
| 533                 | Washington           | Wn-1008                  | IM-1111   | Grimes Excavating                        |
| 534                 | Washington           | Wn-1009                  | IM-525  | Mark Williams Blacktop Co., Inc.         |
| 535                 | Wayne                | We-23                    | IM-1136   | Buckeye Excavating Development, Inc.     |
| 537                 | Clermont             | Ct-11                    | IM-665  | Dravo Lime, Inc.                         |
| 538                 | Columbiana           | Ca-993                   | IM-1180   | Willowbrook Sand & Gravel                |
| 539                 | Columbiana           | Ca-351                   | IM-634  | Inland South Aggregates                  |
| 541                 | Fairfield            | Fd-16                    | IM-1156   | James E. Downard                         |
| 544                 | Gallia               | Ga-J                     | IM-1145   | Jaymar, Inc.                             |
| 545                 | Geauga               | Gea-H                    | IM-510  | Haueter Sand & Gravel, Inc.              |
| 546                 | Greene               | Ge-46                    | IM-1149   | Don Thompson Excavating, Inc.            |
| 547                 | Greene               | Ge-R                     | IM-829  | Richards Service Garage                  |
| 548                 | Greene               | Ge-47                    | IM-751  | M. J. Coates Construction Co., Inc.      |
| 549                 | Greene               | Ge-W                     | IM-645  | Joann O. Weddle                          |
| 550                 | Greene               | Ge-G                     | IM-655  | M. J. Coates Construction Co., Inc.      |
| 551                 | Hamilton             | Hmn-S                    | IM-746  | Southern Ohio Aggregates, Inc.           |
| 552                 | Hamilton             | Hmn-SO                   | IM-720  | Southern Ohio Aggregates, Inc.           |
| 553                 | Hardin               | Hdn-H                    | IM-864  | Norman Harpster                          |
| 559                 | Meigs                | Ms-L                     | IM-1159   | Jaymar, Inc.                             |
| 560                 | Meigs                | Ms-308                   | IM-1174   | Jaymar, Inc.                             |
| 561                 | Montgomery           | My-CW                    | IM-878  | Carter & Carter, Inc.                    |
| 565                 | Pickaway             | Pky-W                    | IM-1176   | Gene T. Wilson                           |
| 568                 | Portage              | Pe-101                   | IM-1154   | D & K Materials, Inc.                    |
| 569                 | Portage              | Pe-SM                    | IM-499  | Schloss Materials Co.                    |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

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|---------------------|----------------------|--------------------------|---|--------------------------------------|
| 570                 | Portage              | Pe-L                     | IM-154  | Lucky Sand & Gravel Co.              |
| 571                 | Preble               | Pre-AAC                  | IM-779  | U.S. Aggregates, Inc.                |
| 573                 | Ross                 | Rs-E                     | IM-1168   | David E. Edgington                   |
| 575                 | Ross                 | Rs-P                     | IM-122  | Mark E. Scott                        |
| 576                 | Scioto               | So-B                     | IM-705  | Boone Coleman Construction, Inc.     |
| 577                 | Shelby               | Shy-SS                   | IM-438  | Miami River Stone Co.                |
| 578                 | Stark                | Sk-MW                    | IM-1171   | Central-Allied Enterprises, Inc.     |
| 579                 | Stark                | Sk-W                     | IM-867  | Ralph C. Wagner & Sons               |
| 581                 | Stark                | Sk-R                     | IM-697  | Oster Sand & Gravel, Inc.            |
| 582                 | Stark                | Sk-SI                    | IM-588  | Spring Industries, Inc.              |
| 584                 | Trumbull             | Tl-16                    | IM-1158   | Nick's Trucking                      |
| 586                 | Tuscarawas           | Ts-2036                  | IM-1155   | Oster Sand & Gravel, Inc.            |
| 588                 | Tuscarawas           | Ts-SI                    | IM-569  | L & M Mineral Co.                    |
| 589                 | Warren               | Wan-7                    | IM-151  | Embro, Inc.                          |
| 590                 | Washington           | Wn-1010                  | IM-1163   | M & J Sand & Gravel, Inc.            |
| 591                 | Wyandot              | Wt-K                     | IM-943  | Kirby's Sand & Gravel, Inc.          |
| 593                 | Ashtabula            | Asa-20                   | IM-1198   | Kinsman Materials, LTD.              |
| 595                 | Cuyahoga             | Cya-42                   | IM-686  | Boyas Excavating, Inc.               |
| 597                 | Lake                 | Lke-C                    | IM-1215   | Cashen, Inc.                         |
| 598                 | Lake                 | Lke-D                    | IM-1187   | De Milta Sand & Gravel, Inc.         |
| 600                 | Licking              | Lg-W                     | IM-1213   | Eagle Material Supply Ltd.           |
| 602                 | Mahoning             | Mg-631                   | IM-1103   | East Fairfield Coal Co.              |
| 605                 | Portage              | Pe-102                   | IM-1184   | GANS Ltd.                            |
| 606                 | Ross                 | Rs-T                     | IM-1189   | Tackett Builders                     |
| 607                 | Stark                | Sk-BE                    | IM-1202   | Beaver Excavating, Inc.              |
| 608                 | Stark                | Sk-HS                    | IM-1193   | Heiser Sand & Gravel Corp.           |
| 609                 | Stark                | Sk-HS1                   | IM-1203   | Heiser Sand & Gravel Corp.           |
| 610                 | Stark                | Sk-1017                  | IM-1186   | National Aggregates, Inc.            |
| 611                 | Trumbull             | Tl-C                     | IM-1190   | Center West Enterprises, Inc.        |
| 613                 | Wayne                | We-24                    | IM-1211   | E. A. Construction, Inc.             |
| 615                 | Portage              | Pe-98                    | IM-1219, IM-1231  | Johnson Road Sand & Gravel           |
| 616                 | Ashland              | Ald-Y                    | IM-1216   | Young's Sand & Gravel Co.            |
| 619                 | Champaign            | Cpn-25                   | IM-1227   | Moore's Excavating Co.               |
| 620                 | Clark                | Ck-29                    | IM-1233   | Moore's Excavating Co.               |
| 622                 | Fulton               | Ftn-M                    | IM-1246   | Al Mackey Enterprises, Inc.          |
| 623                 | Geauga               | Gea-43                   | IM-1230   | Solon Excavators Sand & Gravel, Inc. |
| 625                 | Lake                 | Lke-CIR                  | IM-1243   | C.I.R., Inc.                         |
| 627                 | Pickaway             | Pky-C                    | IM-1223   | George J. Igel & Co., Inc.           |
| 628                 | Portage              | Pe-OB                    | IM-1241   | Oscar Brugmann Sand & Gravel, Inc.   |
| 631                 | Stark                | Sk-CA                    | IM-1234   | Central-Allied Enterprises, Inc.     |
| 633                 | Williams             | Ws-21                    | IM-1225   | Thiel Construction Co.               |
| 634                 | Williams             | Ws-22                    | IM-1222   | Walcott Sand & Gravel Corp.          |
| 635                 | Ashtabula            | Asa-C                    | IM-1278   | Clemson Excavating, Inc.             |
| 636                 | Columbiana           | Ca-S                     | IM-1258   | Solomon's Mines, Inc.                |
| 637                 | Erie                 | Ee-27                    | IM-608  | Erie Blacktop, Inc.                  |
| 639                 | Fulton               | Ftn-M1                   | IM-1275   | Al Mackey Enterprises, Inc.          |
| 640                 | Hamilton             | Hmn-ARH                  | IM-1273   | Watson Gravel, Inc.                  |
| 641                 | Hamilton             | Hmn-G                    | IM-1270   | Golsch Construction, Inc.            |
| 642                 | Hamilton             | Hmn-JC                   | IM-1267   | Joe E. Carter                        |
| 646                 | Lucas                | Ls-M                     | IM-1261   | Al Mackey Enterprises, Inc.          |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                     |
|---------------------|----------------------|--------------------------|---|---|
| 647                 | Morgan               | Mon-L                    | IM-1266   | Link Trucking Co., Inc.                     |
| 648                 | Pickaway             | Fn-C                     | IM-1265   | Louis Johnson                               |
| 650                 | Ashtabula            | Asa-F                    | IM-1289   | Frye Sand & Gravel, Inc.                    |
| 651                 | Ashtabula            | Asa-M                    | IM-1301   | Mathews Sand & Gravel                       |
| 653                 | Columbiana           | Ca-W                     | IM-1279   | Carl Walter                                 |
| 654                 | Fulton               | Ftn-BL1                  | IM-1282   | B & L Excavating                            |
| 655                 | Fulton               | Ftn-M2                   | IM-1294   | Al Mackey Enterprises, Inc.                 |
| 656                 | Highland             | Hd-L                     | IM-1297   | LaMar Sand & Fill, Ltd.                     |
| 657                 | Hocking              | Hg-HV                    | IM-1284   | Hocking Valley Mulch                        |
| 658                 | Licking              | Lg-S                     | IM-1281   | Redskin Transport LLC                       |
| 661                 | Portage              | Pe-LS                    | IM-1293   | Lakeside Sand & Gravel Co.                  |
| 663                 | Scioto               | So-BT                    | IM-1286   | Big T Mining                                |
| 664                 | Scioto               | So-DGM                   | IM-1280   | D.G.M., Inc.                                |
| 665                 | Williams             | Ws-N                     | IM-1291   | Andy Nixon Contractors, Inc.                |
| 666                 | Wood                 | Wd-14                    | IM-1157   | Precision Aggregate, Inc.                   |
| 667                 | Butler               | Br-57                    |   | Watson Gravel, Inc.                         |
| 668                 | Coshocton            | Cn-C                     | IM-1311   | County Line Concrete & Supply Co.           |
| 669                 | Logan                | Lgn-B                    | IM-1309   | Boyd Excavating                             |
| 670                 | Holmes               | Hs-C                     | IM-1303   | Craigton Shale Co.                          |
| 671                 | Pickaway             | Pky-DC                   | IM-1316   | Darby Creek Excavating, Inc.                |
| 672                 | Fulton               | Ftn-SI                   | IM-1308   | Sandco, Inc.                                |
| 673                 | Portage              | Pe-B1                    | IM-1296   | Blue Stone Sand & Gravel, Inc.              |
| 674                 | Portage              | Pe-B2                    | IM-1305   | Blue Stone Sand & Gravel, Inc.              |
| 675                 | Washington           | Wn-C                     | IM-1315   | Chesterhill Stone Co.                       |
| 676                 | Portage              | Pe-M                     | IM-1312   | Mills Rock, Sand, & Soil, Inc.              |
| 677                 | Ashtabula            | Asa-ST                   | IM-1349, IM-2130  | Joe Simak & Sons Trucking, Inc.             |
| 678                 | Fulton               | Ftn-SA                   | IM-1335   | Sandman Trucking, Inc.                      |
| 679                 | Hocking              | Hg-HA                    | IM-1320   | Harden Agricultural Lime & Reclm. Sv., Inc. |
| 680                 | Hamilton             | Hmn-P                    | IM-1333   | Martin Marietta Aggregates                  |
| 681                 | Lucas                | Ls-AM                    | IM-1318   | Al Mackey Enterprises, Inc.                 |
| 682                 | Lucas                | Ls-GB                    | IM-1323   | Gary L. Brown                               |
| 683                 | Lucas                | Ls-ME                    | IM-1345   | Moon Enterprises, Inc.                      |
| 685                 | Stark                | Sk-M1                    | IM-1332   | Massillon Materials, Inc.                   |
| 686                 | Summit               | St-DC                    | IM-1346   | Donald A. Coy                               |
| 687                 | Tuscarawas           | Ts-MM                    | IM-1324   | Massillon Materials, Inc.                   |
| 688                 | Warren               | Wan-MV                   | IM-1329   | Miami View Mining Co., Ltd.                 |
| 689                 | Portage              | Pe-BA                    | IM-1327   | Ballentine Excavation Co.                   |
| 690                 | Fulton               | Ftn-H                    | IM-1336   | Hunter Land Development                     |
| 691                 | Tuscarawas           | Ts-1982                  | IM-621  | L & M Mineral Co.                           |
| 692                 | Huron                | Hrn-M                    | IM-1338   | Marta Track Constructors, Inc.              |
| 693                 | Pike                 | Pke-M                    | IM-1325   | Morrow Gravel Co.                           |
| 694                 | Pike                 | Pke-V                    | IM-1330   | Valley Materials Co.                        |
| 695                 | Fairfield            | Fd-VJ                    | IM-1339   | Van Johnson Construction, Inc.              |
| 696                 | Fulton               | Ftn-W                    | IM-2118   | Wylie and Sons Landscaping                  |
| 699                 | Richland             | Rd-TB                    | IM-1343   | The Terry Byrne Mining Co.                  |
| 700                 | Hamilton             | Hmn-NB                   | IM-1337   | New Baltimore CDD Landfill, Ltd.            |
| 701                 | Ashtabula            | Asa-JS                   | IM-1360   | Joe Simak & Sons Trucking, Inc.             |
| 702                 | Athens               | As-BT                    | IM-1350   | Black Top Contracting, Inc.                 |
| 703                 | Carroll              | Cl-PD                    | IM-1352   | Power Development Corp.                     |
| 704                 | Clark                | Ck-A                     | IM-1359   | American Excavating, Inc.                   |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                    |
|---------------------|----------------------|--------------------------|---|--|
| 705                 | Columbiana           | Ca-XL                    | IM-1347   | XL Sand & Gravel                           |
| 707                 | Knox                 | Kx-S                     | IM-2000   | Small's Sand & Gravel, Inc.                |
| 708                 | Lucas                | Ls-ST                    | IM-2001   | Sandman Trucking, Inc.                     |
| 709                 | Lucas                | Ls-T                     | IM-2012   | E. H Taylor, Inc.                          |
| 710                 | Portage              | Pe-A                     | IM-1362   | American Sand & Gravel, Inc.               |
| 712                 | Tuscarawas           | Ts-S2                    | IM-1356   | Sidco Development, Inc.                    |
| 713                 | Washington           | Wn-SS                    | IM-2006   | Sharon Stone Co.                           |
| 714                 | Allen                | An-W                     | IM-2069   | Ward Materials, Inc.                       |
| 715                 | Ashtabula            | Asa-ST1                  | IM-2023   | Joe Simak & Sons Trucking, Inc.            |
| 716                 | Butler               | Br-B                     | IM-2029   | Broshear Contractors, Inc.                 |
| 717                 | Carroll              | Cl-O                     | IM-2082   | Oster Sand & Gravel, Inc.                  |
| 718                 | Clark                | Ck-B                     | IM-2026   | Brett Baisden                              |
| 719                 | Clark                | Ck-LG                    | IM-2073   | Louis A. Green and Associates              |
| 720                 | Columbiana           | Ca-H                     | IM-2027   | Harvest Sand & Gravel, Inc.                |
| 721                 | Columbiana           | Ca-H1                    | IM-2033   | Hartley Gravel                             |
| 722                 | Coshocton            | Cn-SR                    | IM-2065   | Stewart & Reichman, Inc.                   |
| 723                 | Coshocton            | Cn-WA                    | IM-2036   | William Albert, Inc.                       |
| 724                 | Crawford             | Cd-G                     | IM-0693   | Gibson Sand & Gravel Co.                   |
| 725                 | Fulton               | Ftn-BL2                  | IM-2025   | B & L Excavating                           |
| 726                 | Gallia               | Ga-JE                    | IM-2034   | Jaclib Enterprises, Inc.                   |
| 728                 | Knox                 | Kx-DH                    | IM-2078   | Olen Corp.                                 |
| 729                 | Licking              | Lg-KMA                   | IM-2043   | K. M. A. Services                          |
| 730                 | Logan                | Lgn-J                    | IM-2053   | Betty Sewell and Rebecca Johnson           |
| 731                 | Logan                | Lgn-L                    | IM-2064   | Logan Construction                         |
| 732                 | Lucas                | Ls-BE                    | IM-2054   | Bihn Excavating, Inc.                      |
| 733                 | Lucas                | Ls-ST1                   | IM-2060   | Sandman Trucking, Inc.                     |
| 734                 | Montgomery           | My-B                     | IM-2044   | Barrett Paving Materials, Inc.             |
| 735                 | Morgan               | Mon-CS1                  | IM-2049   | Chesterhill Stone Co.                      |
| 736                 | Pickaway             | Pky-RR                   | IM-2040   | Roy M. Roush                               |
| 737                 | Portage              | Pe-H                     | IM-2039   | Hilltop Aggregate, Inc.                    |
| 738                 | Portage              | Pe-J                     | IM-2051   | Janson & Sons Corp.                        |
| 739                 | Portage              | Pe-R                     | IM-2037   | Rockwell Sand & Gravel, Inc.               |
| 740                 | Portage              | Pe-V                     | IM-2061   | Valley Brook Sand & Gravel, Inc.           |
| 741                 | Preble               | Pre-T                    | IM-2036   | Thomas Sand & Gravel                       |
| 742                 | Shelby               | Shy-SC1                  | IM-2017   | Barrett Paving Materials, Inc.             |
| 743                 | Tuscarawas           | Ts-K                     | IM-2050   | Krizman Enterprises                        |
| 744                 | Tuscarawas           | Ts-N                     | IM-2032   | J. E. Niclozakes Co.                       |
| 745                 | Portage              | Pe-P                     | IM-1322   | Patrick Excavating, Inc.                   |
| 746                 | Ashtabula            | Asa-N1                   | IM-2102   | Nelson Sand & Gravel, Inc.                 |
| 747                 | Clark                | Ck-H                     | IM-2089   | Hilltop Basic Resources, Inc.              |
| 748                 | Clark                | Ck-Th                    | IM-2133   | Terry A. Hoppes                            |
| 749                 | Coshocton            | Cn-WL                    | IM-2127   | Walhonding Sand & Gravel                   |
| 750                 | Fulton               | Ftn-NW                   | IM-2138   | Northwest Ohio Property Developments, Ltd. |
| 751                 | Fulton               | Ftn-SA1                  | IM-2136   | Sandman Trucking, Inc.                     |
| 752                 | Hocking              | Hg-L                     | IM-2117   | Lancaster Limestone                        |
| 753                 | Lucas                | Ls-M1                    | IM-2137   | Al Mackey Enterprises, Inc.                |
| 754                 | Lucas                | Ls-W                     | IM-2098   | Wylie and Sons Landscaping                 |
| 755                 | Morgan               | Mon-M                    | IM-0718   | Muskingum River Gravel Co.                 |
| 756                 | Muskingum            | Mum-LB                   | IM-2106   | LUB, Inc.                                  |
| 757                 | Portage              | Pe-S1                    | IM-2126   | Solon Excavators Sand & Gravel, Inc.       |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SAND AND GRAVEL (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>       |
|---------------------|----------------------|--------------------------|---|-------------------------------|
| 758                 | Ross                 | Rs-G                     | IM-2099   | Gillum Bros. Excavating       |
| 759                 | Stark                | Sk-RO                    | IM-2084   | Dale B. Rohr                  |
| 760                 | Tuscarawas           | Ts-ST                    | IM-2125   | Stocker Sand & Gravel Co.     |
| 761                 | Washington           | Wn-C1                    | IM-2088   | Chesterhill Stone Co.         |
| 762                 | Wyandot              | Wt-J                     | IM-2119   | JALIP, LTD.                   |
| 763                 | Wyandot              | Wt-N                     | IM-2123   | National Lime & Stone Co.     |
| 764                 | Jackson              | Jkn-367                  | D-594, D-968, D-1083  | Waterloo Coal Co., Inc.       |
| 768                 | Sandusky             | Sy-5                     | IM-0259   | Precision Aggregates III, LLC |

**SANDSTONE/CONGLOMERATE ▼**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>               |
|---------------------|----------------------|--------------------------|---|---------------------------------------|
| 4                   | Coshcocton           | Cn-13                    | IM-397  | Briar Hill Stone Co.                  |
| 5                   | Coshcocton           | Cn-659                   | IM-232  | Briar Hill Stone Co.                  |
| 6                   | Coshcocton           | Cn-686                   | IM-504  | Briar Hill Stone Co.                  |
| 7                   | Coshcocton           | Cn-692                   | IM-294  | Briar Hill Stone Co.                  |
| 8                   | Coshcocton           | Cn-695                   | IM-402  | Briar Hill Stone Co.                  |
| 13                  | Cuyahoga             | Cya-42                   | IM-686  | Boyas Excavating, Inc.                |
| 14                  | Erie                 | Ee-21                    | IM-416  | Cleveland Quarries                    |
| 17                  | Geauga               | Gea-3                    | IM-89   | Best Sand Corp.                       |
| 18                  | Geauga               | Gea-1                    | IM-163  | R. W. Sidley, Inc.                    |
| 19                  | Holmes               | Hs-49                    | IM-418  | Briar Hill Stone Co.                  |
| 20                  | Huron                | Hrn-8                    | IM-268  | Mesenburg Bros., Inc.                 |
| 23                  | Knox                 | Kx-12                    | IM-445  | Briar Hill Stone Co.                  |
| 24                  | Knox                 | Kx-1                     | IM-269  | Oglebay Norton Industrial Sands, Inc. |
| 27                  | Lorain               | Ln-3                     | IM-415  | Cleveland Quarries                    |
| 30                  | Mahoning             | Mg-62                    | IM-599  | Gwin Contracting Co.                  |
| 34                  | Ross                 | Rs-16                    | IM-172  | Best Sand Corp.                       |
| 36                  | Scioto               | So-48                    | IM-140  | Waller Bros. Stone Co.                |
| 37                  | Scioto               | So-76                    | IM-141  | Waller Bros. Stone Co.                |
| 38                  | Scioto               | So-82                    | IM-158  | Waller Bros. Stone Co.                |
| 41                  | Tuscarawas           | Ts-1818                  | IM-9  | Kimble Clay & Limestone Co.           |
| 42                  | Tuscarawas           | Ts-1660                  | IM-68   | U.S. Silica Co.                       |
| 43                  | Washington           | Wn-45                    | IM-125  | Alan Stone Co., Inc.                  |
| 44                  | Coshcocton           | Cn-815                   | IM-939  | Briar Hill Stone Co.                  |
| 45                  | Pike                 | Pke-31                   | IM-835  | Best Sand Corp.                       |
| 46                  | Coshcocton           | Cn-809                   | IM-909  | Briar Hill Stone Co.                  |
| 47                  | Columbiana           | Ca-970                   | IM-1024   | M & M Builders Supply Co.             |
| 48                  | Perry                | Py-344                   | IM-1014   | Oglebay Norton Industrial Sands, Inc. |
| 49                  | Summit               | St-24                    | IM-239  | Riverside Sand & Gravel Co., Inc.     |
| 50                  | Geauga               | Gea-N                    | IM-1123   | Newbury Sand & Gravel                 |
| 51                  | Belmont              | Bt-1193                  | IM-1117   | Alan Stone Co., Inc.                  |
| 53                  | Mahoning             | Mg-631                   | IM-1103   | East Fairfield Coal Co.               |
| 54                  | Tuscarawas           | Ts-2032                  | IM-1141   | J. L. & Son Excavating, Inc.          |
| 55                  | Tuscarawas           | Ts-1982                  | IM-621  | L & M Mineral Co.                     |
| 56                  | Belmont              | Bt-1190                  | IM-1089   | Sidwell Materials, Inc.               |
| 57                  | Columbiana           | Ca-888                   | IM-1181   | D. & D. Mining Co.                    |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**SANDSTONE/CONGLOMERATE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                      |
|---------------------|----------------------|--------------------------|---|--|
| 58                  | Geauga               | Gea-S                    | IM-161  | R. W. Sidley, Inc.                           |
| 60                  | Lake                 | Lke-K                    | IM-859  | Keeney Sand & Stone, Inc.                    |
| 62                  | Tuscarawas           | Ts-1517                  | IM-46   | Belden Brick Co.                             |
| 64                  | Wayne                | We-26                    | IM-690, IM-1210   | Mt. Eaton Reclamation, Inc.                  |
| 65                  | Columbiana           | Ca-982                   | IM-1108   | Leetonia Sand & Gravel Co., Inc.             |
| 66                  | Lorain               | Ln-14                    | IM-1205   | Golden Cresent Construction, Inc.            |
| 68                  | Summit               | St-60                    | IM-1206   | Ohio Bulk Transfer Co.                       |
| 70                  | Portage              | Pe-9                     | IM-119  | Oscar Brugmann Sand & Gravel, Inc.           |
| 71                  | Tuscarawas           | Ts-1841                  | IM-45   | Belden Brick Co.                             |
| 72                  | Columbiana           | Ca-S                     | IM-1258   | Solomon's Mines, Inc.                        |
| 73                  | Scioto               | So-BC                    | IM-1252   | Boone Coleman Construction, Inc.             |
| 74                  | Wayne                | We-EA                    | IM-1259   | E. A. Construction, Inc.                     |
| 75                  | Lorain               | Ln-J                     | IM-1300   | Johnson Stone Products, Inc.                 |
| 77                  | Trumbull             | Tl-12                    | IM-131  | Samco, Inc.                                  |
| 78                  | Tuscarawas           | Ts-1646                  | IM-44   | Belden Brick Co.                             |
| 80                  | Washington           | Wn-F                     | IM-1208   | David Florence                               |
| 81                  | Perry                | Py-SU                    | IM-1340   | Suburban South Recycling & Disposal Facility |
| 82                  | Pike                 | Pke-S                    | IM-1348   | Schrader and Son, Inc.                       |
| 83                  | Fairfield            | Fd-PG                    | IM-2086   | Pine Grove Regional Facility                 |
| 84                  | Knox                 | Kx-C                     | IM-2128   | Central Alloy Processing                     |
| 85                  | Scioto               | So-W                     | IM-2111   | Waller Bros. Stone Co.                       |
| 86                  | Trumbull             | Tl-CA                    | IM-2085   | City Stone LLC                               |

**CLAY/SHALE □**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                    |
|---------------------|----------------------|--------------------------|---|--|
| 1                   | Ashland              | Ald-1                    | IM-334  | London Tile Co.                            |
| 2                   | Auglaize             | Ae-7                     |   | Sandkuhl Clay Works, Inc.                  |
| 4                   | Columbiana           | Ca-505                   | IM-13, IM-936   | State Line Resources, Inc.                 |
| 5                   | Columbiana           | Ca-205                   | IM-74   | Summitville Tiles, Inc.                    |
| 7                   | Cuyahoga             | Cya-19                   | IM-95   | Hydraulic Press Brick Co.                  |
| 10                  | Greene               | Ge-8                     | IM-364  | Southdown Inc.                             |
| 11                  | Harrison             | Hn-152                   | IM-42   | Bowerston Shale Co.                        |
| 17                  | Holmes               | Hs-56                    |   | Clark Clay, Inc.                           |
| 19                  | Holmes               | Hs-67                    | IM-3, IM-768  | Holmes Limestone Co.                       |
| 23                  | Jackson              | Jkn-367                  | D-594, D-968, D-1083  | Waterloo Coal Co., Inc.                    |
| 31                  | Licking              | Lg-501                   | IM-257  | Bowerston Shale Co.                        |
| 34                  | Mahoning             | Mg-608                   | IM-4  | ESSROC Cement Corp.                        |
| 36                  | Marion               | Mn-7                     | IM-309  | Glen-Gery Corp.                            |
| 38                  | Muskingum            | Mum-776                  | IM-256  | Bowerston Shale Co.                        |
| 41                  | Noble                | Ne-66                    | IM-664  | Towne Square Products                      |
| 42                  | Paulding             | Pg-1                     | IM-513  | Lafarge Corp.                              |
| 53                  | Stark                | Sk-217                   | D-0938  | Countywide Recycling and Disposal Facility |
| 56                  | Tuscarawas           | Ts-1517                  | IM-46   | Belden Brick Co.                           |
| 57                  | Tuscarawas           | Ts-1646                  | IM-44   | Belden Brick Co.                           |
| 58                  | Tuscarawas           | Ts-1841                  | IM-45   | Belden Brick Co.                           |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**CLAY/SHALE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>               |
|---------------------|----------------------|--------------------------|---|---------------------------------------|
| 59                  | Tuscarawas           | Ts-1939                  | IM-47   | Belden Brick Co.                      |
| 60                  | Tuscarawas           | Ts-1960                  | IM-48   | Belden Brick Co.                      |
| 63                  | Tuscarawas           | Ts-1818                  | IM-9  | Kimble Clay & Limestone Co.           |
| 64                  | Tuscarawas           | Ts-1884                  | IM-6  | L & M Mineral Co.                     |
| 65                  | Tuscarawas           | Ts-1914                  | D-0701  | L & M Mineral Co.                     |
| 67                  | Tuscarawas           | Ts-1557, Ts-1558         | IM-52   | Stone Creek Brick Co.                 |
| 71                  | Tuscarawas           | Ts-540                   | IM-28   | Zoar Mining Co.                       |
| 76                  | Stark                | Sk-235                   | IM-945  | Holmes Limestone Co.                  |
| 77                  | Tuscarawas           | Ts-1982                  | IM-621  | L & M Mineral Co.                     |
| 79                  | Columbiana           | Ca-947                   | IM-935  | Dome Minerals, Inc.                   |
| 81                  | Athens               | As-594                   |   | Athens Hocking Reclamation Center     |
| 82                  | Ashtabula            | Asa-14                   | IM-563  | Janson's Soil Service, Inc.           |
| 85                  | Tuscarawas           | Ts-520                   | IM-214  | Blue Jay Enterprises of Ts. Co., Inc. |
| 86                  | Geauga               | Gea-9                    | IM-132  | Soltis Sand & Gravel                  |
| 87                  | Athens               | As-595                   | IM-1083   | Cochran Transportation Services, Inc. |
| 88                  | Coshocton            | Cn-828                   | IM-1026   | William Albert                        |
| 89                  | Erie                 | Ee-32                    | IM-1077   | Speer Brothers, Inc.                  |
| 90                  | Greene               | Ge-44                    |   | Southdown Inc.                        |
| 92                  | Lake                 | Lke-M                    | IM-1059   | Mitchell Transport, Inc.              |
| 93                  | Lawrence             | Le-B                     | IM-1188, D-0746   | Belville Mining Co., Inc.             |
| 99                  | Pike                 | Pke-26                   | IM-142  | Valley Materials Co.                  |
| 101                 | Preble               | Pre-9                    | IM-1095   | Loxley Aggregates, Inc.               |
| 105                 | Belmont              | Bt-1190                  | IM-1089   | Sidwell Materials, Inc.               |
| 106                 | Columbiana           | Ca-970                   | IM-1024   | M & M Builders Supply Co.             |
| 107                 | Mahoning             | Mg-EM                    | IM-1056   | ESSROC Cement Corp.                   |
| 108                 | Perry                | Py-338                   | IM-1092   | Bearcreek Clay Co.                    |
| 109                 | Harrison             | Hn-B                     | IM-1020   | Bowerston Shale Co.                   |
| 111                 | Holmes               | Hs-96                    | IM-997  | Spring Run Gravel                     |
| 114                 | Richland             | Rd-R                     | IM-1035   | Richland Moulded Brick Co.            |
| 116                 | Portage              | Pe-61                    | IM-1064   | Red Brush Peat Co.                    |
| 118                 | Mahoning             | Mg-631                   | IM-1103   | East Fairfield Coal Co.               |
| 122                 | Muskingum            | Mum-904                  | IM-1127   | Valley Clay Mining Co.                |
| 123                 | Stark                | Sk-246                   | IM-2024   | American Landfill, Inc.               |
| 128                 | Athens               | As-533                   | IM-17   | Waterloo Coal Co., Inc.               |
| 130                 | Columbiana           | Ca-348                   | IM-976  | D. & D. Mining Co.                    |
| 135                 | Mahoning             | Mg-632                   | IM-808  | Solomon's Mines, Inc.                 |
| 136                 | Ottawa               | Oa-19                    | IM-1153   | Brush Wellman, Inc.                   |
| 137                 | Perry                | Py-344                   | IM-1014   | Ogleby Norton Industrial Sands, Inc.  |
| 138                 | Perry                | Py-S1                    | IM-1183   | Swingle Drilling, Inc.                |
| 144                 | Wayne                | We-26                    | IM-690, IM-1210   | Mt. Eaton Reclamation, Inc.           |
| 146                 | Stark                | Sk-247                   | D-0929  | Buckeye Industrial Mining Co.         |
| 147                 | Tuscarawas           | Ts-B                     | IM-49   | Belden Brick Co.                      |
| 148                 | Knox                 | Kx-K                     | IM-870  | Knox County Board of Commissioners    |
| 150                 | Ross                 | Rs-T                     | IM-1189   | Tackett Builders                      |
| 151                 | Tuscarawas           | Ts-H1                    | IM-927  | Holmes Limestone Co.                  |
| 152                 | Washington           | Wn-1010                  | IM-1163   | M & J Sand & Gravel, Inc.             |
| 153                 | Champaign            | Cpn-20                   | IM-482  | Moore's Excavating Co.                |
| 155                 | Fairfield            | Fd-16                    | IM-156  | James E. Downard                      |
| 156                 | Lucas                | Ls-13                    | IM-492  | Seaway Sand & Stone, Inc.             |
| 157                 | Montgomery           | My-CW                    | IM-878  | Carter & Carter, Inc.                 |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**CLAY/SHALE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                             |
|---------------------|----------------------|--------------------------|---|---|
| 158                 | Montgomery           | My-W                     | IM-1207   | Weidle Sand & Gravel, Inc.                          |
| 161                 | Portage              | Pe-89                    | IM-1142   | Green Oaks Potting Products, Inc.                   |
| 162                 | Stark                | Sk-BE                    | IM-1202   | Beaver Excavating, Inc.                             |
| 163                 | Washington           | Wn-F                     | IM-1208   | David Florence                                      |
| 164                 | Columbiana           | Ca-888                   | IM-1181   | D. & D. Mining Co.                                  |
| 165                 | Wayne                | We-25                    | IM-1209   | Craigton Shale Co.                                  |
| 166                 | Ashtabula            | Asa-18                   | IM-949  | Joe Simak & Sons Trucking, Inc.                     |
| 173                 | Perry                | Py-V                     | IM-1245   | Valley Clay Mining Co.                              |
| 174                 | Stark                | Sk-K                     | IM-1236   | Koch-Glitsch, Inc.                                  |
| 177                 | Tuscarawas           | Ts-BB                    | IM-1221   | Belden Brick Co.                                    |
| 178                 | Columbiana           | Ca-987                   | D-0928  | Buckeye Industrial Mining Co.                       |
| 179                 | Wayne                | We-11                    | IM-547  | Prairie Lane Sand & Gravel Co.                      |
| 182                 | Lawrence             | Le-PH                    | IM-1268   | P & H Construction                                  |
| 184                 | Trumbull             | Tl-12                    | IM-131  | Samco, Inc.   |
| 185                 | Wayne                | We-EA                    | IM-1259   | E. A. Construction, Inc.                            |
| 186                 | Columbiana           | Ca-BIM                   | IM-1271   | Buckeye Industrial Mining Co.                       |
| 188                 | Harrison             | Hn-CD                    | D-1105  | Waste Management/Chambers Development of Ohio, Inc. |
| 189                 | Stark                | Sk-BI                    | D-1043  | Buckeye Industrial Mining Co.                       |
| 190                 | Hamilton             | Hmn-72                   | IM-1264   | Rumpke Mountain Mining Co.                          |
| 193                 | Wayne                | We-15                    | IM-398  | Zollinger Sand & Gravel Co.                         |
| 194                 | Columbiana           | Ca-S                     | IM-1258   | Solomon's Mines, Inc.                               |
| 195                 | Jackson              | Jkn-CH2                  | IM-1302   | Cedar Heights Clay Co.                              |
| 197                 | Noble                | Ne-S                     | IM-913  | Sharon Stone Co.                                    |
| 198                 | Ottawa               | Oa-BF                    | IM-1287   | Browning-Ferris Industries of Ohio, Inc.            |
| 199                 | Portage              | Pe-101                   | IM-1154   | D & K Materials, Inc                                |
| 200                 | Stark                | Sk-B                     | D-1123  | Buckeye Industrial Mining Co.                       |
| 201                 | Tuscarawas           | Ts-BJ                    | IM-1285   | Blue Jay Enterprises of Ts. Co., Inc.               |
| 203                 | Stark                | Sk-208                   | D-1015  | ENZ, Inc.   |
| 204                 | Portage              | Pe-84                    | IM-868  | Twinsburg Development Corp.                         |
| 205                 | Perry                | Py-D1                    | IM-1304   | Bearcreek Clay Co.                                  |
| 206                 | Fairfield            | Fd-VJ                    | IM-1339   | Van Johnson Construction, Inc.                      |
| 207                 | Madison              | Mdn-11                   | IM-1063   | Tuffco Sand & Gravel, Inc.                          |
| 208                 | Mahoning             | Mg-54                    | IM-93   | Honey Creek Stone Co.                               |
| 209                 | Mercer               | Mr-C                     | IM-1341   | Laidlaw Waste Systems (Celina), Inc.                |
| 210                 | Muskingum            | Mum-L                    | IM-1344   | Luburgh Inc.  |
| 211                 | Portage              | Pe-18                    | IM-193  | Sober Sand & Gravel Co.                             |
| 212                 | Portage              | Pe-P                     | IM-1322   | Patrick Excavating, Inc.                            |
| 213                 | Perry                | Py-SU                    | IM-1340   | Suburban South Recycling & Disposal Facility        |
| 214                 | Huron                | Hrn-M                    | IM-1338   | Marta Track Constructors, Inc.                      |
| 216                 | Hamilton             | Hmn-NB                   | IM-1337   | New Baltimore CDD Landfill, Ltd.                    |
| 217                 | Defiance             | De-3                     | IM-1351   | General Motors Power Train                          |
| 219                 | Greene               | Ge-W                     | IM-645  | Joann O. Weddle                                     |
| 221                 | Putnam               | Pm-P                     | IM-2002   | Putnam County Board of Commissioners                |
| 223                 | Williams             | Ws-N                     | IM-1291   | Andy Nixon Contractors, Inc.                        |
| 224                 | Wyandot              | Wt-CD                    | IM-2016   | County Disposal (Ohio), Inc.                        |
| 225                 | Lucas                | Ls-12                    | IM-953  | Barrett Paving Materials, Inc.                      |
| 226                 | Athens               | As-H                     | IM-2081   | J. B. Hayes Excavating and Pipeline                 |
| 227                 | Brown                | Bn-W                     | IM-2076   | Rumpke Waste, Inc.                                  |
| 228                 | Butler               | Br-K                     | IM-2041   | Kelchner Environmental, Inc.                        |
| 229                 | Licking              | Lg-NU                    | IM-2046   | Nuway Services, Inc.                                |

**NUMERICAL INDEX OF OPERATORS OF MINES  
SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

**CLAY/SHALE (cont.)**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>                    |
|---------------------|----------------------|--------------------------|---|--|
| 230                 | Jackson              | Jkn-CH3                  | IM-2035   | Cedar Heights Clay Co.                     |
| 231                 | Stark                | Sk-CR                    | IM-2020   | Countywide Recycling and Disposal Facility |
| 232                 | Columbiana           | Ca-E                     | IM-2112   | East Liverpool Landfill, Inc.              |
| 233                 | Coshocton            | Cn-WL                    | IM-2127   | Walhonding Sand & Gravel                   |
| 234                 | Fairfield            | Fd-PG                    | IM-2086   | Pine Grove Regional Facility               |
| 235                 | Hamilton             | Hmn-CE                   | IM-2113   | Carlisle Equipment Group L.P.              |
| 236                 | Logan                | Lgn-C                    | IM-2108   | Cherokee Run Landfill                      |
| 237                 | Stark                | Sk-B4                    | D-2096  | Buckeye Industrial Mining Co.              |
| 238                 | Lucas                | Ls-E                     | IM-2116, IM-1075  | Envirosafe Services of Ohio, Inc.          |
| 239                 | Cuyahoga             | Cya-42                   | IM-686  | Boyas Excavating, Inc.                     |
| 240                 | Columbiana           | Ca-H                     | IM-2027   | Harvest Sand & Gravel, Inc.                |

**SALT □ ■**

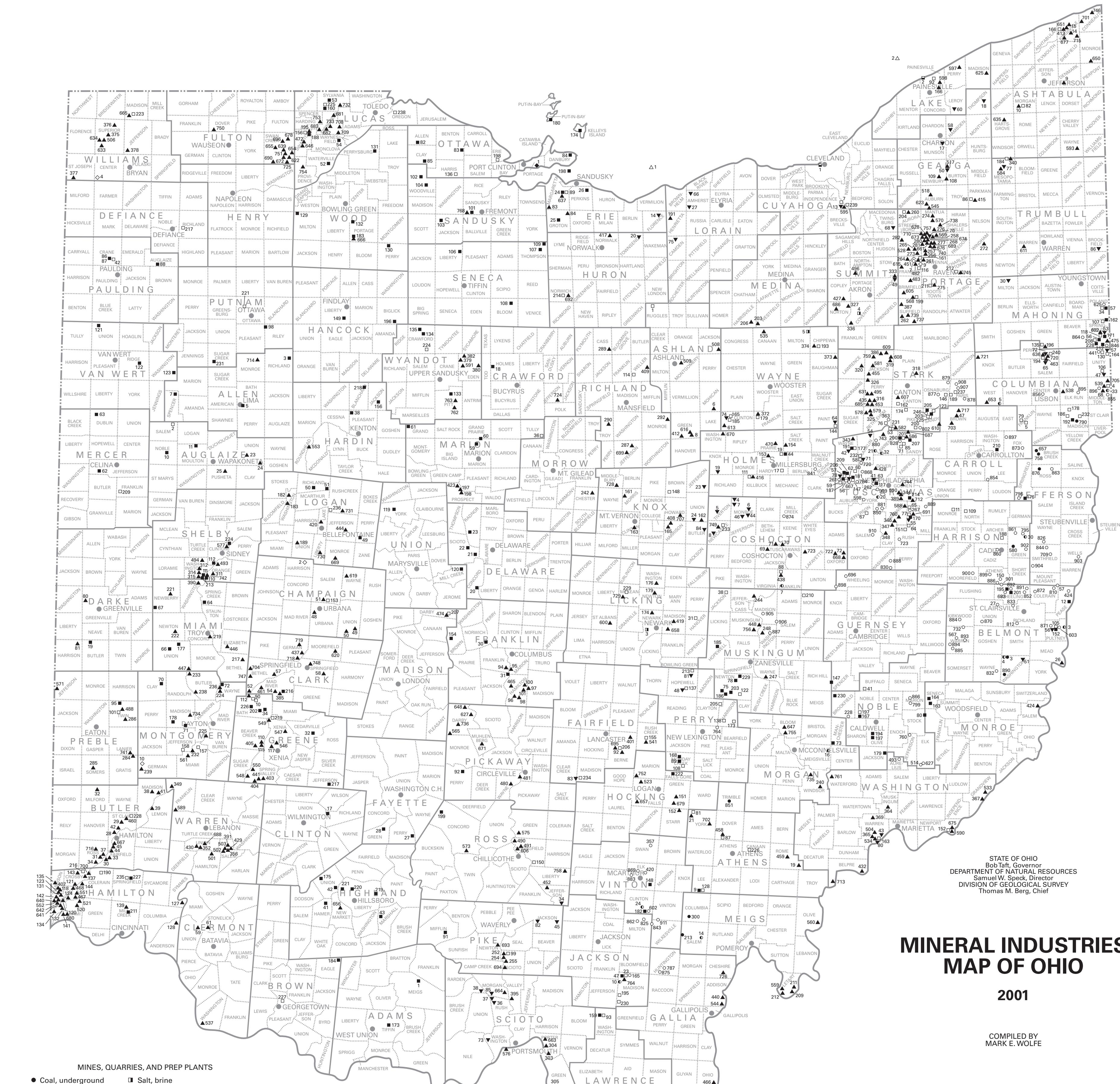
| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>    |
|---------------------|----------------------|--------------------------|---|----------------------------|
| 1                   | Cuyahoga             | Cya-30                   |   | Cargill Incorporated       |
| 2                   | Lake                 | Lke-6                    |   | Morton International, Inc. |
| 3                   | Licking              | Lg-45                    |   | R. H. Penick Co.           |
| 4                   | Summit               | St-9127                  |   | Cargill Incorporated       |
| 5                   | Wayne                | We-9129                  |   | Morton International, Inc. |

**GYPSUM ◆**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i> |
|---------------------|----------------------|--------------------------|---|-------------------------|
| 1                   | Ottawa               | Oa-2                     | IM-344  | BPB-Celotex             |

**PEAT ◇**

| <i>Map location</i> | <i>County number</i> | <i>State mine number</i> | <i>Division of Mineral Resources Management permit number</i> | <i>Name of operator</i>           |
|---------------------|----------------------|--------------------------|---|-----------------------------------|
| 2                   | Champaign            | Cpn-9                    |   | Sphagnum Moss Peat Farm           |
| 4                   | Williams             | Ws-17                    |   | Lingvai Peat Co.                  |
| 7                   | Portage              | Pe-89                    | IM-1142   | Green Oaks Potting Products, Inc. |
| 9                   | Portage              | Pe-61                    | IM-1064   | Red Brush Peat Co.                |
| 10                  | Montgomery           | My-41                    | IM-360  | Moraine Materials Co., Inc.       |



0 10 20 30 40 miles  
0 10 20 30 40 kilometers

Cartography by Lisa Van Doren

This map is based on operators listed in the 2001 Report on Ohio mineral industries and is intended for general reference. Assistance with locations was received from the Ohio Department of Natural Resources, Division of Mineral Resources Management.



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