

Indiana Mineral Industry News

1st Quarter 2005

By Kathryn R. Shaffer
Indiana Geological Survey

Production

Indiana **coal production** through the week ending April 2, 2005, was 9.2 million short tons, a 4.7 percent decrease from the same period of the previous year according to the **U.S.**

Department of Energy (DOE), Energy Information Administration (EIA). Indiana ranked eighth nationally (as of April 2).¹

The most current data published by the **U.S. Geological Survey (USGS)** for the fourth quarter of 2004 showed Indiana **production of crushed stone** was 14.2 million metric tons (mt) and Indiana **production of construction sand and gravel** was 7 million mt, demonstrating a decrease of 0.4 percent and a decrease of 5.5 percent for each commodity, respectively, when compared to the same period of 2003. The USGS reports that **aggregate production** set a national record in 2004 with a preliminary total of 413 million metric tons produced; Indiana ranked ninth nationally.² Industry experts are projecting **moderate growth** in the construction industry during 2005, which should have a positive effect on the aggregate industry.^{3,4}

Nonresidential construction may outperform residential. High oil prices and cement supply problems are projected to have negative impacts.⁵ **Jack Gerard** left his post as President of the National Mining Association for a position with the American Chemistry Council.⁶

The U.S. **dimension stone** market is projected to have a good year in 2005, according to an industry survey. Fabricators are expecting increases of 10 to 15 percent over the previous year, with projections of up to 30 percent improvement during the coming decade.⁷

For the fourth consecutive year, a national **wallboard** shipment record was set in 2004. About 34.24 billion square feet were shipped, a 7.9 percent increase over 2003 shipments.⁸

Industry news

Triad Mining opened its South Augusta Mine near its existing Augusta Mine in Pike County. Production from the new mine will be approximately 600,000 tons per year. The company will soon be closing its Flint Hill and Lyons mines because reserves are nearly exhausted.⁹

Lexington Coal Company, which purchased the remaining Indiana holdings of **Horizon Natural Resources** and mines in Kentucky and West Virginia, decided not to mine any of them.¹⁰ **Peabody Energy** purchased several Lexington Coal Company assets including the Sycamore, Beech, and Kindill #3 Mines and other assets resulting in 40 million tons of reserves in Knox County for the Peabody's existing Miller Creek Mine and 20 million tons of reserves in Sullivan County for its Farmersburg Mine.^{11,12,13}

Alliance Resource Partners LP is permitting land for a new mine near its current Gibson County Coal Company mine. The new mine will be called Gibson South and is planned for production during 2008 or 2009. The mine could produce 3.2 million tons per year from an estimated 83 million tons in reserves.¹⁴ Alliance is also allowing a synfuel company, **PC Indiana Synthetic Fuel #2**, to set up a synthetic fuel operation on its Gibson County mine property. The agreement lasts through 2007 and the fuel will be sold to Cinergy's Gibson Station.¹⁵

Vigo Coal Company's Cypress Creek Mine designed a revised mining plan to better cope with overburden and is expecting to see greater production this year. Specialized machinery will also be used at the mine for 4 months to maximize production.¹⁶

Holcim Ltd., a Swiss company, purchased **Aggregate Industries**, which mines sand and gravel at three operations in Indiana. Holcim is the second-largest-cement producing company in the world, and the third-largest in the U.S.^{17,18}

Hanson Aggregates will expand their Fort Wayne quarry by an additional 120 acres.¹⁹

A fire destroyed **Mulzer Crushed Stone's** 80,000-sq-ft building that included their office, and several pieces of heavy equipment at their operation near Charlestown. The fire, probably caused by an electrical malfunction, resulted in about \$3 million in damages.²⁰

Irving Materials has added a portable crusher to its Pipe Creek Jr. Quarry near Swayzee. The new equipment can produce 1,000 tons per hour compared to the old system's 600 tons per hour. The old Pipe Creek Stone Co. property has been turned into a machining and repair shop for the company.²¹

Oglebay Norton, which among its many holdings has a plant that produces ground limestone in Porter County, completed Chapter 11 bankruptcy proceedings. The company emerged with \$260 million in debt and with \$400 million in financing.^{22,23}

Two articles about the use of **Indiana Limestone** appeared in the March issue of *Stone World*. One featured the use of Indiana Limestone to clad the Gucci Jewelry Boutique in Beverly Hills, California. The stone was chosen to match a neighboring Gucci store and old carving techniques were used.²⁴ The other focused on the renovation of an historic building in Cincinnati, Ohio, now called the Hope Lodge. In that case, Indiana Limestone was chosen to replace damaged Cincinnati Stone, which is no longer available.²⁵

Rogers Group won seven community relations awards; one of them went to Morgan County Sand & Gravel in Indiana.²⁶

The vice-president of **Bybee Stone Company**, John Andrew Bybee, died unexpectedly in February.²⁷

Environmental issues

A new director, **Stephen L. Johnson**, was nominated to head the **U.S. Environmental Protection Agency (EPA)**. He has held many administrative posts within that agency.²⁸ The EPA released the **Clean Air Interstate Rule (CAIR)** which contains stringent emissions requirements for sulfur dioxide and nitrogen oxide emissions. The new standards are expected to alleviate some of the pollution in the northeastern states that allegedly travels there from other states.^{29,30} Indiana's sulfur dioxide emissions should be 56 percent lower and nitrogen oxide levels 68 percent lower than current levels by 2015 as a result of the new standards.³¹ Nationwide, benefits should exceed \$100 billion annually compared to an annual cost of approximately \$4 billion.³² A report released by the EPA indicates that due to economic improvements, **carbon emissions** increased from 2002 to 2003 by 0.6 percent, but was still below levels reported in 2000.³³ The EPA also issued the **Clean Air Mercury Rule** to help control the release of mercury from coal-fired plants through creation of a cap-and-trade program. Caps on emissions are set at 38 tons in 2010 and 15 tons in 2018.^{34,35} Emissions should then be reduced by 50 percent by 2020. Many companies do not expect much difficulty in reaching this goal.³⁶ Indiana plants may spend \$3 billion over 10 years to reach the new air standards.³⁷ Nine states, led by New Jersey, filed suit against the EPA stating that the new mercury rule would not meet Clean Air Act requirements.³⁸ As much as 30 percent of ozone drifting over the U.S. and 40 percent of the mercury influx could be the result of pollution from other countries.³⁹

The EPA states that the **sulfur dioxide (SO₂) cap-and-trade program** has been effective, reducing electric power plant SO₂ emissions by nearly seven million tons since 1980 and the cost of compliance is 75 percent lower than originally thought. Acid deposition is thought to have decreased by approximately 30 percent.⁴⁰

Indiana filed a lawsuit against the EPA, stating that the agency had not used the most recent air quality data available before issuing its December list of **Indiana counties in noncompliance with EPA particulate standards**. A recent Indiana Department of Environmental Management (IDEM) report contains data indicating that sixteen counties should be removed from that list and only three counties—Clark, Dubois, and Marion—should remain on the list. Listed counties have until 2008 to develop plans on how they will meet EPA standards by 2010.⁴¹

Southern Indiana Gas and Electric Company will close a 50-megawatt (MW) coal-fired unit at its Culley generating station near Newburgh to settle a lawsuit with the U.S. Environmental Protection Agency. The company was sued because improvements that were made to the unit did not result in sufficient improvement to air quality.⁴²

Kentucky, Indiana, Michigan, Ohio, Virginia, and West Virginia were being considered for an American Electric Power (AEP) **integrated gasification combined cycle (IGCC) power plant**, but the company announced plans to construct the plant in Ohio.^{43,44} **Cinergy/PSI Energy** is performing site-specific studies related to the possibility of constructing a 500- to 600-megawatt

IGCC plant, possibly in Indiana.⁴⁵ State legislation, HB 1245, was introduced that would give IGCC plants a 5-year tax incentive to locate in Indiana.⁴⁶ **Wabash River Energy** has been renamed **SG Solutions**.⁴⁷ Wabash Valley Power Association purchased 50 percent of the company from Global Energy and plans to reopen the plant after reaching an agreement to sell its synthetic gas product to Cinergy/PSI.⁴⁸ In addition, **Tondu Corp.**, an independent power producer, is considering a site near New Carlisle for an IGCC power plant.⁴⁹

Cinergy/PSI Energy will add more **scrubbers** and will conduct a mercury reduction project at its New Albany plant. It is requesting a rate increase of between 13 and 17 percent over 5 years (annually an estimated average of about 3.1 percent) to pay for the improvements designed to bring the company into compliance with federal clean air laws.⁵⁰ It plans to increase the percentage of scrubbers on its units from the current 20 percent to 60 percent.⁵¹ Through 2008, the estimated cost for the company's Indiana, Kentucky, and Ohio scrubbers will be between \$1.3 billion and \$1.4 billion.⁵²

The **Kyoto Protocol**, ratified by 140 nations, however, not by the U.S. and developing countries such as China and India, took effect on February 16 and will run until 2012.⁵³

In an effort to curb emissions, an **international meeting** of environmental ministers met at the United Nations in February to discuss a binding treaty to strictly control the use of **mercury** by many industries. The proposal was rejected by all 140 represented countries owing to costs and

technical problems, but the countries agreed to voluntarily form partnerships to try to limit the use of mercury. If ineffective, they will meet again in 2007.⁵⁴

The **First Annual Illinois Basin Coalbed Symposium** was held November 16-17, 2004, in Evansville to discuss the use of **methane** as a resource.⁵⁵

Construction industry developments

An industry expert expects that nationwide, the **highway construction industry** will grow by about 4.5 percent during 2005 owing to improved state and local budgets, increased levels of federal funding, and increased tax receipts from sales of ethanol fuels.⁵⁶ However, the American Society of Civil Engineers reports that the **nation's infrastructure** needs \$1.6 trillion over 5 years for needed improvements.⁵⁷

A preferred route for a \$134 million U.S. 231 upgrade was released by **the Indiana Department of Transportation**. The project is scheduled for 2007.⁵⁸ The Federal Highway Administration issued approval for a \$245 million section of **S.R. 25**, also known as the Hoosier Heartland Corridor, from Lafayette to Logansport. It is the final segment of the multi-year project and will involve construction of a new four-lane highway.⁵⁹ Approximately \$27.5 million will be spent for the design and building of **U.S. 41** in Knox County, \$13.7 million for new road construction and bridge work on **SR 145** in Crawford County, \$12.5 million from bridge rehabilitation on **I-**

65 in Marion County, \$8.8 million for pavement replacement and bridge work on **SR 912** in lake County, \$5.6 million for superstructure replacement and widening of **I-90** in Steuben County, and \$5 million for an alternative **SR 23** in Granger.^{60,61,62} Six options are under consideration for the **U.S. 31 Kokomo Corridor Project**.⁶³

A resolution was passed by the Indianapolis City-County Council opposing the **proposed I-69 corridor** through Marion County because it would split a suburban area and cause other travel problems.⁶⁴

As plans develop, the **Marquette Greenway Plan** has been renamed the **Marquette Plan** because, although greenways will be included, the plan also includes other types of development. When complete, approximately 80 percent of the **Lake Michigan shoreline** between Hammond and Portage will be accessible to the public. Land currently held largely by steel companies is expected to become available as companies merge and consolidate their operations. It is expected that with an improved shoreline, **commercial development** of the area will follow. Affected cities have been asked to submit plans and timelines.⁶⁵ The plan received approval from the Portage Plan Commission and **Northern Indiana Public Service Company** submitted a plan to state regulators to sell its inactive Mitchell coal-fired electric plant to the city of Gary so that it can be demolished for the project.^{66,67,68}

A new \$550 to \$700 million **football stadium** is planned for Indianapolis. Construction could be funded by new taxes that would be imposed on restaurants, hotels, car rentals, tickets, and athlete salaries. There are also plans to renovate the nearby **convention center**, bringing the project cost to about \$990 million.⁶⁹

A new \$38 million **county hospital** has been approved by Harrison County Commissioners.⁷⁰ A **private nonprofit hospital** has been proposed for Clark County.⁷¹ About \$16.8 million will be spent on construction of **affordable housing** in Indianapolis.⁷² A new 168-room **hotel** is under construction in downtown Bloomington.⁷³

Cinergy has been selling some of its unused property. Recently the company sold 42 acres along **U.S. 40** to a development group that has plans to develop a shopping area with several stores.⁷⁴

Owing to significant freezing and thawing this year, **potholes** could be worse this spring than they have been in several years.^{75,76}

Legislation and regulatory issues

The **Transportation Equity Act: A Legacy for Users (H.R. 3, called TEA LU)**, which in its current state provides \$284 billion over 6 years for highways, passed out of the House of Representatives on March 10.^{77,78,79} It then quickly passed out of the Senate Environment

Committee and Public Works and Banking Committee.⁸⁰ Under the current bill, **Indiana** is slated to get back an increased portion (37%) in federal gas tax money, which places it eighth among the states and is the fourth-largest percentage increase among the states. That should translate to an increase of \$1.4 billion over the next 6 years. It contains a total of **\$5.4 billion for Indiana highway projects** with \$55 million going to the Ohio River Bridges Project. For the state, about \$14 million is provided for the I-69 extension from Indianapolis to Evansville by the bill. The bill also provides \$4.8 million for a bus facility for Bloomington Transit.^{81,82,83}

The Clear Skies bill failed to make it out of Senate committee. The bill, backed by the Bush administration, had provisions for the management of sulfur dioxide, nitrogen oxides, and mercury emissions. It was opposed by some who were concerned that it did not deal with the issue of carbon dioxide, and therefore, would weaken the Clean Air Act.⁸⁴

The Bush administration's **proposed federal budget** reduced funding for the **Federal Aviation Administration Airport Improvement Program** by \$0.5 billion from the appropriated \$3.5 billion in 2004.⁸⁵ **The U.S. Geological Survey (USGS) Mineral Resources Program** faces a possible \$29 million cut, a reduction in their program of about 53 percent; this would leave the program with a budget of about \$25 million. Emphasis would be shifted to natural hazard research and warning systems.^{86,87,88} In addition, the **EPA budget** would decrease by 5.6 percent to \$7.6 billion. **The U.S. Department of Energy's** \$23.4 billion includes funding for the President's Coal Research Initiative, clean coal demonstration projects, and FutureGen.⁸⁹

A bill (**HB-1618**) was introduced into the state legislature that would provide funding for the **Center for Coal Technology Research (CCTR)** at Purdue University. The money is to be raised through a coal technology fee, based on use, charged to all electric consumers. The center would have a spending limit of \$500,000 per fiscal year.^{90,91}

The **U.S. Mine Safety and Health Administration (MSHA)** reports a new record low for fatalities in 2004. Fifty-four miners lost their lives that year, mostly in surface mines.⁹²

Thomas Sharp, retired Alcoa executive and a civil engineering consultant, was selected by Governor Mitch Daniels to head **the Indiana Department of Transportation**.^{93,94,95} **Courtney Carr**, who has military, business, and construction industry experience, was appointed **Chief of Staff and Deputy Commissioner for Highway Operations**.⁹⁶ Personnel changes were made in other divisions, several in IDEM and in the Department of Natural Resources.^{97,98}

In February, legislation was passed (**H.B. 1003**) that established a new **Indiana Economic Development Corporation (IEDC)**. Headed by Patricia Miller, as Chief Executive, the corporation replaces the Indiana Department of Commerce and may be the only one in the nation. The governor and 11 board members control the Corporation.^{99,100} The primary purpose of the IEDC will be to concentrate on business and job creation in Indiana. Other former functions, such as state tourism, were transferred to the Lieutenant Governor Becky Skillman's

Office.¹⁰¹

A project was begun to take **digital aerial photos** of the entire state that will be used to update the Indiana's geographic information system (GIS). Called the 2005 **Statewide Color Orthophotography Project**, more than 50,000 high-resolution photos will be taken.¹⁰²

The federal **Steel Import Monitoring and Analysis program**, administered by the U.S. Department of Commerce, will be extended to 2009. It has been set to expire in March.¹⁰³

Metals

The **U.S. steel industry** did very well last year largely as a result of **consolidation**. China is a significant factor as it currently imports steel, but could become a competitor in the future as its domestic steel industry grows.¹⁰⁴ The **American Institute for International Steel**, a group that advocates international free steel trade and industry growth, predicts a profitable first half of 2005 for the steel industry. Steel prices are expected to rise.¹⁰⁵ About 35.7 million tons of steel were imported during 2004, a 54.5 percent increase over 2003 levels.¹⁰⁶ Scrap metal prices are falling.¹⁰⁷

Mergers continue in the steel industry. **International Steel Group (ISG)** is merging with **Mittal Steel Co. LLC**. The international company, with operations in 14 companies, will be the

largest steel producer in the world.¹⁰⁸ Steel plants at Burns Harbor and East Chicago and ISG Railroads will be acquired.^{109,110} **Ispat** merged with Mittal last year. **Mittal Steel** reported a net income of \$4.7 billion during 2004, almost four times its reported income during 2003, through acquisitions, sales to China, and improved international steel prices. The company plans to expand further, through acquisition, in Europe. **Ispat Inland** is in negotiations with the United Steel Workers for a new labor agreement.^{111,112} Ispat Inland also reported record 2004 income. The company reported a net income of \$258.7 million compared to \$52.6 million in 2003.¹¹³ When the ISG acquisition is complete, the new company will be named **Mittal USA**, and the Ispat Inland and ISG names will be dropped.¹¹⁴ As a result of the mergers, jobs may be cut, but most likely in its overseas operations.¹¹⁵

Refractory material is being added to the No. 6 blast furnace at **Ispat Inland**. The furnace was shut down for the maintenance during a period when demand for steel was lower and so the overall effect on production is expected to be small.¹¹⁶

Mittal Steel has displaced a Luxembourg-based company named **Arcelor** as the leading international company in terms of amount of steel produced. Arcelor is also seeking to expand through acquisition and is looking closely at several **U.S. prospects** with mills in Indiana including U.S. Steel, Nucor, AK Steel, and Steel Dynamics. The company is looking at potential acquisitions in other countries as well.¹¹⁷

An article appeared in the Kendallville News-Sun newspaper detailing the growth and positive economic impact of **Steel Dynamics**. The 9-year-old company now ranks sixth nationally in size. The company has purchased land neighboring its DeKalb County plant and may build an iron-making facility, **Indiana Nugget**, that would utilize a “clean” process that does not use **coke**.¹¹⁸ It petitioned to have the 289 acres rezoned for industrial use.¹¹⁹ Steel Dynamics is selling 40 acres to **Heidtman Steel Products Inc.** The company will construct a mill utilizing unique processing equipment. Sheet products for truck manufacturers will be produced..¹²⁰ The company also plans a \$150 million expansion project at its Columbia City mill in Whitley County. The mill currently has excess capacity that the company would like to utilize. Specific plans have not been released.¹²¹

U.S. Steel Corp. experienced a record year in 2004 with a profit of 1.09 billion compared to a loss of \$463 million in 2003. The improvement can be attributed to company acquisitions and an improved international market. The company plans to rebuild its Gary Works No. 13 blast furnace this year. This unit is the second largest in the country and the down time for construction will likely impact flat-rolled steel production numbers for 2005. The cost will be about \$195 million for the rebuild. The unit has had carbon monoxide problems resulting in death and injury.^{122,123}

Nucor Corp. and **Ambassador Steel Corp.** are entering a joint venture to form **Nufab Rebar LLC** to fabricate rebar.¹²⁴

The 40-year old **Schererville Steel Co.**, under new ownership since 2003, experienced record sales during 2004.¹²⁵

The **United Steelworkers of America** is merging with the **Paper, Allied Industrial, Chemical, and Energy Workers International Union**. The combined union will be named the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial, and Service Workers International Union and will be called the **USW**. It will have about 850,000 active members.¹²⁶

Alcoa, Inc., plans to eliminate approximately 2,000 jobs worldwide to make it a more competitive company.¹²⁷

References cited

1. “Weekly U.S. coal production overview,” U.S. Department of Energy, Energy Information Administration, April 2, 2005.
2. Tepordei, V, “Crushed stone and sand and gravel in the fourth quarter 2004,” U.S. Geological Survey Mineral Industry Surveys, March 2005, 13 p., 9 tables, 3 figs., <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/csmis4q04.pdf>, date accessed, May 3, 2005.
3. Delano, D., “AggMan Outlook,” Aggregates Manager, February 2005, p. 6, also available at <<http://aggman.com/articles/economics/am02-05outlook.pdf>>.
4. Delano, D., “AggMan Outlook,” Aggregates Manager, March 2005, p. 6, also available at <<http://aggman.com/articles/economics/am03-05outlook.pdf>>.

5. “2005 U.S. cement forecast,” Cement Americas, January/February 2005, p. 10, 15, also available at <http://cementamericas.com/issue_20050101/>.
6. “Brinzo praises Gerard’s leadership as he leaves NMA to head American Chemistry Council,” March 25, 2005, p. 1, <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw032505.pdf>>, date accessed, April 18, 2005.
7. “Stone fabricators looking positive for 2005,” Stone World, January 1, 2005, <http://www.stoneworld.com/CDA/ArticleInformation/features/BNP__Features__Item/0,4046,141679,00.html>, date accessed, April 18, 2005.
8. “Wallboard shipments set new record for fourth consecutive year,” Gypsum Association news release, January 21, 2005, <<http://www.gypsum.org/01.21.05.pr.htm>>, date accessed April 15, 2005.
9. “Triad Mining’s newest mine to open this month in Indiana,” Platts Coal Outlook, January 17, 2005.
10. “Lexington likely to sell closed Marrowbone property,” Platts Coal Outlook, January 31, 2005.
11. “Indiana agencies take note of Peabody’s interest in three mines,” Platts Coal Outlook, February 28, 2005.
12. “Peabody Energy acquires coal reserves, surface assets in Illinois, Indiana,” National Mining Week, March 25, 2005, p. 3, <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw032505.pdf>>, date accessed April 18, 2005.
13. “Lexington sells Marrowbone mines to partnership involving CONSOL Energy,” Platts Coal Outlook, April 4, 2005.
14. “Mines to boost Alliance output by 12 million tons,” Platts Coal Outlook, March 14, 2005.
15. “Alliance enters long-term agreements to host synfuel facility at Gibson mine,” Platts Coal Outlook, March 21, 2005.
16. “Vectren ready for 2005, leaving disappointing 2004 behind,” Platts Coal Outlook, January 31, 2005.
17. Cowell, A., “Swiss cement maker weighs acquisition,” The New York Times, January 13, 2005, p. C10.

18. “Aggregate deal could reposition Holcim in U.S. ready mixed,” Cement Americas, January/February 2005, p. 2, also available at <http://cementamericas.com/mag/cement_aggregate_deal_reposition/>, date accessed April 15, 2005.
19. Barbaccia, T. G., State-by-state & province news,” Aggregates Manager, February 2005, p. 16, also available at <<http://www.aggman.com/articles/feb05sbs.htm>>, date accessed April 14, 2005.
20. “Quarry building destroyed; damage may top \$3 million,” The Louisville Courier-Journal, January 6, 2005, p. B1.
21. Barnum, D., “Portability around shots,” North American Quarry News, January 2005, p. 3, 6, also available at <<http://www.quarrynews.com>>, date accessed April 14, 2005.
22. Markley, R., “Oglebay Norton comes through bankruptcy,” Rock Products, February 2005, p. 22, 27, also available at <http://rockproducts.com/mag/rock_oglebay_norton_comes/>, date accessed April 18, 2005.
23. “Oglebay Norton emerges from chapter 11 bankruptcy,” Pit & Quarry Online, February 14, 2005, <<http://www.pitandquarry.com/pitandquarry/article/articleDetail.jsp?id=146952>>, date accessed April 18, 2005.
24. Adams, J., “A high-end finish in Indiana limestone,” Stone World, March 1, 2005, <http://www.stoneworld.com/CDA/ArticleInformation/features/BNP__Features__Item/0,4046,146824,00.html>, date accessed April 18, 2005.
25. Adams, J., “Limestone structure provides beacon of hope,” Stone World, March 1, 2005, <http://www.stoneworld.com/CDA/ArticleInformation/features/BNP__Features__Item/0,4046,146828,00.html>, date accessed April 18, 2005.
26. “NSSGA selects Rogers Group’s Morgan County Sand & Gravel for Certificate of Achievement award,” Rogers Group news release, January 14, 2005, <<http://www.rogersgroupinc.com/aboutrgi/rginews/2005PressReleases/starofexcellence-oakridge.htm>>, date accessed April 15, 2005.
27. “John Andrew Bybee,” The Bloomington Herald Times, February 28, 2005, p. A2.
28. Hellprin, J., “EPA nominee is career scientist,” The Indianapolis Star, March 5, 2005, p. A4.
29. Bergman, C., “EPA announces landmark Clean Air Interstate Rule,” U.S. Environmental Protection Agency News Release, March 10, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/690738c4ba5467b385256fc0005d1ca0!OpenDocument>>, date accessed April 14, 2005.

30. Janofsky, M., “E.P.A. sets rules to cut pollution,” The New York Times, March 11, 2005, p. A1.
31. Webber, T., “EPA rule tightens standards on smog,” The Indianapolis Star, March 11, 2005, p. A1.
32. Bruggers, J., “Clean-air rule affects Indiana,” The Louisville Courier-Journal, March 11, 2005, p. B6.
33. Millett, J., “News brief: U.S. greenhouse gas inventory released for public comment,” U.S. Environmental Protection Agency News Release, March 1, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/65f579a31d8ffcee85256fb700555157!OpenDocument>>, date accessed April 14, 2005.
34. Bergman, C., “EPA announces first-ever rule to reduce mercury emissions from power plants,” U.S. Environmental Protection Agency News Release, March 15, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/91ab7266e65751b985256fc50067d9b0!OpenDocument>>, date accessed April 14, 2005.
35. Barringer, F., “Bush plan to permit trading of credits to limit mercury,” The New York Times, March 14, 2005, p. A1.
36. “Utilities expect current equipment to help meet mercury rule standards,” Platts Coal Outlook, March 21, 2005.
37. Simcox, Ed, “Reducing mercury requires balancing act,” The Indianapolis Star, March 27, 2005, p. E4.
38. “Nine states sue EPA over mercury regulations,” Associated Press, The Wall Street Journal, March 30, 2005, p. D11.
39. The Indianapolis Star, “Foreign pollution is fouling U.S. Air,” March 14, 2005.
40. Ryan, D., “News brief: - EPA’s latest development: EPA announces results of annual sulfur dioxide action,” U.S. Environmental Protection Agency News Release, March 29, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/258fa4311d34c51685256fd30075ec65!OpenDocument>>, date accessed April 14, 2005.
41. “EPA targeted in pollution suit,” The Louisville Courier-Journal, March 8, 2005, p. B1.
42. “Coal-fired unit to close by 2006 as a result of settlement with EPA,” Platts Coal Outlook, January 10, 2005.

43. "AEP expects site decision on IGCC plant by mid-year," Platts Coal Outlook, January 17, 2005.
44. "AEP files for cost recovery to fund Ohio IGCC plant," Platts Coal Outlook, March 28, 2005.
45. "Cinergy reports 2004 results; finishes with strong fourth quarter," Cinergy News Release, January 27, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=490>, date accessed, April 14, 2005.
46. "Indiana legislation aims to lure IGCC plant development," Platts Coal Outlook, February 7, 2005.
47. "Management changes portend restart for gasification plant," Platts Coal Outlook, January 31, 2005.
48. "Cinergy, WVPA reach tentative agreement that keeps Wabash River Energy syngas plant operational," Cinergy News Release, February 7, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=492>, date accessed, April 14, 2005.
49. "Tondu plans 500-MW coal-gasification plant for Indiana," Platts Coal Outlook, March 14, 2005.
50. "PSI Energy seeks to boost rates up to 17 percent over five years," The Bloomington Hoosier Times, January 23, 2005, p. D5.
51. "As plants install scrubbers, high-sulfur coal demand will grow," Platts Coal Outlook, February 21, 2005.
52. "Cinergy plans scrubber upgrades," Platts Coal Outlook, February 28, 2005.
53. Coleman, J., "Kyoto global warming pact takes effect," The Louisville Courier-Journal, February 17, 2005.
54. "Plans to limit mercury pollution voluntary, not binding," The Bloomington Herald-Times, February 26, 2005, p. A5.
55. Hamill, P., ed., "Coalbed methane forum discusses DOE resource assessment," Clean Coal Today, Office of Fossil Energy, U.S. DOE, DOE/FE-0484, issue #62, Spring 2005, p. 11, <http://www.netl.doe.gov/cctc/newsletter/documents/cctoday_spring_05_final.pdf>, date accessed April 14, 2005.

56. “ARTBA economist expects 4.5 percent growth in highway construction,” Pit & Quarry Online, February 28, 2005,
<<http://www.pitandquarry.com/pitandquarry/article/articleDetail.jsp?id=146939>>, date accessed April 18, 2005.
57. “Report Card on America’s infrastructure released,” The National Stone, Sand and Gravel Association E-Digest, G. Edward, ed., March 15, 2005,
<http://www.nssga.org/newsletter/digest/031505_ed.cfm>, date accessed April 15, 2005.
58. “New route selected for U.S. 231 in Dubois County,” Indiana Department of Transportation News Release, January 4, 2005,
<<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=82458>>, date accessed April 14, 2005.
59. “Federal Highway Administration approves Hoosier Heartland Corridor,” Indiana Department of Transportation News Release, January 11, 2005,
<<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=82548>>, date accessed April 14, 2005.
60. “INDOT announces alternative for S.R. 23 project in Granger,” Indiana Department of Transportation News Release, January 14, 2005,
<<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=82650>>, date accessed April 14, 2005.
61. “Indiana Department of Transportation official tabulation of bids received for the letting of February 16, 2005,” Indiana Department of Transportation, February 21, 2005,
<<http://www.in.gov/dot/div/contracts/letting/feb/feb16off.pdf>>, date accessed April 14, 2005.
62. “Indiana Department of Transportation official tabulation of bids received for the letting of March 16, 2005,” Indiana Department of Transportation, March 18, 2005,
<<http://www.in.gov/dot/div/contracts/letting/mar/mar.htm>>, date accessed April 14, 2005.
63. “US 31 Kokomo Corridor Project study to be released,” Indiana Department of Transportation News Release, January 14, 2005,
<<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83385>>, date accessed April 14, 2005.
64. “Indianapolis council votes against I-69 route plan,” The Bloomington Herald-Times, February 9, 2005, p. C1.
65. Zorn, T., “Marquette Plan would transform 21 miles of NWI’s Lake Michigan shoreline,” Gary Post-Tribune, January 30, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=17076&SectionID=31&SubSectionID=217&S=1>>, date accessed April 19, 2005.

66. Russell, J., “Portage Plan Commission endorses Marquette Plan,” Times of Northwest Indiana, February 8, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=17287&SectionID=31&SubSectionID=217&S=1>>, date accessed April 19, 2005.
67. Russell, J., “Portage City Council adopts plan for Lake Michigan lakefront,” Times of Northwest Indiana, March 7, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=17826&SectionID=31&SubSectionID=217&S=1>>, date accessed April 19, 2005.
68. “NIPSCO submits proposal to Indiana regulators to sell Mitchell plant,” Coal Outlook, March 21, 2005.
69. Wrenn, D., “Lawmaker offers plan to pay for stadium,” The Louisville Courier-Journal, February 5, 2005, p. B1.
70. Schneider, G., “Commissioners back \$38 million request for Harrison hospital,” The Louisville Courier Journal, February 24, 2005, p. B1.
71. Davis, A., “Hospital proposed in eastern Clark,” The Louisville Courier-Journal, March 3, 2005, p. B1.
72. Tuohy, J., “HUD grant to help add housing,” The Indianapolis Star, February 26, 2005, p. B7.
73. Creps, M., “Hotel to fill downtown vacancy,” The Bloomington Herald-Times, March 9, 2005, p. A1.
74. “Sale agreement reached for Cinergy’s 42 acres,” The Indianapolis Star, January 29, 2005, p. B2.
75. Tuohy, J., “Changes in weather make potholes bloom,” The Indianapolis Star, January 13, 2005, p. B1.
76. “Potentially troublesome pothole season expected,” Indiana Department of Transportation News Release, February 2, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=82749>>, date accessed April 14, 2005.
77. Edward, G., ed., “House passes TEA LU: State funding apportionments omitted; pavement materials research included,” National Stone, Sand and Gravel Association e-Digest, March 15, 2005, <http://www.nssga.org/newsletter/digest/031505_ed.cfm>, date accessed April 15, 2005.

78. Hulse, C., “How to unite Congress: Spend billions on roads,” *The New York Times*, March 11, 2005, p. A1.
79. “House passes highway bill despite veto threat,” *Washington Post* article reprinted in *The Bloomington Herald-Times*, March 11, 2005, p. A3.
80. “Senate Committee passes highway reauthorization bill,” *National Stone, Sand and Gravel Association Washington Watch*, March 29, 2005, <<http://www.nssga.org/communications/ww032405.cfm>>, date accessed April 18, 2005.
81. Van der Dussen, K., “Legislation has funds for I-69,” *The Bloomington Herald-Times*, March 12, 2005, p. A1.
82. Poynter, C., “House bill sets aside \$55 million for 2 Ohio River bridges,” *The Louisville Courier-Journal*, March 11, 2005, p. B4.
83. “U.S. House of Representatives pass Transportation Equity Act,” *Indiana Department of Transportation news release*, March 10, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83192>>, date accessed April 14, 2005.
84. Janofsky, M., “Bush-backed emissions bill fails to reach Senate floor,” *The New York Times*, March 10, 2005, p. A21.
85. Edwards, G., ed., “Small airport funds in jeopardy,” *National Stone, Sand and Gravel Association e-Digest*, March 29, 2005, <http://www.nssga.org/newsletter/digest/032905_ed.cfm>, date accessed April 15, 2005.
86. “NMA urges House panel to reject proposed minerals program cut,” *National Mining Association Mining week*, March 18, 2005, p. 3, <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw031805.pdf>>, date accessed April 18, 2005.
87. “Alert: USGS Mineral Resources Program threatened with 53% cut,” *American Geological Institute news release*, March 16, 2005, <http://www.agiweb.org/gap/legis109/usgs_mineral_alert.html>, date accessed April 15, 2005.
88. “USGS wins some and loses some under Bush budget proposal,” *National Stone, Sand and Gravel Association Washington Watch*, February 8, 2005, <<http://www.nssga.org/communications/ww020805.cfm>>, date accessed April 18, 2005.
89. Hamill, P., ed., “News Bytes,” *Clean Coal Today*, Spring 2005, <www.netl.doe.gov/cctc/newsletter/documents/cctoday_spring_05_final.pdf>, date accessed April 18, 2005.

90. "Indiana coal official wants state to fund research center permanently," Coal Outlook, January 17, 2005.
91. "House Bill 1618," Indiana Legislative Services Agency, <<http://www.in.gov/apps/lisa/session/billwatch/billinfo?year=2005&session=1&request=getBill&docno=1618>>, date accessed April 15, 2005.
92. "MSHA announces mining fatalities decline to new record low," U.S. Department of Labor, Mine Safety and Health Administration news release, January 5, 2005, <<http://www.msha.gov/MEDIA/PRESS/2005/NR050105.asp>>, date accessed April 14, 2005.
93. Evans, T., "Daniels names INDOT chief," The Indianapolis Star, January 1, 2005, p. A1.
94. "Daniels names retired Alcoa executive to head INDOT," The Bloomington Hoosier Times, January 2, 2005.
95. "Commissioner Sharp takes the helm at the Indiana Department of Transportation," Indiana Department of Transportation News Release, January 11, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=82550>>, date accessed April 14, 2005.
96. "INDOT Commissioner announces Chief of Staff," Indiana Department of Transportation News Release, January 11, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=82551>>, date accessed April 14, 2005.
97. Webber, T., "7 environmental officials leave in Daniels' shake-up," The Indianapolis Star, January 12, 2005, p. B3.
98. "Outdoor agency's directors are fired," The Louisville Courier-Journal, March 16, 2005, p. B1.
99. "Daniels will ask for resignations," The Indianapolis Star, January 12, 2005, p. B3.
100. Swiatek, J., "Daniels' expectations high for new economic board," The Indianapolis Star, March 18, 2005, p. C1.
101. Cavanaugh, D., "Creation of Indiana Economic Development Corporation to impact local initiatives," Business Network, a Greater Bloomington Chamber of Commerce Publication, February 2005, p. 16.
102. Van der Dussen, K., "Planes take photos for high-tech state maps," The Bloomington Herald-Times, February 28, 2005, p. A1.

103. “AISI commends Commerce Secretary Gutierrez for extending SIMA program,” American Iron and Steel Institute press release, March 9, 2005,
<<http://www.steel.org/news/pr/2005/pro050309a.asp>>, date accessed April 18, 2005.
104. Deutsch, C. H., “Is the steel industry in a boom or on a bubble?” The New York Times, January 18, 2005, p. C1.
105. Holecek, A., “Steel: Good times ahead for booming industry,” The Times of Northwest Indiana, January 2, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=16398&SectionID=31&SubSectionID=217&S=1>>, date accessed April 19, 2005.
106. Holecek, A., “Steel imports grow in 2004,” The Times of Northwest Indiana, January 30, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17089&SectionID=31&SubSectionID=135&S=1>>, date accessed April 19, 2005.
107. Holecek, A., “2005 will be good for steel industry – maybe,” The Times of Northwest Indiana, February 13, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17398&SectionID=31&SubSectionID=135&S=1>>, date accessed April 19, 2005.
108. “Mittal Steel announces US\$3.2 billion credit facility,” Mittal news release, January 21, 2005,
<<http://www.mittalsteel.com/NR/rdonlyres/B5DB86C5-EE31-46F9-810C-B475F0367ECC/317/2005JanuaryFinancing.pdf>>, date accessed April 19, 2005.
109. Holecek, A., “Mittal to acquire ISG railroads,” The Times of Northwest Indiana, January 15, 2005,
<<http://www.nwitimes.com/articles/2005/01/15/business/business/4acdea98b3681c0a86256f89007cd770.txt>>, date accessed April 19, 2005.
110. Shidler, L., “ISG’s last report before Mittal Steel merger shows turnaround,” Gary Post-Tribune, February 11, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17355&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.
111. Holecek, A., “Ispat Inland resumes talks with USWA,” The Times of Northwest Indiana, January 13, 2005,
<<http://nwitimes.com/articles/2005/01/13/business/business/2c086f039509e0ea86256f87007fa934.txt>>, date accessed April 19, 2005.
112. Shidler, L., “High prices, Chinese market help boost Mittal Steel profits,” Gary Post-Tribune, February 11, 2005, accessed from Indiana Economic Digest,

<<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17354&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.

113. Shidler, L., “Ispat Inland 2004 profit reaches \$258 million,” Gary Post-Tribune, February 24, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17611&SectionID=31&SubSectionID=217&S=1>>, date accessed April 19, 2005.

114. Holecek, A., “100-year old Inland name to disappear,” The Times of Northwest Indiana, March 2, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17720&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.

115. Shidler, L., “Mittal Steel job cuts not expected in northwest Indiana,” Gary Post-Tribune, February 25, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17640&SectionID=31&SubSectionID=217&S=1>>, date accessed April 19, 2005.

116. Shidler, L., “Ispat Inland cuts back output at East Chicago plant, plans maintenance,” Gary Post-Tribune, March 8, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17846&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.

117. “Steel: The mergers aren’t over yet,” BusinessWeek Online, February 2005, <http://www.businessweek.com/magazine/content/05_08/b3921120.htm>, date accessed February 16, 2005.

118. Gisel, B., “Fort Wayne-based SDI experiences phenomenal growth in its nine years,” Kendallville News-Sun, January 30, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=17121&SectionID=31&SubSectionID=245&S=1>>, date accessed April 19, 2005.

119. Bassett, K., “DeKalb County Plan Commission favors rezoning site north of Steel Dynamics,” Auburn Evening Star, March 16, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=18043&SectionID=31&SubSectionID=170&S=1>>, date accessed April 19, 2005.

120. Gisel, B., “Steel plant expanding in Butler,” Auburn Evening Star, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=16419&SectionID=31&SubSectionID=170&S=1>>, date accessed April 19, 2005.

121. Garcia, W. S., “Steel Dynamics hints at Columbia City growth,” Fort Wayne Business Journal, March 21, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=18126&SectionID=31>>

&SubSectionID=245&S=1>, date accessed April 19, 2005.

122. Shidler, L., “U.S. Steel turns \$1 billion profit,” Gary Post-Tribune, January 25, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=16920&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.

123. Shidler, L., “U.S. Steel to spend \$195 million to rebuild Gary Works blast furnace,” Gary Post-Tribune, January 26, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=16947&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.

124. “Nucor announces joint venture with Ambassador Steel Corporation,” Nucor Corp. news release, January 12, 2005, <<http://www.nucor.com/financials.asp?finpage=newsreleases>>, date accessed April 18, 2005.

125. Holecek, A., “Structural steel manufacturer sees growth with high demand,” Times of Northwest Indiana, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=16427&SectionID=31&SubSectionID=198&S=1>>, date accessed April 19, 2005.

126. Nevers, K., “United Steelworkers of America mergers with another union,” Chesterton Tribune, <<http://www.indianaeconomicdigest.com/main.asp?Search=1&ArticleID=16620&SectionID=31&SubSectionID=135&S=1>>, date accessed April 19, 2005.

127. Mandak, J., “Alcoa cutting 2,000 jobs as it tightens global focus,” The Indianapolis Star, March 23, 2005, p. C5.

Indiana Mineral Industry News

2nd Quarter 2005

By Kathryn R. Shaffer
Indiana Geological Survey

Production

Indiana **coal production** through the week ending July 2, 2005, was 16.8 million short tons, an 8.5 percent decrease from the same period of the previous year according to the **U.S.**

Department of Energy (DOE), Energy Information Administration (EIA). Indiana ranked eighth nationally as of July 2.¹ A Morgan Stanley report states that current year U.S. coal production must show a 4 percent growth to balance supply with demand.²

The most current data published by the **U.S. Geological Survey (USGS)** for the first quarter of 2005 showed Indiana **production of crushed stone** was 7.5 million metric tons (mt) and Indiana **production of construction sand and gravel** was 4.4 million mt, demonstrating a decrease of 3.6 percent and an increase of 3.4 percent for each commodity, respectively, when compared to the same period of 2004.³

Cement consumption is predicted to reach a record 123.4 million mt in 2005, a projected increase of 3.0 percent over 2004 levels.⁴ Strong demand has left shortages in 23 states during the first quarter. Cement is being imported to meet demand; imports' share of consumption rose to 22.7 percent in 2004 and is projected to exceed 25 percent by the end of 2007.⁵

Industry news

James River Coal, headquartered in Richmond, Va., purchased **Triad Mining's** six Indiana surface mines and one Indiana underground mine for \$75 million.^{6,7} Triad Mining started production at its newest mine, **South Augusta**, in Pike County this year. Triad Mining is believed to have 17.4 million short tons of reserves.^{8,9}

Lexington Coal Company continued to try to sell former **Horizon Natural Resources properties** in West Virginia, Illinois, and Indiana. They were in negotiations with another company over some of the properties, including those in Indiana.¹⁰ **Peabody Coal Company**, which purchased some of the Horizon Natural Resources properties from Lexington Coal Company earlier this year, was again ranked as the nation's top coal producer in 2004.¹¹

Cinergy Corp. and Duke Energy decided to merge their companies. The new company will be called **Duke Energy Corporation**, if the merger is completed.¹² The two companies together own 19 coal-fired electric-power-generating stations.¹³ **PSI Energy** would retain its office in Plainfield.¹⁴ **Vectren Corporation** celebrated its 5-year anniversary and opened a new corporate headquarters building in Evansville.^{15,16}

The U.S. Department of Justice and the U.S. Federal Bureau of Investigation (FBI) investigated incidents of reported **price-fixing** among some **Indiana ready-mix concrete companies**. Four

company officers of **Irving Materials, Inc., (IMI)** pleaded guilty to conspiracy charges and will pay personal fines totaling \$500,000. They will also serve prison terms of 5 months each followed with 5 months of home detention and have agreed to cooperate in ongoing investigations. IMI will pay fines totaling \$29.2 million, the largest fine ever imposed for an antitrust case. IMI is reported to have profited by approximately \$225 million as a result of the price-fixing which occurred in the Indianapolis area between July 2000 and May 25, 2004. The Indiana Department of Transportation (INDOT) announced that it is severing ties with the company, but may allow it to complete projects that have been started to avoid delays. Other companies may also be charged. In a separate case, **Lee's Ready-Mix & Trucking** was indicted on federal antitrust charges for price-fixing on several jobs between February 2003 to June 2004 in Bartholomew, Jackson, and Jennings Counties resulting in sales of about \$7 million over that period. Former president Larry Lee pleaded guilty to charges and will serve a jail sentence of 8 months and pay a \$70,000 fine.^{17,18,19,20,21,22}

Rogers Group, Inc., was initially suspended from bidding on INDOT contracts for the period of one month for not reporting unethical behavior by INDOT employees who improperly furnished an INDOT subdistrict office. However, Rogers Group, Inc., was eventually cleared of any wrong-doing, but some INDOT employees resigned.^{23,24,25}

Rogers Group, Inc., is installing a 3-mile **railroad spur** to connect its Bloomington quarry to the Indiana Rail Road Company's Ellettsville line. The spur should allow for improved transport

and the possibility of new customers in Indiana and other states. Rogers Group, Inc., moved into new and larger office space in Bloomington.²⁶ Two of the company's Indiana operations received recognition in the National Stone, Sand and Gravel Association's (NSSGA's) About Face awards program. **The Greene County Plant** near Bloomfield received a Outstanding Achievement Award and the **Graysville Sand and Gravel** operation received a First Step Award.²⁷ In addition, **Morgan County Sand and Gravel** earned a Certificate of Achievement as part of the NSSGA community relations awards.²⁸

Stonehenge Gravel and Concrete sold its concrete properties to **Ernst Concrete** and its two gravel properties in Randolph and Wayne Counties to **U.S. Aggregates** in June. Stonehenge Gravel and Concrete had been in business for 20 years.²⁹

Rieth-Riley Construction Co., which owns active sand and gravel operations in Morgan and St. Joseph Counties, applied to the Hendricks County Plan Commission for permission to install a hot mix **asphalt plant** on 10 acres near IMI's concrete plant near U.S. 36. Public hearings were held and substantial community opposition was expressed. The Indiana Department of Environmental Management (IDEM) approved an air permit for the proposed plant, but the Hendricks County Plan Commission **did not approve the development** based on probable increased truck traffic, decreased air quality, and decreased property values.^{30,31,32,33,34}

Buzzi Unicem USA's Greencastle plant received the Indiana Governor's **2004 environmental excellence award** for its innovative semi-dry technology installed in 2000. The technology has resulted in a decrease of 89 percent in SO₂ emissions and a decrease of 38 percent in NO_x emissions, as well as reductions in particulate matter and other emissions, over the past four years.³⁵

All the limestone and lime operations of **Oglebay Norton**, which emerged from bankruptcy proceedings last quarter, are **now called O-N Minerals**. This includes the **Global Stone** ground limestone operation in Porter County.³⁶

The **De Hoftoren government building** completed in September 2003 in The Hague, The Netherlands, received **two design awards** and is a finalist for a third. Although noted for its use of green slate, the exterior of the building was clad with **Indiana Limestone**.³⁷

The Monroe County Convention and Visitor's Center and the Lawrence County Tourism Commission received a \$42,000 grant that had been awarded last November from the former Lt. Governor's office. The purpose of the grant is to determine whether or not it is feasible to develop a **Limestone Trail, museum, and park** as tourist destinations. The study will be conducted in three phases with a final report completed by September 15, 2006.³⁸

The Natural Stone Council, which formed in 2003 to support the use of natural stone over imitation products, met to continue formation of bylaws, council structure, programs, and other matters.³⁹

The **ninth annual Limestone Symposium** was held at **Bybee Stone Company** in Ellettsville during June. The symposium, also sponsored by the Bloomington Area Arts Council, draws sculptors who want to learn more about carving Indiana limestone. This year an exhibit of stone sculptures, titled “Carved in Stone,” was held in association with the symposium at the John Waldron Arts Center in Bloomington.^{40,41,42}

Environmental issues

The Tondur Corp., an independent power producer based in Houston, Tx., plans to build a 500 MW **integrated gasification combined cycle (IGCC)** plant somewhere in Indiana. The company may convert an abandoned natural-gas-fired plant near South Bend that was never completed and plans to use **Shell Global Solutions (US), Inc.**, gasification technology. The company is planning IGCC plants in other states also.^{43,44,45} **Cinergy/PSI Energy** also plans to build an IGCC plant in Indiana, and is interested primarily in the **Edwardsport** area, depending upon local incentives offered. In response, Edwardsport established a redevelopment zone and offered property tax incentives for the project.^{46,47,48} A feasibility study was conducted. **General Electric, Bechtel, ConocoPhillips, Vectren Corp.**, and other companies are being considered as

potential participants.^{49,50} **American Electric Power (AEP)** plans to build an IGCC plant, with the assistance of **General Electric Co. and Bechtel**, at one of three sites in Kentucky, Ohio, or West Virginia. The Kentucky site is on land the company already holds along the Ohio River. AEP currently supplies some electricity to Indiana through the Kentucky Power Company.⁵¹ The **Cinergy/PSI Energy Wabash River** plant plans to use **petroleum coke** to fuel its coal-gasification plant which was idled for a year. The gasification plant will be run by a new company, **SG Solutions LLC**, an alliance between the **Wabash Valley Power Association and Global Energy**, based in Indianapolis and Cincinnati, respectively. Plans were made to restart the utility in May.⁵² New **Indiana tax credits** that support clean-coal power projects are helping to “fuel” the proposed projects.⁵³

The U.S. DOE issued grants for seven projects totaling \$145 million over four years to advance research in **carbon sequestration technology**.⁵⁴ Indiana is participating in two of the projects.

Three Indiana counties, **Elkhart, St. Joseph, and Delaware Counties**, have been added to the list of areas that meet **new national fine particulate pollution standards** and includes the cities of **Elkhart and Muncie**. Nationwide, 208 counties remain on the **nonattainment list**, including Clark, Dubois, Hamilton, Hendricks, Johnson, Lake, Marion, Morgan, Porter, Vanderburgh, Warrick, and parts of Dearborn, Gibson, Pike, Spencer, Jefferson, and Floyd Counties in Indiana. All counties must reach compliance by 2010.^{55,56} **IDEM** held a public meeting to discuss a petition to **remove the Evansville area**, which includes Vanderburgh and Warrick Counties,

from the U.S. EPA **ozone nonattainment list**. A maintenance plan for the counties was also discussed.⁵⁷

The final **New Source Review Equipment Replacement rule** was upheld in June. It had been stopped by a **federal appeals court** during investigations as to whether the revision was legal under provisions of the **Clean Air Act**. The rule will allow power plants to make certain repairs to existing equipment without being required to install additional pollution control equipment.⁵⁸

Cinergy completed installation of a new control system to help prevent the **plume problems** experienced last year at the **Gibson Station** following the installation of new pollution control equipment.⁵⁹

Emissions of U.S. **greenhouse gases** increased between 2002 and 2003 owing to moderate economic growth, although levels still remained below 2000 reports, according to an EPA report.⁶⁰ However, the level of toxic emissions in central Indiana fell 21 percent between 1999 and 2003, according to the **federal Toxics Release Inventory**. Besides emission control efforts, an overall decrease in production because of the slowed economy also affected the numbers. Of **nine counties in central Indiana**, Hancock and Morgan County emissions increased while the others—Boone, Hamilton, Henderson, Johnson, Madison, Marion, and Shelby—decreased.⁶¹

The **Clean Air Interstate Rule (CAIR)** was published in the Federal Register. The rule contains stringent emissions requirements for **sulfur dioxide and nitrogen oxide emissions**. The rule should result in decreased levels of emissions crossing state boundaries in 28 eastern states and the District of Columbia. The levels of SO₂ should be decreased by at least 70 percent and NO_x by at least 60 percent as compared to 2003 levels. A **cap and trade program** will also be initiated.^{62,63}

The EPA finalized the **Clean Air Visibility Rule**, which will require states to determine the **Best Available Retrofit Technology (BART)** to control emissions from older plants that pollute certain protected areas. States must identify the plants and submit their compliance plans by 2008. The plans must be implemented within five additional years, with emission decreases beginning to take effect by 2014. National parks in the southwest and southeast should benefit with improved visibility.⁶⁴

A report released by the **Environmental Integrity Project** listed some Indiana plants on its **list of the nation's dirtiest coal-fired plants**. **Alcoa's Warrick plant** is ranked at the top of the report's SO₂ emissions list with 46.6 lbs/MWh released. **Cinergy/PSI's Gallagher plant** is third on that list with 30.19 lbs./MWh. **Northern Indiana Public Service Company's Bailly plant** is listed fifth in NO_x emissions with 8.97 lbs/MWh released. No Indiana plants are listed in the top ten for emissions of mercury. The listings are based on older data, dating from 2002 to 2004, and new pollution-control equipment has been installed at some of these plants since then.^{65,66,67}

Vectren Corp., which owns half of Alcoa's Warrick plant, announced that a multi-emission compliance plan was filed with the **Indiana Utility Regulatory Commission**. When the plan is implemented, the company's power plants will be scrubbed 100 percent for SO₂, 90 percent for NO_x, and mercury emissions will also meet standards. The **Warrick scrubber** should be installed by 2010. The company plans to shut down **Culley Unit 1** by the end of next year.⁶⁸

The DOE's **National Energy Technology Laboratory (NETL)** issued a license to **Mbotec USA, Inc.**, to develop a **mercury emissions treatment process** patented by the NETL called the **Thief Process**. Using low-chlorine **subbituminous coal**, the process has been demonstrated to remove up to 93 percent of mercury from flue gas.⁶⁹

The nation's seven major **freight-hauling railroads** made an agreement with the **U.S. EPA** to find ways to reduce emissions and reduce fuel consumption through the **SmartWay Transport Partnership**, a voluntary program. It is expected that at least 33 and perhaps as much as 66 million mt of carbon dioxide and 200,000 tons of nitrogen oxide emissions could be eliminated and perhaps as much as 150 million barrels of fuel could be saved annually by the year 2012. Other freight companies are also involved in the program.⁷⁰

Construction industry developments

I-69 public meetings were held in Oakland City in May and Bloomington in June to discuss sections of, and possible interchanges for, the planned route.^{71,72} Opponents to the I-69 extension project found several methods to express their disapproval. A meeting was held on the Indiana University Bloomington campus and was attended by members of the **Indiana Student Public Interest Research Group (INPIRG)** and other groups and individuals. Several demonstrations were held protesting the I-69 extension project.⁷³ Twenty-four individuals were arrested during an **anti-I-69 demonstration** during which graffiti was spray-painted on the Indiana Statehouse in Indianapolis. However, charges were filed against only three individuals.⁷⁴ The protest was organized by **Roadblock Earth First** and had members from a movement called “**Roadless Summer.**” The movement is primarily concerned about the trade implications of the proposed highway.^{75,76,77,78} A new policy was also enacted that prevents banners, displays, and tables from being set up at state public highway meetings for the stated reason of preventing potential liability problems, but that policy was later rescinded.^{79,80,81} INDOT discovered records from the previous administration that indicated **construction dates for I-69 could be delayed** by several years owing to funding issues; construction of the highway would begin in 2017 and be completed by 2030, much later than previously thought. **Alternative methods of funding** may be considered, including increased gas taxes, tolls, or borrowing against future federal funding to speed the project.^{82,83,84}

The **Southwind Maritime Center** in Mount Vernon announced a preference for the most western route proposed for **I-69** because it would help development of the Center more than the other routes.⁸⁵

INDOT asked legislators and the general public to **prioritize a list of 254 highway projects**.

The agency is formulating a new **10-year plan**, but is short on funding for all projects by about \$2.1 billion. Comments will be considered in addition to other factors such as economic benefits and traffic studies because decisions will have to be made **not to fund about half of them** at this time. Ten factors are considered for each project.^{86,87} The new plan is expected to be completed in September.⁸⁸

Six potential routes have been reduced to three preferred plans for the **U.S. 31 Kokomo Corridor Project**. All routes are located **east of Kokomo**. Public input is being sought to determine the final route, and zoning issues will also be considered. It may be spring of 2007 before a final route is decided upon.⁸⁹

A route for the final section of the **Hoosier Heartland Highway, S.R. 25** connecting **Lafayette and Fort Wayne**, was established. Four engineering firms will design the highway that could take up to two years to complete. Actual construction of the highway will depend on the availability of funding.⁹⁰

INDOT also held public meetings to discuss plans for **I-80/I-65 improvements** near Lake Station in Lake County, added travel lanes for **U.S. 6** in Portage in Porter County, and added lanes for **S.R. 1** in Fort Wayne in Allen County.^{91,92,93} Work continued this season on the multi-year \$300 million **Borman Expressway (I-80/94)** improvement project in Lake County.^{94,95} Ground was broken on the three-year \$14.1 million **S.R. 28 reconstruction project** in Clinton County.⁹⁶ Other notable construction contracts awarded by INDOT include pavement replacement and bridge construction on **S.R. 129** from S.R. 56 to S.R. 250 for \$19.2 million and asphalt resurfacing on **I-70** from approximately 1 mile west of U.S. 27 to the Ohio State line for \$5.9 million.⁹⁷

A project to build **two bridges spanning the Ohio River** in the Clarksville, Jeffersonville, and Louisville area is moving forward. During the spring, **aerial surveys were made**. The project has been divided into multiple parts for the approach ramps, connecting highways, and the two bridges. Contractors have been selected and contracts are being prepared. Indiana work will not likely begin until sometime between 2007 to 2008.⁹⁸

Blue Sky Casino received the approval of a local **French Lick** commission to proceed with construction of a new casino in that community. Construction of the casino is estimated to cost about \$70 million, and restorations at the **French Lick Resort** and the neighboring historic **West Baden Springs Hotel** estimated to cost \$100 million and \$30 million, respectively. Renovations on the historic **French Lick Resort** have already begun.⁹⁹

Simon Property Group has released plans for a new \$100 million mall/residential community in **Noblesville** on 97 acres to be called **Hamilton Town Center**. The development will include a hotel, a “main street” with shops, grocery store, restaurants, and a movie theater. Offices and housing are planned above some shops. An estimated 2,700 jobs should be created and construction is expected to begin in spring 2006 and be completed by fall of 2007. The development will be among the largest retail areas in central Indiana.¹⁰⁰ The development borders the planned **life science Corporate Campus** ; Noblesville officials believe that it will promote economic development in the area. Highway improvements are also planned to support the development.¹⁰¹

The annual **Road Information Project (TRIP)** reports **substandard conditions** for one in every four miles of U.S. major metropolitan roads. The report is called “Rough Ride Ahead: Metro Areas with the Roughest Rides and Strategies to Make Our Roads Smoother.”¹⁰²

A request to rezone 57 acres of land south of Bloomington to residential use was studied and **denied** because houses on that property would prevent **dimension limestone resources** present under the land from ever being developed. **Victor Oolitic Stone Company** was attempting to sell the property, which they believe to contain inferior stone, but the **Indiana Limestone Company** was concerned that a future housing development on the property would prevent

future use of neighboring reserves which they hold. Indiana Limestone Company may have a future interest in the property for stone production.^{103,104}

Indiana University renamed the **Main Library on its Bloomington Campus** after former Chancellor Herman B Wells as an initial step to **renovating the structure**. The university will seek \$80 million for the improvements, with an initial request of \$28.9 million for the first phase of the projected ten-year project.¹⁰⁵

A new \$12.2 million **elementary school** will be built in **Clark County** by 2007 to replace **Riverside Elementary**.¹⁰⁶

Legislation and regulatory issues

A roundtable was conducted by the U.S. **Senate Energy and Natural Resources Committee** at which **IGCC technology** was discussed as a means of encouraging the use of coal.¹⁰⁷ **The federal energy bill** includes language supporting coal-gasification projects and coal research.^{108,109} It also includes language including incentives for new nuclear power plants.¹¹⁰ The bill was approved by a Senate committee in May and the **Senate passed the legislation** by the end of the quarter. The Senate version has more environmental language than the House version.^{111,112,113,114}

The federal highway bill reauthorizing the **Transportation Equity Act for the 21st Century (TEA-21)** passed the U.S. House of Representatives by a very large margin in April and was sent to the Senate. The bill passed the Senate in May and went to conference committee for resolution of differences with the Senate bill, one of the most problematic being a difference of cost. The House approved \$284 billion and the Senate approved \$295 billion. President Bush has indicated that he would veto anything over \$284 billion, but the Senate asserts that it has found a way to fund the difference. A seventh one-month TEA 21 extension was passed by the end of May to cover the time during which the conference deliberations will take place.^{115,116,117,118}

Again this year, the **Mineral Resources Program of the USGS** faced a cut of more than half of its current year budget. However, funding was eventually restored.^{119,120,121} **J. Patrick Leahy** was named as acting USGS director following the resignation of Charles G. Groat who left the USGS for a teaching position at the University of Texas at Austin.¹²²

A Senate subcommittee hearing was held in May on **Endangered Species Act reform**.¹²³ A bipartisan House task force that will study effects of the **National Environmental Policy Act** on organizations and communities was formed in order to see if reforms are needed.¹²⁴

Indiana legislators passed legislation that creates a **Northwest Indiana Regional Development Authority** that will be charged with **developing the lakeshore and with transportation improvements** in the area. The \$28 million plan was packaged along with the plan to build a

new **stadium for the Indianapolis Colts** in Indianapolis and Lake County's portion will most likely be funded by area casinos, a tax on food and beverage, and Indiana Toll Road income. Funds should be available to improve the **Gary/Chicago Airport**. Porter County passed an increase in its local income tax that will help fund the plan. The plan will be reviewed in two years to examine progress.^{125,126,127}

More than \$7.9 million in **U.S. Department of Labor, Mine Safety and Health Administration (MSHA)** grants were awarded to states for **mine safety and health training and education**.¹²⁸ The mining education program that had been located at Ivy Tech State College in Terre Haute, which had received these MSHA grants in the past, is moving to **Vincennes University** where it will be expanded into a two-year program. Although still in development, a link off of the Vincennes University Web site provides more information:
<http://www.vinu.edu>.¹²⁹

A final rule that strengthens the protections for underground metal/nonmetal miners exposed to **diesel particulate matter** was issued by MSHA.¹³⁰

A **Senate Manufacturing Caucus** was established to work on problems facing American manufacturing. This move was welcomed by the steel industry.^{131,132}

Metals

Following an investigation, the **U.S. International Trade Commission** decided to extend the agreement that **prevents dumping** and also places other controls upon the import of hot-rolled steel from Brazil, Japan, and Russia. The agreement will be **extended for five more years**.^{133,134}

A report by the Association of Equipment Manufacturers, Farm Equipment Manufacturers Association, and the North American Dealers Association called “Steel Markets: Causes and Factors Affecting Steel Prices in the Near and Medium Term” stated that **steel prices for most types of steel doubled during 2004**. A booming Chinese market was a strong factor in that increase.¹³⁵ However, **Chinese steel production** has dropped this year along with decreased demand for steel in that country. The **oversupply** of steel could cause an industry crash in China during 2006 and 2007.¹³⁶ **U.S. spot prices for steel fell** from \$756 a ton in September 2004 to \$575 a ton in April, largely owing to the existence of excess inventory. Mills are working to reduce inventory levels and prices may not stabilize until August to September.^{137,138,139} **Import levels are up** 23 percent this year and an anticipated **higher price for oil** will not help the industry.^{140,141}

International Steel Group (ISG) completed its merger with **Mittal Steel Company NV**. The new company expects to save over \$230 million annually in purchasing, manufacturing, and operating expenses, more than \$60 million in one-time improvements, as well as other

unspecified savings.¹⁴² Neighboring mills Ispat and ISG are now considered one plant and were renamed **Mittal USA - Indiana Harbor**.^{143,144,145} ISG lost a large number of managers when the new organizational structure for Mittal Steel USA was announced.^{146,147,148} In addition, the former Ispat Inland mill, now a part of Mittal USA, is losing about 10 percent of its 1,200 management positions; a severance package was offered to encourage people to leave voluntarily.¹⁴⁹ The company's **research facility in Pennsylvania will be closed** and positions will be moved to the **East Chicago research center**, close to Purdue University - Calumet, which often works on steel mill-related research projects.¹⁵⁰ It was announced that Burns Harbor would be the western headquarters and Richfield, Ohio, would be the eastern headquarters of the merged company.^{151,152,153} **ISG Burns Harbor Plate** successfully restarted its 110-inch plate mill. An increase in demand for plated steel was stated as the reason for restarting the mill, which had been idled since August 2000.^{154,155} With a slowdown in the market, the company **idled its H-3** (at former ISG plant) and **No. 6** (at former Ispat Inland plant) **blast furnaces** and is doing some maintenance while reducing the amount of steel on the market. Two furnaces are still running. It will restart the idled furnaces only when the market improves. It considered shutting down another former Ispat Inland furnace, but decided to keep it running to fill orders.^{156,157,158} **Production will be reduced** globally during the third quarter by one million tons, split among its mills.¹⁵⁹

U.S. Steel Corp. will rebuild its **Gary Works No. 13 blast furnace**. As a result of the many technological features to be added to the furnace it will be **renamed No. 14**. Production is

expected to be greatly improved. The furnace was shut down in late May and work was expected to be completed by early November. About 45 percent of the iron produced at Gary Works is produced in the No. 13 furnace.^{160,161} The reconstruction is expected to cost \$260 million. The old furnace had a number of cracks and **leaked carbon monoxide** that killed and injured several workers.¹⁶² The company is **considering moving all purchasing activity to Pittsburgh** which may have a negative effect on local businesses in Gary.¹⁶³

Steel Dynamics, Inc., experienced record revenue gain during 2004, increasing from \$987 million to over \$2 billion and topped the list of Indiana public companies for that year. The reason given for the increase, besides general improvement of the economy, is the company's **diversification of its product line** in addition to **overall company growth**. The company expects to experience more growth during 2005.¹⁶⁴ **IDEM** held a public hearing in Whitley County concerning modifications to Steel Dynamics, Inc.'s **air permit** to allow both arc furnaces to operate at the same time, and to increase the capacity of the mill's meltshop and casting operations.¹⁶⁵

Heidtman Steel received approval from the DeKalb County Plan Commission to build a factory on 35 acres purchased from **Steel Dynamics, Inc.**, just south of Steel Dynamics, Inc.'s building products plant, **New Millennium Building Systems**, southwest of **Butler**. Heidtman Steel will **cut coils of steel** into flat sheets, which can then be used for a variety of applications, including truck beds and semi trailers. Steel Dynamics will supply the coils.¹⁶⁶

Savings of about \$190 million annually are expected when **Alcoa streamlines operations** and cuts a total of approximately 8,300 jobs at operations worldwide this year. The Warrick County plant will not be affected by layoffs.^{167,168,169}

As part of **Auburn Foundry's** bankruptcy settlement, the company's **two plants were sold**. The plants will **not be reopened**, but equipment and buildings will probably be resold.¹⁷⁰

Citizens Gas and Coke in Indianapolis, which produces coke used by the metals industries, may make a **profit** for the first time this year since completing **bankruptcy** proceedings in 2003. It is producing at high capacity and **hiring new employees** to help meet the increased demand for coke. The company has had inquiries from companies in other countries looking for coke.¹⁷¹

References cited

1. U.S. Department of Energy, Energy Information Administration, 2005, Weekly U.S. coal production overview: July 2, 2005.
2. Platts Coal Outlook, 2005, Analysts: Production needs to grow 4% this year to balance supply, demand: June 6, 2005.
3. Tepordei, V, 2005, Crushed stone and sand and gravel in the first quarter 2005: U.S. Geological Survey Mineral Industry Surveys, June 2005, 8 p., 6 tables, 3 figs., <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/csmis1q05.pdf>, date accessed, September 26, 2005.
4. Puckett, R., 2005, Cement consumption to remain strong: Portland Cement Association news release, May 23, 2005, <<http://www.cement.org/newsroom/springforecast20050523.asp>>, date accessed, September 14, 2005.

5. McIntosh, B., 2005, Strong demand tightens cement supplies: Portland Cement Association news release, June 7, 2005, <<http://www.cement.org/newsroom/cementsupply20050606.asp>>, date accessed, September 14, 2005.
6. Medley, B., 2005, Company to buy Triad Mining, including seven mines in Indiana: Evansville Courier & Press, April 19, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18605&SectionID=31&SubSectionID=277&S=1>>, date accessed, September 14, 2005.
7. Platts Coal Outlook, 2005, James River finalizes Triad purchase: June 6, 2005.
8. Platts Coal Outlook, 2005, James River has mixed results but wider margins: April 11, 2005.
9. Society of Mining Engineers, 2005, James River Coal to acquire Triad Mining: Mining Engineering, May 2005, p. 20.
10. Platts Coal Outlook, 2005, Lexington Coal seeks to sell defunct Horizon properties: May 9, 2005.
11. National Mining Association, 2005, Peabody once again largest U.S. coal producers, says NMA survey: Mining Week, May 27, 2005, <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw052705.pdf>>, date accessed, September 16, 2005.
12. PRNewswire, 2005, Cinergy and Duke Energy agree to merge: May 9, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19016&SectionID=31&SubSectionID=185&S=1>>, date accessed, September 14, 2005.
13. Platts Coal Outlook, 2005, Fuel buying roles remain unclear in expanded Duke Energy: May 16, 2005.
14. Cinergy Corp., 2005, PSI files merger-related petition in Indiana: news release, June 15, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=519>, date accessed, September 6, 2005.
15. Vectren Corp., 2005, Vectren marks 5-year anniversary: news release, April 18, 2005, <<http://phx.corporate-ir.net/phoenix.zhtml?c=121125&p=irol-newsArticle&ID=697277&highlight=>>>, date accessed, September 6, 2005.
16. Vectren Corp., 2005, Governor, mayor join Vectren CEO in new building dedication: news release, May 19, 2005, <<http://phx.corporate-ir.net/phoenix.zhtml?c=121125&p=irol-newsArticle&ID=712219&highlight=>>>, date accessed, September 7, 2005.

17. U.S. Department of Justice, 2005, Indiana ready mixed concrete producer and four executives agree to plead guilty to price-fixing charge: Office of Public Affairs news release, June 29, 2005, <http://www.usdoj.gov/atr/public/press_releases/2005/209816.htm>, downloaded September 28, 2005.
18. Wall, J. K., 2005, Concrete firm indicted by feds: Indianapolis Star, May 20, 2005, p. C6.
19. Indianapolis Star, 2005, Concrete firm faces charges of price-fixing: June 28, 2005, p. B6.
20. Evanoff, T., and Pernot, C. R., 2005, Firm fined \$29 million in price-fixing case: Indianapolis Star, June 30, 2005, p. A1.
21. Wilson, C., 2005, Concrete company fined for price fixing: Louisville Courier-Journal, June 30, 2005, p. B2.
22. McCleery, B., 2005, Guilty plea surprises hometown: Indianapolis Star, June 30, 2005, p. A14.
23. Van der Dussen, K., 2005, INDOT penalizes business for not policing INDOT: Bloomington Herald-Times, May 21, 2005, p. A1.
24. Hensel, K., 2005, State clamps down on INDOT contractor: 24 Hour News 8, WISH-TV, Indianapolis, Ind., June 15, 2005, <<http://wishtv.com/Global/story.asp?s=3480186>>, date accessed, September 27, 2005.
25. Chaudoin, L., ed., 2005, Statement regarding INDOT Prequalification Committee open session of May 18, 2005: Rogers Group, Inc., news release May 20, 2005, <<http://www.rogersgroupinc.com/aboutrgi/rginews/2005pressreleases/indotrevokedstatement.pdf>>, date accessed, September 19, 2005.
26. Chaudoin, L., ed., 2005, Bloomington Crushed Stone's new rail spur, Rogers Group, Inc.: The Conveyor Express company newsletter, May 2005, p. 7 and p. 15, <<http://www.rogersgroupinc.com/aboutrgi/conveyor/may2005.pdf>>, date accessed, September 19, 2005.
27. Chaudoin, L., ed., 2005, NSSGA selects Rogers Group, Inc. for five About Face awards: Rogers Group, Inc., news release, April 8, 2005, <<http://www.rogersgroupinc.com/aboutrgi/rginews/2005pressreleases/NSSGA-AboutFaceAwards.pdf>>, date accessed, September 9, 2005.
28. Chaudoin, L., ed., 2005, Oak Ridge earns top community relations award: Rogers Group, Inc., The Conveyor Express company newsletter, May 2005, p. 13, <<http://www.rogersgroupinc.com/aboutrgi/conveyor/may2005.pdf>>, date accessed, September 19, 2005.

29. Sell, M., 2005, Local concrete business divvied up, sold: Richmond Palladium-Item, June 7, 2005.
30. Duke, J., 2005, Asphalt plant worries remain - Company defends proposal; residents are dubious: Indianapolis Star, April 2, 2005.
31. Hirsch, S. A., 2005, Hearing set on asphalt plant - Public may comment on application for air permit: Indianapolis Star, April 19, 2005.
32. Hirsch, S. A., 2005, Asphalt hearing at high school - Lots of folks are expected at Thursday's session: Indianapolis Star, May 10, 2005.
33. Hirsch, S. A., 2005, Asphalt plant gets air permit - Opponents expected to speak out at session tonight: Indianapolis Star, May 12, 2005.
34. Hendricks County Area Plan Commission, 2005, May 31, 2005: Minutes of a special meeting, accessed at <http://www.co.hendricks.in.us/Indexer/planning/Minutes%5CHC-PC%20special%20minutes_may%2031,%202005_Asphalt%20Plant.pdf>, date accessed, September 28, 2005.
35. Buzzi Unicem USA, 2005, Buzzi Unicem USA, Greencastle, IN plant wins Governor's award for environmental excellence: news release, April 19, 2005, <http://www.buzziunicem.com/news/news_greencastle.html>, date accessed, September 8, 2005.
36. Rock Products, 2005, Oglebay Norton consolidates operation names: May 2005, p. 4, also available at <http://rockproducts.com/mag/rock_semgroup_buy_koch/>, date accessed, September 8, 2005.
37. Stinnard, M., 2005, Green slate reflects natural surroundings: Stone World, June 1, 2005, <http://www.stoneworld.com/CDA/ArticleInformation/features/BNP__Features__Item/0,4046,152805,00.html>, date accessed, September 15, 2005.
38. Waters, T. W., 2005, Feasibility of limestone-based attractions under consideration: Business Network, a Greater Bloomington Chamber of Commerce Publication, May 2005, p. 1.
39. Stone World, 2005, Association representatives discuss future of Natural Stone Council: May 1, 2005, <http://www.stoneworld.com/CDA/ArticleInformation/news/news_item/0,,151255,00+en-uss_01dbc.html>, date accessed, September 15, 2005.
40. Heilenman, D., 2005, Romancing the stone: Scene, Louisville Courier-Journal, June 18, 2005, p. 4.

41. Kauffman, N., 2005, Art center shows samples in stone: Bloomington Herald-Times, June 5, 2005, p. A3.
42. LaMantia, A., 2005, Limestone sculptures on display at the Waldron: Indiana Daily Student, June 16, 2005, p. 10, also available at <<http://www.idsnews.com/subsite/story.php?id=29977>>, date accessed, September 15, 2005.
43. Platts Coal Outlook, 2005, Tondu plans 500-MW coal-gasification plant for Indiana: March 14, 2005.
44. Platts Coal Outlook, 2005, Tondu signs to use Shell IGCC technology: May 25, 2005.
45. Platts Coal Outlook, 2005, Tondu picks IGCC process for plants: June 20, 2005.
46. Robbins, G. R., 2005, Cinergy says Edwardsport is preferred site for \$1 billion power plant: Vincennes Sun-Commercial, April 7, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18300&SectionID=31&SubSectionID=195&S=1>>, date accessed, September 14, 2005.
47. Robbins, G. R., 2005, Cinergy plant closer to fruition with property-tax incentives in Knox County: Vincennes Sun-Commercial, April 13, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18505&SectionID=31&SubSectionID=195&S=1>>, date accessed, September 14, 2005.
48. Robbins, G. R., 2005, Knox County to form redevelopment zone for possible new Cinergy plant: Vincennes Sun-Commercial, April 19, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18610&SectionID=31&SubSectionID=195&S=1>>, date accessed, September 14, 2005.
49. Platts Coal Outlook, 2005, Small coal-fired power plants may face uncertain future: May 16, 2005.
50. Wall, J. K., 2005, Rising power demand unearths coal dilemma: Indianapolis Star, June 26, 2005.
51. Louisville Courier-Journal, 2005, American Electric advances clean-coal plans with deal: May 21, 2005, p. D3.
52. Platts Coal Outlook, 2005, Petcoke to fuel gasification plant: April 25, 2005.
53. Platts Coal Outlook, 2005, Indiana's tax credits to encourage using state's coal may be working: May 16, 2005.

54. U.S. Department of Energy, Office of Fossil Energy, 2005, DOE advances commercialization of climate change technology: news release, June 9, 2005, <http://www.fe.doe.gov/news/techlines/2005/tl_sequestration_grants.html>, date accessed, September 8, 2005.
55. Millett, J., and Davis, A., 2005, Twelve additional areas now meet national air quality standards for fine particle pollution: U.S. Environmental Protection Agency press release, April 5, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/d9bf8d9315e942578525701c005e573c/79f8a5cb0fe5830485256fda007348b6!OpenDocument>>, date accessed, September 7, 2005.
56. Bruggers, J., 2005, 2 Indiana counties off dirty-air list: Louisville Courier-Journal, April 7, 2005, p. B1.
57. Pippenger, L., 2005, IDEM to hold public hearing in Vanderburgh County concerning ozone re-designation petition: Indiana Department of Environmental Management news release, April 19, 2005, <<http://www.in.gov/serv/presscal?PF=idem&Clist=16&Elist=83520>>, date accessed, September 7, 2005.
58. Janofsky, M., 2005, U.S. Court backs Bush's changes on Clean Air Act: New York Times, June 25, 2005, p. A1.
59. Cinergy Corp., 2005, Gibson Station completes new plume control systems: news release, April 20, 2005, <http://cinergy.com/News/default_corporate_news.asp?news_id=505>, date accessed, September 6, 2005.
60. Millett, J., 2005, U.S. greenhouse gas 2003 inventory submitted to U.N.: U.S. Environmental Protection Agency press release, April 27, 2005, <<http://http://yosemite.epa.gov/opa/admpress.nsf/d9bf8d9315e942578525701c005e573c/fe5c2a42023c88618525702e0066aae1!OpenDocument>>, date accessed, September 7, 2005.
61. Webber, T., 2005, Air pollution fell 21% in area, federal tally says: Indianapolis Star, May 18, 2005, p. B1.
62. Millett, J., 2005, Landmark Clean Air Interstate Rule to take effect: U.S. Environmental Protection Agency press release, May 11, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/d9bf8d9315e942578525701c005e573c/5af79c40e7ba7f2685256ffe00642ad3!OpenDocument>>, date accessed, September 7, 2005.
63. Platts Coal Outlook, 2005, CAIR goes into effect for eastern U.S.: May 16, 2005.
64. Platts Coal Outlook, 2005, Visibility rule requires older stations to begin eliminating emissions via BART: June 20, 2005.

65. Czark, G., 2005, Group: Indiana leads nation with dirtiest power plants, Times of Northwest Indiana: May 12, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19058&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 14, 2005.
66. Chambers, J., 2005, PSI plants in Wabash River Valley rate high on polluter list: Terre Haute Tribune-Star, May 12, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19060&SectionID=31&SubSectionID=240&S=1>>, date accessed, September 14, 2005.
67. Platts Coal Outlook, 2005, Top 10 dirtiest coal power plants for SO₂: May 16, 2005.
68. Vectren Corp., 2005, Vectren to enhance environmental stewardship through new air quality improvements: news release, May 16, 2005, <<http://phx.corporate-ir.net/phoenix.zhtml?c=121125&p=irol-newsArticle&ID=710581&highlight=>>>, date accessed, September 7, 2005.
69. U.S. Department of Energy, 2005, Innovative technology shows promise for low-cost mercury control: Fossil Energy Techline, June 2, 2005, <http://www.fe.doe.gov/news/techlines/2005/tl_thief_process.html>, date accessed, September 8, 2005.
70. Millett, J., 2005, Major freight railroads to save fuel and cut emissions: U.S. Environmental Protection Agency press release, May 27, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/d9bf8d9315e942578525701c005e573c/3f60a8bbb444ca498525700e006abb6b!OpenDocument>>, date accessed, September 7, 2005.
71. Bloomington Herald-Times, 2005, Hearing on I-69 routes gets heated: May 28, 2005, p. A7.
72. Van der Dussen, K., 2005, Hundreds attend I-69 hearing: Bloomington Herald-Times, June 17, 2005, p. A1.
73. Giese, P., 2005, IU students, community speak out against I-69 construction: Indiana Daily Student, April 21, 2005, p. 2, also available at <<http://www.idsnews.com/subsite/story.php?id=29289>>, date accessed, September 7, 2005.
74. Hinnefeld, S., 2005, Three charged in I-69 protest: Bloomington Herald-Times, June 10, 2005, p. A1.
75. Van der Dussen, K., 2005, Group plans summer of anti-I-69 activities: Bloomington Herald-Times, June 3, 2005, p. A3.
76. Boyd, J., 2005, Two dozen arrested at I-69 protest: Louisville Courier-Journal, June 5, 2005, p. A1.

77. Tuohy, J., 2005, Protesters against I-69 highway extension spray-painted slogans inside and out, police say: Indianapolis Star, June 5, 2005, p. B1.
78. Louisville Courier-Journal, AP, 2005, Vandalism during I-69 protest condemned: June 7, 2005, p. B3.
79. Hinnefeld, S., 2005, INDOT bans displays at I-69 meetings: Bloomington Herald-Times, June 7, 2005, p. A2.
80. Smith, M., 2005, I-69 debate prompts new meeting rules: Louisville Courier-Journal, June 8, 2005, p. B3.
81. Van der Dussen, K., 2005, Hundreds attend I-69 hearing: Bloomington Herald-Times, June 17, 2005, p. A1.
82. Abell, G., 2005, INDOT discovers long-range plan showing I-69 construction more than a decade away: Indiana Department of Transportation news release, June 27, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=84002>>, date accessed, September 8, 2005.
83. Kim, T. and Schneider, M.B., 2005, I-69 project schedule in question: Indianapolis Star, June 28, 2005, p. A1.
84. Smith, M., Daniels, 2005, Democrats at odds over I-69 project: Louisville Courier-Journal, June 29, 2005, p. B2.
85. Raithel, T., 2005, West I-69 route called key for Port of Indiana in Mount Vernon: Evansville Courier & Press, June 13, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19638&SectionID=31&SubSectionID=218&S=1>>, date accessed, September 19, 2005.
86. Weidenbener, L. S., 2005, Shortfall prompts new road plan: Louisville Courier-Journal, May 25, 2005, p. B1.
87. Smith, M., 2005, Democrats irked at being asked for input on road projects: Louisville Courier-Journal, June 30, 2005, p. B3.
88. Kim, T., 2005, Road project review could create gridlock: Indianapolis Star, May 26, 2005, p. B1.
89. Fletcher, M., 2005, INDOT narrows Kokomo's U.S. 31 corridor project to three possible routes: Kokomo Tribune, April 2, 2005, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18316&SectionID=31&SubSectionID=187&S=1>>, date accessed, September 14, 2005.

90. Indiana Department of Transportation, 2005, Hoosier Heartland corridor design can move forward: news release, June 14, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83932>>, date accessed, September 8, 2005.
91. Indiana Department of Transportation, 2005, Plans for U.S. 6 added travel lanes project to be outlined at public meeting Tuesday: news release, April 25, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83576>>, date accessed, September 8, 2005.
92. Indiana Department of Transportation, 2005, Public to have an opportunity to review, comment on I-80/I-65 construction plans: news release April 25, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83575>>, date accessed, September 8, 2005.
93. Indiana Department of Transportation, 2005, Public to have opportunity to review, comment on S.R. 1 design plans: news release, May 10, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83747>>, date accessed, September 8, 2005.
94. Indiana Department of Transportation, 2005, Interstate closures, restrictions ahead on Kingery construction project: news release, June 17, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83947>>, date accessed, September 8, 2005.
95. Indiana Department of Transportation, 2005, Borman Expressway (I-80/94) reconstruction to enter new phase Wednesday: news release, June 17, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83970>>, date accessed, September 8, 2005.
96. Indiana Department of Transportation, 2005, Officials break ground on State Road 28 reconstruction: news release, June 24, 2005, <<http://www.in.gov/serv/presscal?PF=dot&Clist=6&Elist=83986>>, date accessed, September 8, 2005.
97. Indiana Department of Transportation, 2005, Indiana Department of Transportation official tabulation of bids received for the letting of May 25, 2005: May 31, 2005, <<http://www.in.gov/dot/div/contracts/letting/may/may25off.pdf>>, date accessed, September 8, 2005.
98. Davis, A., 2005, Engineer is at the helm of bridge project: Louisville Courier-Journal, April 25, 2005, p. B3.

99. Schneider, G., 2005, Hotel panel backs applicant for Orange County casino: Louisville Courier-Journal, June 11, 2005, p. B1.
100. Bora, M., 2005, Huge project in Noblesville to mix life, work: Indianapolis Star, June 28, 2005, p. A1.
101. Ruthhart, B., 2005, Downtown merchants fear mall: Indianapolis Star, June 28, 2005, p. A1.
102. Pit & Quarry, 2005, Economics: P&Quick News e-newsletter, June 28, 2005.
103. Van der Dussen, K., 2005, Quarry-area rezoning decision delayed: Bloomington Herald-Times, April 2, 2005.
104. Van der Dussen, K., 2005, Quarry-area zoning request shot down: Bloomington Herald-Times, April 6, 2005.
105. Schoenbaechler, K., 2005, Old stones, new face: Indiana Daily Student, April 5, 2005, p. 1, also available at <<http://www.idsnews.com/subsite/story.php?id=28841>>, date accessed, September 7, 2005.
106. Davis, A., 2005, New elementary building begins: Louisville Courier-Journal, May 25, 2005, p. B3.
107. Platts Coal Outlook, 2005, Industry looks to IGCC to push coal use forward: April 25, 2005.
108. Platts Coal Outlook, 2005, Coal gasification hot topic in Senate energy bill: May 16, 2005.
109. Platts Coal Outlook, 2005, Finance Committee approves \$14.1 billion tax incentives bill: June 20, 2005.
110. Hutcheson, R., 2005, President calls for more U.S. nuclear plants: Indianapolis Star, June 23, 2005, p. A3.
111. Fialka, J. J., 2005, Environmentalists divided over bill for nuclear push: Wall Street Journal, May 17, 2005, p. A5.
112. National Mining Association, 2005, Bi-partisan energy bill approved by Senate committee: Mining Week, May 27, 2005, p. 1, also available at <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw052705.pdf>>, date accessed, September 13, 2005.
113. Hulse, C., 2005, Senate passes bill that strives to balance oil and alternatives: New York Times, June 29, 2005, p. A1.

114. Hebert, H. J., 2005, Senate energy bill differs significantly from House's: Louisville Courier-Journal, June 29, 2005, p. A3.
115. Pit & Quarry, 2005, House passes TEA LU; state funding apportionments omitted: news release, April 11, 2005, <<http://www.pitandquarry.com/pitandquarry/article/articleDetail.jsp?id=155619>>, date accessed, September 15, 2005.
116. Whitted, P. J., Riley, J., Boling, J., Colaneri, J., Maeder, P., 2005, Senate passes highway bill; America one-step closer to reauthorization: National Stone, Sand and Gravel Association Washington Watch, May 17, 2005, <http://www.nssga.org/communications/ww051705_su.cfm>, date accessed, September 14, 2005.
117. Bloomington Herald-Times, 2005, AP, Senate approves highway bill despite veto threat: May 18, 2005, p. A3.
118. Whitted, P. J., Riley, J., Boling, J., Colaneri, J., Maeder, P., 2005, Congress passes 7th TEA 21 extension; House conferees named: National Stone, Sand and Gravel Association Washington Watch, May 27, 2005, <http://www.nssga.org/communications/ww053105_su.cfm>, date accessed, September 14, 2005.
119. Barbaccia, T.G., 2005, USGS Mineral Resources Program faces \$29 million cut: Aggregates Manager, April 2005, <<http://www.aggman.com/articles/apr05aggbeat.htm>>, date accessed, September 15, 2005.
120. Barbaccia, T. G., 2005, Where has all the funding gone?: Aggregates Manager, May 2005, <<http://www.aggman.com/articles/may05aggbeat.htm>>, date accessed, September 15, 2005.
121. National Mining Association, 2005, House panel restores proposed cuts in USGS Mineral Resources Program budget: Mining Week, May 6, 2005, p. 1, also available at <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw050605.pdf>>, date accessed, September 13, 2005.
122. National Stone, Sand and Gravel Association, 2005, Industry updates: e-Digest, June 21, 2005, <http://www.nssga.org/newsletter/digest/062105_ed.cfm>, date accessed, September 14, 2005.
123. National Mining Association, 2005, Senate subcommittee holds hearing on ESA reform: Mining Week, May 27, 2005, p. 3, also available at <<http://www.nma.org/newsroom/miningweek/miningweekarchive/pdf2005/mw052705.pdf>>, date accessed, September 13, 2005.

124. Raulston, C., and Popovich, L., 2005, Mining industry applauds bipartisan NEPA scrutiny: National Mining Association press release, April 6, 2005, <http://www.nma.org/newsroom/press_releases.asp>, date accessed, September 13, 2005.
125. O’Shaughnessy, B., 2005, Northwest Indiana Regional Development Authority plan hailed as boon to region: Times of Northwest Indiana, May 1, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18866&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 7, 2005.
126. O’Shaughnessy, B., 2005, NWI Regional Development Authority took roller-coaster route to success: Times of Northwest Indiana, May 9, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19021&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 7, 2005.
127. Kasarda, B., 2005, Porter County joins RDA effort: Times of Northwest Indiana, May 25, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19318&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.
128. Fillpot, D., 2005, States to receive \$7.9 million for mine safety training, U.S. Department of Labor: Mine Safety and Health Administration news release, April 11, 2005, <<http://www.msha.gov/MEDIA/PRESS/2005/NR050411.asp>>, date accessed, September 8, 2005.
129. Personal communication with Robert Jones, Executive Director of the Indiana Mineral Aggregates Association, on October 27, 2005, and with J. Nathan Noland, President of the Indiana Coal Council, Inc., on October 28, 2005.
130. Bohnert, S., and Fillpot, D., 2005, MSHA issues final rule strengthening protections for underground metal/nonmetal miners exposed to diesel particulate matter: U.S. Department of Labor Mine Safety and Health Administration news release, June 6, 2005, <<http://www.msha.gov/MEDIA/PRESS/2005/NR050606.asp>>, date accessed, September 8, 2005.
131. U.S. Steel, 2005, U.S. Steel hails formation of Senate Manufacturing Caucus: press release, June 14, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/06-14-2005/0003870976&plainNews=United+States+Steel+-+Press+Releases&EDATE=Jun+14,+2005>, date accessed, September 19, 2005.
132. Nucor Corp., 2005, Nucor welcomes establishment of Senate Manufacturing Caucus: news release, June 15, 2005, <http://phx.corporate-ir.net/phoenix.zhtml?c=107115&p=irol-newsArticle_print&ID=720879&h

ighlight=>, date accessed, September 19, 2005.

133. Nucor Corp., 2005, Nucor praises decision to extend antidumping relief: news release, April 14, 2005, <<http://www.nucor.com/financials.asp?finpage=newsreleases>>, date accessed, September 19, 2005.

134. U.S. Steel Corp., 2005, U.S. Steel welcomes International Trade Commission decision to continue unfair trade relief: press release, April 14, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/04-14-2005/0003393451&plainNews=United+States+Steel+-+Press+Releases&EDATE=Apr+14,+2005>, date accessed, September 19, 2005.

135. Rock Products, 2005, Steel prices double: May 2005, p. 18, also available at <http://rockproducts.com/mag/rock_steel_prices_double/>, date accessed, September 8, 2005.

136. Shidler, L., 2005, Volatile prices, weaker demand in China portend slower steel market: Gary Post-Tribune, June 22, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19790&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

137. Holecek, A., 2005, Steel prices fall: Times of Northwest Indiana, May 8, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19009&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

138. Holecek, A., 2005, Steel oversupply hits prices, production sliced: Times of Northwest Indiana, June 5, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19478&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.

139. Glader, P., 2005, Steel-sector middlemen caught in meltdown: Wall Street Journal, June 20, 2005, p. C1.

140. Glader, P., 2005, U.S. steel imports increase 23% as world-wide market softens: Wall Street Journal, June 23, 2005, p. A2.

141. Shidler, L., 2005, Analyst: Steel market depends on price of oil, dollar's strength: Gary Post-Tribune, June 23, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19810&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

142. Davidson, N., 2005, Mittal Steel Company N.V. announce expected savings in the USA following completion of ISG merger: Mittal Steel Company N.V. news release, April 26, 2005, <<http://www.mittalsteel.com/NR/rdonlyres/0A3C8467-D19E-4DB1-81E6-1B5260F57496/394/2>>

005AprilUSsynergysavings.pdf>, date accessed, September 19, 2005.

143. Mittal Steel Company N.V., 2005, Mittal Steel Company N.V. and International Steel Group Inc. announce completion of merger and final exchange ratio and election deadline: news release, April 15, 2005,
<<http://www.mittalsteel.com/NR/rdonlyres/37F870AA-DE6B-402F-85A7-7FDDD3333F59/386/2005AprilMITTALandISGannoucecompletionofmerger.pdf>>, date accessed, September 19, 2005.

144. Holecek, A., 2005, Ispat, ISG renamed Mittal USA: Times of Northwest Indiana, April 21, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18656&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

145. Shidler, L., 2005, Tough choices ahead in Northwest Indiana steel industry: Gary Post-Tribune, April 25, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18725&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

146. Shidler, L., 2005, Steel Titan – Mittal, ISG shareholder approve merger: Gary Post-Tribune, April 13, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18502&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

147. Davidson, N., 2005, Mittal Steel Company N.V. announces management organization at Mittal Steel USA: Mittal Steel Company N.V. news release, April 15, 2005,
<<http://www.mittalsteel.com/NR/rdonlyres/B87C993F-0E30-4EA2-8516-552AAC0660CD/385/2005AprilMittalSteelUSAManagementFINAL.pdf>>, date accessed, September 19, 2005.

148. Shidler, L., 2005, Fallout begins from giant steel merger: Gary Post-Tribune, April 19, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18598&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.

149. Holecek, A., 2005, Mittal Steel cutting salaried staff in Lake County: Times of Northwest Indiana, June 14, 2005, accessed from Indiana Economic Digest,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19655&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.

150. Benman, K., 2005, East Chicago gets more high-end Mittal jobs: Times of Northwest Indiana, April 23, 2005,
<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18694&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.

151. Benman, K., 2005, NiSource part of dwindling Hoosier Fortune 500 team: Times of Northwest Indiana, April 6, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18382&SectionID=31&SubSectionID=202&S=1>>, date accessed, September 19, 2005.
152. Shidler, L., 2005, Tough choices ahead in Northwest Indiana steel industry: Gary Post-Tribune, April 25, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18725&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.
153. Holecek, A., 2005, Mittal Steel USA looking for a home: Times of Northwest Indiana, April 26, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18751&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.
154. International Steel Group, 2005, ISG restarts 110-inch plate mill at Burns Harbor: news release, April 6, 2005, <<http://www.intlsteel.com/Press/69.pdf>>, date accessed, September 19, 2005.
155. Shidler, L., 2005, ISG Burns Harbor plant's 110-inch plate mill roars to life: Gary Post-Tribune, April 7, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18410&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.
156. Shidler, L., 2005, Steel mills cut back production: Gary Post-Tribune, April 8, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18425&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.
157. Caffarini, K., 2005, Mittal Steel to idle second furnace at Indiana Harbor plant: Gary Post-Tribune, May 6, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18975&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.
158. Holecek, A., 2005, Steel production slows to meet order levels: Times of Northwest Indiana, June 18, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19733&SectionID=31&SubSectionID=217&S=1>>, date accessed, September 19, 2005.
159. Onillon, J., Davidson, N., Weigh, P., 2005, Mittal steel company announces production reduction for Q3 2005: Mittal Steel Company N.V. news release, June 29, 2005, <<http://www.mittalsteel.com/NR/rdonlyres/EBD2AAC0-CC2F-49E4-819A-36D73423A919/549/2005JuneQ3productioncutsFINAL.pdf>>, date accessed, September 19, 2005.

160. Armstrong, J., Vargo, C., 2005, U.S. Steel announces major investment at Gary Works, U.S. Steel Corp. press release, April 1, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/04-01-2005/0003297562&plainNews=United+States+Steel+-+Press+Releases&EDATE=Apr+1,+2005>, date accessed, September 19, 2005.
161. Armstrong, J., Vargo, C., 2005, U.S. Steel to take No. 13 blast furnace offline in late May: U.S. Steel Corp. press release, May 11, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/05-11-2005/0003595605&plainNews=United+States+Steel+-+Press+Releases&EDATE=May+11,+2005>, date accessed, September 19, 2005.
162. Holecek, A., 2005, U.S. Steel commits to rebuild Gary blast furnace for \$260 million: Times of Northwest Indiana, April 2, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18308&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.
163. Shidler, L., 2005, U.S. Steel may move buyers to Pittsburgh, including Gary Works purchasing group: Gary Post-Tribune, April 23, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=18692&SectionID=31&SubSectionID=198&S=1>>, date accessed, September 19, 2005.
164. Held, S., 2005, Steel Dynamics Inc. tops list of state's public revenue gainers in 2004: Indianapolis Business Journal, June 8, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19543&SectionID=31&SubSectionID=196&S=1>>, date accessed, September 19, 2005.
165. Pippenger, L., 2005, IDEM to hold public hearing in Whitley County for air permit: Indiana Department of Environmental Management press release, May 9, 2005, <<http://www.in.gov/serv/presscal?PF=idem&Clist=16&Elist=83739>>, date accessed, September 7, 2005.
166. Kurtz, D., 2005, Heidtman Steel expansion plan gets OK from DeKalb County planners: Auburn Evening Star, May 19, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19221&SectionID=31&SubSectionID=170&S=1>>, date accessed, September 19, 2005.
167. Society of Mining Engineers, 2005, Industry newswatch: Mining Engineering, May 2005, p. 21.
168. Alcoa, 2005, Alcoa provides additional details on significant second quarter 2005 events: news release, June 23, 2005, <http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20050623005681en&newsYear=2005>, date accessed, September 28, 2005.

169. Medley, B., 2005, Warrick County's Alcoa plant may avoid layoffs: Evansville Courier & Press, June 25, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19856&SectionID=31&SubSectionID=240&S=1>>, date accessed, September 19, 2005.

170. Kurtz, D., 2005, OmniSource eyes options for Auburn Foundry's Plant 1 site: Auburn Evening Star, June 22, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19783&SectionID=31&SubSectionID=170&S=1>>, date accessed, September 19, 2005.

171. O'Malley, C., 2005, After slump, Citizens Gas unit adds workers, expects profit: Indianapolis Business Journal, May 12, 2005, accessed from Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=19073&SectionID=31&SubSectionID=202&S=1>>, date accessed, September 19, 2005.

Indiana Mineral Industry News

3rd Quarter 2005

By Kathryn R. Shaffer
Indiana Geological Survey

Production

Indiana **coal production** through the week ending September 30, 2005, was 25.7 million short tons, a 4.8 percent decrease from the same period of the previous year according to the **U.S.**

Department of Energy (DOE), Energy Information Administration (EIA). Indiana ranked eighth nationally as of September 30.¹

The most current data published by the **U.S. Geological Survey (USGS)** for the first quarter of 2005 showed Indiana **production of crushed stone** was 7.5 million metric tons (mt) and Indiana **production of construction sand and gravel** was 4.4 million mt, demonstrating a decrease of 3.6 percent and an increase of 3.4 percent for each commodity, respectively, when compared to the same period of 2004.²

The Portland Cement Association reports that **cement consumption** is expected to increase by 5.0 percent during 2005 and by an additional 3.3 percent during both 2006 and 2007. The increases are expected as a result of continued improvement in residential and nonresidential construction and a projected increase in public works and highway construction projects during this period.³

With the current and planned installation of more flue gas desulfurization (fgd) scrubbers to meet new emissions standards that power plants must meet and with the discovery of lower-sulfur coal reserves, **the Illinois Basin is being revitalized**. Indiana coal production has returned to the 1990 level of 35 million tons. Further improvement is expected in the years to come. Because of the activity, equipment parts and tires are in short supply.⁴

Industry news

Alliance Resource Partners began the permitting process for its new **Gibson South Mine**. The mine will have reserves of about 82 million tons, the company's second largest coalfield. The mine will have its own processing facilities, with production expected to begin by 2009. The mine may produce 3.2 million tons per year.^{5,6} The coal company also filed for permits to construct railroad access to the mine.⁷

James River Coal Company completed its acquisition of **Triad Mining's** six Indiana surface mines and one Indiana underground mine.^{8,9}

Lexington Coal Company will sell its **Kindill 1 and 2** mines to a joint venture between American Metal and Coal International and T&T Washing Co. Of the Indiana properties acquired by Lexington Coal Company following Horizon Natural Resources bankruptcy in 2004, this leaves only the **Chinook** mine unsold. The company is still looking for a buyer for that mine.¹⁰

Vigo Coal Co. applied for a water-related permit to excavate coal from a reclaimed area in Warrick County.¹¹

Peabody Energy received a 2005 Excellence in Surface Coal Mining Reclamation award for its abandoned Indiana Universal Mine. The award was received for wetlands reclamation.¹²

Duke Energy and **Cinergy** filed for approval of their **merger agreement** through the Federal Energy Regulatory Commission, commonly known as FERC. Operational efficiencies and resulting cost-savings are expected to be gained which the company plans to share with its customers. Shareholders must approve the merger.¹³ Testimony was also given to state regulatory agencies in Kentucky, Indiana, and Ohio.¹⁴ All approvals are expected to be received in the first half of 2006.¹⁵

Cinergy acquired a 512-megawatt **natural-gas plant at Wheatland** in Knox County from **Allegheny Energy, Inc.**, for about \$100 million.¹⁶

Electrical energy use soared to record highs in July owing to a heat wave.¹⁷

Critser Companies, Inc., sold several plants to **Vulcan Construction Materials LP**, including Bass Lake Sand & Gravel in Starke County, Eagle Creek Sand & Gravel in Lake County, Hanna Sand & Gravel in LaPorte County, and Northern Indiana Materials, a crushed stone operation, in

Lake County. The plants are all in northwestern Indiana.^{18,19,20,21}

Audax Group acquired **Victor Oolitic Stone Company**, which has been in production since 1898.²²

The **Indiana Mineral Aggregates Association** reported the Indiana aggregate industry as variable with the industry strong where financial support for infrastructure improvements and construction is available, but less strong in rural areas and where funding is weak. **The Indiana Department of Transportation (INDOT)** is facing a \$2 billion shortfall in the near future and that deficit will impact the industry. Equipment tires are reported as being in high demand with shortages being experienced.²³

Lawsuits were filed by two companies against three Indiana concrete producers—**Irving Materials, Inc., American Concrete Co., and Builder’s Concrete & Supply Co., Inc.**—claiming overpayment because of unfair trade practices for ready-mix concrete following Irving Materials, Inc.’s (IMI), guilty plea in a federal antitrust case.^{24,25} Another civil suit was filed by another business owner accusing five companies—**Prairie Material Sales, Inc., Builder’s Concrete & Supply, Inc., Shelby Materials, Inc., American Concrete Co., and Carmel Concrete Products Co.**—of fixing ready-mix concrete prices. Charges have not been filed against those companies by the U.S. Department of Justice.²⁶ Some concerns have been expressed about whether or not there will be enough companies left to provide concrete for

several large projects under development in Indianapolis when the investigation is complete.²⁷ In a separate case, **Larry Lee of Lee's Ready Mix & Trucking, Inc.**, of North Vernon was sentenced to eight months of jail time and will pay a \$70,000 fine for price fixing ready-mix concrete in Bartholomew, Jackson, and Jennings Counties.²⁸

An article appeared in the July issue of North American Quarry News about a processing plant upgrade made by **Irving Materials, Inc., to its Kewanna Plant** that was purchased from **Cowles Sand and Gravel** in 2003. The improvements came online in April and will help to increase production and improve its line of products. The operation has been in existence since 1946.²⁹

Rogers Group, Inc., added a 3-mile **railroad spur** to connect **Bloomington Crushed Stone** in Monroe County to the Indiana Rail Road Company's Ellettsville line. Rogers Group, Inc., expects to have increased sales of scrubber stone and specialty products; local truck traffic should also be reduced, improving safety.^{30,31}

Liter's of Indiana's Jeffersonville quarry was threatened by city officials with fines of up to \$2,500 per day if dust caused by company trucks was not controlled.^{32,33}

Oldcastle Materials, which has operations in Indiana, has pledged \$100,000 to Habitat for Humanity as part of an initiative called Congress Building America, which is composed of Habitat for Humanity, federal, corporate, and private groups.³⁴

The town of **Reynolds**, population 550, is participating in a project whereby the town will be powered by **renewable energy resources**. The project is called **BioTown** and bioproducted resources such as methane gas and ethanol will be used in the community. Methane from area hog farms and the sewer system may be used.³⁵

Barge traffic on the Ohio River stopped for several days following Hurricane Katrina.³⁶

Construction material prices were expected to rise as a result of the hurricane. **Cement is already in short supply** in 35 states and could also delay other construction projects.^{37,38} It is possible that heavy duties placed on imports of **cement from Mexico** could be lifted and replaced with limits on how much cement can be imported into the United States to help ease the shortage. The duties had been placed in 1990 because Mexican cement was being sold in the United States at prices with which U.S. companies could not compete.³⁹

Vinegar Hill, a 64-property residential area in Bloomington constructed primarily of dimension limestone, or with limestone trim, was named to the National Register of Historic Places. Many individuals involved in the early development of Indiana's building stone industry lived in the area.⁴⁰

Environmental issues

The **U.S. Environmental Protection Agency (EPA)** fined **Lehigh Cement Company** \$40,000 for excessive emissions of carbon monoxide at its **Mitchell plant**. The company will also be

required to retest for carbon monoxide and nitrogen oxide emission levels and then file for a modification of its air permit reflecting those findings.⁴¹ The incident occurred in 2003 when the company **changed two kilns** where clinker is produced. It was a temporary problem related to that modification and the EPA took this into consideration when determining the fine. The system change has allowed the plant to increase its cement production.⁴² An article about the cement plant, complaints and inspections, and cement-making process appeared in the Bloomington Herald-Times.⁴³

As an **alternative to the Kyoto Protocol**, an agreement was made between the United States and **five developing nations** that forms a **new partnership** designed to promote the use of cleaner energy technologies in those countries. No specific emissions reductions are required under the agreement.⁴⁴ Because the Bush Administration would not endorse **carbon emission regulation**, a pact was made between **nine northeastern states**—Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont—to prevent carbon dioxide emissions from rising above current levels and then drop emissions by 10 percent by the year 2020. Each state will have to pass legislation for the agreement to take effect. Environmentalists hope that other states will follow suit, prompting eventual national legislation. A market-driven **carbon emissions trading system** is a part of the region's plan. California, Washington, and Oregon are considering a similar agreement.⁴⁵

Environmental improvements will be made at **Alcoa's Warrick Power Plant** at Newburgh.

Wet limestone scrubbers will be installed on all units, the ability to burn natural gas if needed will be added, and new coal-handling facilities will be installed, with the company contributing about \$330 million. **Vectren Corp.**, which owns part of the power plant, is contributing an additional \$68 million. The improvements will not be completed until 2010. When the project is complete, sulfur dioxide emissions should drop by 98 percent.⁴⁶

A final report issued by the **EPA** on July 1 recommended significantly **tightening particulate matter air-quality standards**. Current standards for fine particulate matter allow 65 micrograms per cubic meter of air over 24 hours, but the recommended standard would decrease that to between 25 and 35 micrograms. Coarse particulate matter would be decreased from 150 micrograms per cubic meter of air over 24 hours to 65 to 85 micrograms. A proposal is due from the agency by December 20. A final rule is due by September 27, 2006.⁴⁷

Cinergy and **Vectren Corp.** have decided to proceed with preliminary engineering and design for a new 600-megawatt **integrated gasification combined cycle (IGCC)** plant. The exact site is still undecided, but could be at Edwardsport where Cinergy/PSI has an existing power plant.⁴⁸

The Tondur Corp., an independent power producer based in Houston, Tx., has decided to build a 500-megawatt IGCC plant near South Bend in Indiana. The company plans to convert an abandoned natural-gas-fired plant nearby that was never completed. The site already has high-voltage transmission lines and access to two railroads and the site is large enough to accommodate a future possible expansion.^{49,50}

Construction industry developments

An informational meeting was held in Morgan County in July where interchange locations for the planned **I-69 extension** north of Bloomington were discussed.^{51,52} The Bloomington I-69 project office was attacked with graffiti by vandals who had attempted to break into the building. They had also attempted to start a fire.⁵³ A small street demonstration of about 40 individuals was also held.⁵⁴ Governor Daniels gave a speech in which he said that his administration was working on a way to **fund the I-69 project with tolls** and to complete the project by 2017.⁵⁵

The Road Information Program (TRIP) estimates that of the nation's major highways about 1 mile in every 4 has **pavement in substandard condition**, and conditions have continued to worsen to the point that 26 percent of the nation's major roads were in poor condition in 2006. Road travel is continuing to increase as conditions deteriorate.⁵⁶ TRIP is a research group based in Washington, D.C. This observation is supported by the Texas Transportation Institute's 2005 **Urban Mobility Report** which states that transportation infrastructure is not keeping pace with travel demand.⁵⁷

INDOT formulated a statewide **10-year plan** and last quarter requested legislators to help prioritize about **254 highway projects**. Some legislators were having difficulty doing this because they said they were not well enough informed and some legislators ranked all projects as having the highest priority. However, INDOT did feel that the input they received was helpful, overall. Public hearings around the state were announced and project recommendations were expected to

be released on September 1.^{58,59} **Meetings were held** in Seymour in August for residents and officials of Monroe, Brown, and Morgan Counties to discuss proposed projects.^{60,61} Although the **I-69** project was on the list, funding is not yet available.⁶² Meetings were also held in Vincennes, Crawfordsville, and Greenfield. Interstate projects in Marion, Hamilton, and Lake Counties scored highest on the preliminary list, largely because of population density.⁶³ Small communities are also hoping to receive funding for smaller highway projects, but some representatives are concerned that they will be lost in the shuffle.⁶⁴ The final plan includes **\$5.3 billion for new road construction**. It also includes a plan to increase tolls on the **Indiana Toll Road** and to use those increased funds for toll road maintenance and for other road projects. The plan, which is called **Major Moves for Indiana**, also includes a plan to build **I-69 as a toll road**. The state would enter a **public-private relationship**, leasing out the state's existing and proposed **I-69** toll roads to a company. This plan is expected to generate additional funds for other highway projects and to speed up construction of I-69 by several years. The plan must be approved by the Indiana legislature.^{65,66,67}

A **bridge in southern Harrison County** over the Ohio River is being considered, but has low priority because of other projects that are further along in the planning process, including two bridges in the Louisville area, an I-64 interchange, and a connecting road between I-64 and Indiana 64. The Harrison County project is being considered for economic development reasons and could possibly be **funded by tolls**.⁶⁸ A design plan has not been decided upon for the two downtown bridges that are part of the **Ohio River Bridges Project**. The project will receive

\$665 million under INDOT's new 10-year plan. The Indiana portion could also be completed up to 5 years earlier than originally thought, although Kentucky does not anticipate that the total project will be completed that quickly.^{69,70}

The new **Indianapolis Airport terminal project** has increased in price from \$808 million to \$1.07 billion, an increase of more than \$250 million, since its inception. The increase is due primarily to design changes necessitated by the terrorist events of September 11, 2001, the lengthening of new bridge ramps from I-70, a larger parking garage, a costly baggage-screening system, construction prices, and inflation.⁷¹

Development agreements still have not been made for construction of the new **\$700 million Indianapolis Colts football stadium**, but contracts were awarded for demolition of four city-owned buildings currently on the lot. The August 1 groundbreaking will be delayed.^{72,73}

Work stopped on the **O'Bannon Highway**, which runs through southern Indiana, because of the high price of diesel fuel. The contractor was in dispute with INDOT over which group should cover the cost because it was not included in the contract. The same contractor also stopped work on a project on U.S. 231 for the same reason.⁷⁴

Riley Hospital for Children in Indianapolis will add a **\$500 million expansion**, making it the nation's second largest children's hospital.⁷⁵ Also, the I.U. School of Medicine and the Clarion

Health Center are expanding the IU Cancer Center at an estimated cost of \$150 million.⁷⁶

Site preparation has begun for the new **Orange County casino**. **Cave Quarries** received the first major contract—to provide fill material.⁷⁷

A new **\$30 million school** will be built in **Danville** with a projected completion date of Fall 2008.⁷⁸

Legislation and regulatory issues

The U.S. House passed the long-awaited \$12.3 billion energy bill, **The Energy Security Act of 2005**, near the end of July. The Senate began debate on the bill immediately, passing it the next day. **The President signed the bill** on August 8. Under the bill, clean coal technology, nuclear power plant development, and wind power is encouraged and promoted through subsidies and loan guarantees. The legislation will not open the Arctic National Wildlife Refuge for oil production, but will call for doubling the production of **ethanol gasoline additive** by up to 7.5 billion gallons per year until 2012. This is likely to boost corn production in Indiana and new **ethanol plants** will probably be built. Daylight savings time will be extended by 4 weeks each year in order to produce projected energy savings. Funding exists in the bill for three “Energy Centers.” One of these will be at Purdue University. **Indiana’s new Energy Center** will study renewable energy and will look for ways to cut the nation’s reliance on foreign energy sources.^{79,80,81,82,83}

A twelfth **TEA 21** extension was passed owing to conference deliberations for the new highway legislation. A deal between the Senate and House was finally reached at the end of July and the President signed the bill on August 10. The final legislation will result in \$286.4 billion for highway construction and mass transit projects over a period of 6 years, retroactive to September 30, 2003. A total of \$193.2 billion of this amount is for highway construction. There is also an arrangement for the states to get back 92 cents on every dollar of gasoline taxes by the year 2009 instead of the current 90.5.^{84,85,86,87,88} Included in the bill is \$58 million for the **Ohio River Bridges Project**. Indiana will receive \$5.3 billion of the \$286.4 billion for state highway projects. Indiana's share increased by 34.7 percent over the previous transportation bill, the eighth largest state increase. At least \$400 million is allotted to I-69 for affected states to share.^{89,90}

The National Geologic Mapping Reauthorization Act of 2005 passed the House. The bill funds geologic mapping at \$64 million each year through 2010.⁹¹

A federal bill proposing amendments to the **Endangered Species Act** was introduced in September. The suggested changes would include provisions to reimburse landowners for **fair market value** when planned land developments are disallowed because of the presence of endangered species. It also makes it more difficult for the federal government to prevent land development in areas determined to be endangered habitat. In addition, the federal government would be required to give a decision within 90 days on any question regarding development in such an area. If not received in that time period, the development could proceed. **Conservation**

grants would be given to property owners who voluntarily protect a species on the endangered species list. The House passed the bill September 30.^{92,93,94}

The city of Carmel enacted a new ordinance to control mining practices, and it exerts more control over **blasting practices** in the city. A city mining ordinance passed earlier this year was withdrawn because a lawsuit was filed by **Martin Marietta Aggregates**, which has a sand and gravel operation in the city. The company is also contesting the new ordinance.⁹⁵

A new rule permits governors to petition the federal government for changes to **land-management plans in national forests**. This could lead to more mining or other development in national forests and has resulted in a lawsuit filed by environmental groups.⁹⁶

A final rule tightening limits on **diesel particulate matter exposure** in underground mines was issued by the U.S. Mine Safety and Health Administration.⁹⁷

A U.S. Court of Appeals decision will allow the **U.S. Army Corps of Engineers 2002 Nationwide Permit Regulations** to be reviewed. The rules have caused a lot of contention in the aggregates industry because of their difficult permit requirements.⁹⁸

The **EPA** has proposed requiring companies to **report chemical releases in alternate years** instead of annually, and to increase the minimum reporting levels for some chemicals from 500 to

5,000 pounds per year for its Toxic Release Inventory Program. The agency has stated that this would allow it to improve the quality and usability of the data that is reported in its database.⁹⁹

Metals

Scrap metal prices have dropped and with it has dropped the price of structural steel; the price of steel has dropped by more than \$100 per ton since January to an average price of \$510 per ton in July.¹⁰⁰

Steel Dynamics reported that its profits remained at historic high levels during the second quarter, although were down somewhat from the first quarter. Permit problems have slowed the progress on its **Mesabi Nugget project**, an iron-making facility that will utilize a “clean” process that does not use **coke**.¹⁰¹

Nucor Corp. also continued record earnings during the second quarter, although at lower levels than during the first quarter of the year.

U.S. Steel Corp. announced that it would begin buying back its **common stock** when financial conditions are favorable.¹⁰² The company is rebuilding its **Gary Works number 14 blast furnace**. An accident during the repair somewhat damaged a part of the furnace, delaying the projected startup until December.^{103,104}

The Mittal Steel Company N.V. and International Steel Group merger was completed on April 15. More mergers are expected in the steel industry. There is reportedly an oversupply of steel in international markets. **Production has slowed** in Europe and North America, but Asia, primarily China, has continued to overproduce. This has set up a situation where mergers are more likely.¹⁰⁵

As American steel companies are absorbed by international companies and are merged into companies having fewer numbers of employees, the numbers of union steelworkers in this country is declining and so is the amount of political power that they hold. As a result, the **United Steelworkers of America (USWA)** is merging with nonsteel-producing unions in order to strengthen its position. Other industries included are paper, petroleum, plastics, glass, chemicals, rubber, health care, and other metals. The USWA is also strengthening ties to international steel-producing unions or associations.¹⁰⁶

In the first half of 2005, shipments of steel through the **Ports of Indiana** increased 39 percent over the same period in 2004.¹⁰⁷ **Hurricane Katrina** disrupted port shipments. The Hurricane also caused a disruption in the shipment of hydrogen gas to **Steel Dynamics**, which uses it for production of cold-rolled, galvanized, and painted sheet products. The company suspended taking orders for those products temporarily.¹⁰⁸

During the second quarter, a combination of improved markets, company acquisitions in Russia,

and restructuring contributed to the largest quarterly gain ever achieved by **Alcoa, Inc.**, with net profit increasing by 13 percent over the previous year, and 8 percent over the first quarter. **The second restructuring stage was also announced** wherein 8,100 positions and \$195 million will be cut.^{109,110} The company is investing \$375 million at its **Warrick power plant**. As discussed above, approximately \$330 million of that will be used for environmental improvements. The remaining \$45 million will be used to set up a mining operation in Friendsville, Illinois, and to acquire needed equipment.¹¹¹

References cited

1. U.S. Department of Energy, Energy Information Administration, 2005, Weekly U.S. coal production overview, September 30, 2005.
2. Tepordei, V, 2005, Crushed stone and sand and gravel in the second quarter 2005: U.S. Geological Survey Mineral Industry Surveys, September 2005, 8 p., 6 tables, 3 figs., <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/csmis2q05.pdf>, date accessed October 23, 2005.
3. Cement Newslines e-newsletter, 2005, PCA bumps up 2005-2009 forecast: Cement Americas, August 19, 2005.
4. Buchsbaum, L., 2005, Demand returns to the Illinois Basin: Coal Age, September 2005, p. 26.
5. Buchsbaum, L., 2005, Demand returns to the Illinois Basin: Coal Age, September 2005, p. 26.
6. Anonymous, 2005, Alliance seeks state permit for expected Gibson South mine: Platts Coal Outlook, August 29, 2005.
7. Anonymous, 2005, Alliance seeks permits for rail project at new Indiana mine: Platts Coal Outlook, July 4, 2005.
8. Anonymous, 2005, James River reports strong performance: Coal Age, September 2005, p. 15.
9. Anonymous, 2005, People in Coal: Platts Coal Outlook, July 11, 2005.

10. Anonymous, 2005, American Metals and Coal, T&T Washing buying two Kindill mines: Platts Coal Outlook, September 12, 2005.
11. Anonymous, 2005, Corps reviews three applications: Platts Coal Outlook, September 19, 2005.
12. Anonymous, 2005, NMA, OSM and MSHA give safety, reclamation awards: Platts Coal Outlook, September 26, 2005.
13. Cinergy, 2005, Duke Energy and Cinergy submit FERC merger application: news release, July 13, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=523>, date accessed December 9, 2005.
14. Cinergy, 2005, Cinergy, Duke seek merger approval from Kentucky regulators; file testimony in Indiana and Ohio merger applications: news release, August 2, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=528>, date accessed December 9, 2005.
15. Cinergy, 2005, Duke energy and Cinergy announce early termination of Hart-Scott-Rodino waiting period: news release, August 11, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=529>, date accessed December 9, 2005.
16. Cinergy, 2005, PSI Energy to purchase generating station from Allegheny Energy: news release, August 12, 2005, <http://www.cinergy.com/News/default_corporate_news.asp?news_id=530>, date accessed December 9, 2005.
17. Malarkey, J., 2005, IPL, PSI set records for use of electricity: Indianapolis Star, July 27, 2005, p. C1.
18. Anonymous, 2005, Vulcan Materials acquires northern Indiana aggregates facilities: Pit & Quarry, August 24, 2005, <<http://www.pitandquarry.com/pitandquarry/article/articleDetail.jsp?id=176939&searchString=vulcan%20materials%20acquires%20northern>>, date accessed December 19, 2005.
19. Anonymous, 2005, Vulcan Materials buys aggregate facilities: Mining Engineering, September 2005, p. 13.
20. Anonymous, 2005, Vulcan acquires Ind., Tenn. operations: Rock Products, September 2005, p. 4, <http://rockproducts.com/mag/rock_vulcan_acquires_ind/>, date accessed December 19, 2005.

21. P&Quick News, 2005: Pit & Quarry e-newsletter, September 13, 2005.
22. Anonymous, 2005, Indiana quarry sold to investment group: Rock Products, September 2005, p. 4, <http://rockproducts.com/mag/rock_vulcan_acquires_ind/>, date accessed December 19, 2005.
23. Anonymous, 2005, The states weigh in, Indiana: Pit & Quarry, July 1, 2005, <<http://www.pitandquarry.com/pitandquarry/article/articleDetail.jsp?id=168228&searchString=the%20states%20weigh%20in>>, date accessed December 19, 2005.
24. Evanoff, T., 2005, Concrete case draws flurry of lawsuits: Indianapolis Star, July 1, 2005, p. C1.
25. Associated Press, 2005, Builders allege concrete price-fixing: Louisville Courier Journal, July 2, 2005, p. B4.
26. Wall, J. K., 2005, Civil suit links firms to concrete price-fixing: Indianapolis Star, August 25, 2005, p. C1.
27. Wall, J. K., and Pernot, C. R., 2005, 4 admit to fixing prices of concrete—Federal probe of what Irving Materials, others in area charged comes as big projects are planned: Indianapolis Star, July 16, 2006.
28. Anonymous, 2005, Second firm pleads guilty to fixing price of concrete: Indianapolis Star, July 23, 2005.
29. Gates, K., 2005, IMI designs and builds a new plant for its Kewanna plant: North American Quarry News, July 2005.
30. Schroeder, M., 2005, Quarry gets new rail spur: Bloomington Herald-Times, August 22, 2005, p. A1.
31. Schroeder, M., 2005, Rail spur serving Rogers quarry has trains rolling: Bloomington Herald-Times, September 23, 2005.
32. Anonymous, 2005, North Central Indiana news: Pit & Quarry, July 2005, p. 42.
33. Anonymous, 2005, North Central Indiana news: Pit & Quarry, August 2005, p. 41.
34. Anonymous, 2005, Oldcastle gives \$100K to Habitat for Humanity: Rock Products, August 2005, p. 4, <http://rockproducts.com/mag/rock_us_silica_sells/index.html>, date accessed December 19, 2005.

35. Wall, J. K., 2005, Hoosier burg to be pilot for energy project: Indianapolis Star, September 13, 2005, p. C1.
36. Schoenberger, R., 2005, Ohio River barge traffic back to near-normal level: Louisville Courier-Journal, September 9, 2005, p. D1.
37. Anonymous, 2005, Costs rise after hurricane: e-newsletter, Breaking Rock News, September 20, 2005.
38. Hernan, P., 2005, Shortage of cement could slow expanding construction market: Pit & Quarry, July 2005, p. 50.
39. Carlton, J., 2005, U.S. nears Mexican cement pact: Wall Street Journal, August 29, 2005, p. A7.
40. Schroeder, M., 2005, Vinegar Hill a history in limestone: Bloomington Herald-Times, July 27, 2005, p. A1.
41. U.S. Environmental Protection Agency, 2005, EPA reaches agreement with Lehigh Cement: press release, July 12, 2005, <<http://yosemite.epa.gov/opa/admpress.nsf/d9bf8d9315e942578525701c005e573c/2685dce436a38d3e852570bd007a398a!OpenDocument>>, date accessed December 9, 2005.
42. Lane, L., 2005, Mitchell cement company to pay \$40,000 for emissions violations: Bloomington Herald-Times, July 13, 2005, p. A1.
43. Lane, L., 2005, Cement plant complaints drawing state attention: Bloomington Herald-Times, August 7, 2005.
44. Associated Press, 2005, U.S., five other nations sign on to emissions pact: Bloomington Herald-Times, July 29, 2005, p. D3.
45. DePalma, A., 2005, 9 states in plan to cut emissions by power plants: New York Times, August 4, 2005, p. A1.
46. Alcoa, 2005, Alcoa investing \$375 million for Warrick, IN facilities: news release, July 22, 2005, <http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20050722005314en&newsYear=2005>, date accessed December 9, 2005.
47. Anonymous, 2005, EPA recommends tighter standards for fine particulate matter: Pit & Quarry, August 2005, p. 38.

48. Anonymous, 2005, Cinergy/PSI, Vectren move forward with engineering of cleaner coal power plant: Cinergy news release, September 20, 2005.
49. Anonymous, 2005, Tondu pushing ahead with 500-MW IGCC unit: Megawatt Daily, July 12, 2005.
50. Anonymous, 2005, Indiana county delays vote on IGCC plant proposed by Tondu: Platts Coal Outlook, September 19, 2005.
51. Van der Dussen, K., 2005, Options for I-69 access outlined: Indianapolis Star, July 20, 2005, p. A1.
52. Van der Dussen, K., 2005, I-69 meeting mostly cordial: Bloomington Herald-Times, July 21, 2005, p. A1.
53. Van der Dussen, K., 2005, Vandals hit local I-69 office: Bloomington Herald-Times, July 19, 2005, p. A1.
54. Anonymous, 2005, Demonstrators block traffic over weekend: Bloomington Herald-Times, July 20, 2005, p. A9.
55. Associated Press, 2005, Daniels expects I-69 work to be done by 2017: Louisville Courier-Journal, August 19, 2005, p. B3.
56. Anonymous, 2005, TRIP says urban pavement worsening: Rock Products, July 2005, p. 22, <http://rockproducts.com/mag/rock_trip_says_urban/index.html>, date accessed December 19, 2005.
57. Anonymous, 2005, Highway roadway congestion worse than ever; significant action must be taken: Aggregates Manager, July 2005, p. 11, <<http://aggman.com/articles/jul05aggbeat.htm>>, date accessed September 9, 2005.
58. Kim, T., 2005, Legislators weighing in on road plan: Indianapolis Star, July 2, 2005, p. B1.
59. Kim, T., 2005, Hearings to help state rank roadwork: Indianapolis Star, July 18, 2005, p. B2.
60. Van der Dussen, K., 2005, INDOT outlines 10-year project list, August 1, 2005, p. A1.
61. Van der Dussen, K., 2005, Ind. 45/46 bypass high on new list: Bloomington Herald-Times, August 3, 2005, p. A1.
62. Van der Dussen, K., 2005, INDOT officials: I-69 needs separate funding, August 3, 2005, A1.

63. Kim, T., 2005, Road projects compete for scarce dollars: Indianapolis Star, August 15, 2005, B1.
64. Kim, T., 2005, Small towns want share of road funds: Indianapolis Star, August 8, 2005, p. B1.
65. Kim, T., 2005, Higher tolls will fund roads: Indianapolis Star, September 27, 2005, p. B1.
66. Smith, M., 2005, Daniels' highway plan calls for I-69 extension: Indiana Daily Student, September 27, 2005, p. 4, <<http://www.idsnews.com/news/story.php?adid=search&id=31337>>, date accessed December 12, 2005.
67. Van der Dussen, K., 2005, Daniels suggests tolls on 37, I-69: Bloomington Herald-Times, September 27, 2005, p. A1.
68. Schneider, G., 2005, Harrison to monitor bridge proposal: Louisville Courier-Journal, August 16, 2005, p. B3.
69. Davis, A., 2005, Residents' thoughts vary on downtown bridge: Louisville Courier-Journal, September 21, 2005, p. B3.
70. Weidenbener, L. S., 2005, \$665 million earmarked for bridges: Louisville Courier-Journal, September 27, 2005, p. A1.
71. Kim, T., 2005, How did this \$808 million project turn into a \$1.07 billion undertaking?: Indianapolis Star, July 10, 2005, p. A1.
72. Associated Press, 2005, Colts, Indianapolis agree on new stadium lease: Indiana Daily Student, August 31, 2005, p. 1, <<http://www.idsnews.com/news/story.php?adid=search&id=30666>>, date accessed December 15, 2005.
73. Associated Press, 2005, First contracts approved for Colts stadium: Bloomington Herald-Times, July 27, 2005, p. A9.
74. Schneider, G., 2005, Fuel price increases stall O'Bannon Highway work: Louisville Courier-Journal, September 15, 2005, p. B1.
75. Peacock, E., 2005, Riley Hospital announces \$500M expansion: Indiana Daily Student, September 21, 2005, p. 4, <<http://www.idsnews.com/news/story.php?adid=search&id=31200>>, date accessed December 9, 2005.
76. Garrison, A., 2005, Clarian, School of Medicine begin work on Cancer Center building expansion: Indiana Daily Student, September 27, 2005,

- <<http://www.idsnews.com/news/story.php?adid=search&id=31342>>, date accessed December 9, 2005.
77. Creps, M., 2005, Casino spurs Orange County jobs: Bloomington Herald-Times, August 17, 2005, p. A3.
78. Anonymous, 2005, Indianapolis firm chosen to design new school: Indianapolis Star, July 18, 2005, p. B2.
79. Hebert, J., 2005, House Oks sweeping energy bill: Louisville Courier-Journal, July 29, 2005, p. A1.
80. Hebert, J., 2005, Senate gives energy bill the green light: Louisville Courier-Journal, July 30, 2006, p. A3.
81. Anonymous, 2005, Washington delivers for the coal industry: Coal Age, August 2005, p. 20.
82. Baker, B., 2005, Bill could boost state economy: Indiana Daily Student, August 4, 2005, <<http://www.idsnews.com/news/story.php?adid=search&id=30440>>, date accessed December 15, 2005.
83. Associated Press, 2005, New Purdue center to study energy: Louisville Courier-Journal, August 18, 2005, p. B4.
84. Cement Newslines, 2005, Number of Congressional TEA-21 extensions hits double digits: Cement Americas e-newsletter, July 22, 2005.
85. Meckler, L., 2005, Senate, House negotiators reach a deal on the highway bill: Wall Street Journal, July 28, 2005, p. A4.
86. Anonymous, 2005, House passes highway funding bill, Senate next: Pit & Quarry, July 29, 2005, <<http://www.pitandquarry.com/pitandquarry/article/articleDetail.jsp?id=172822&searchString=%22house%20passes%20highway%22>>, date accessed September 15, 2005.
87. Anonymous, 2005, Transportation bill is finally done: Rock Products, August 2005, p. 18, <http://rockproducts.com/mag/rock_transportation_bill_finally/index.html>, date accessed December 9, 2005.
88. Kuennen, T., 2005, It's a highway bill: Rock Products, September 2005, p. 24-27, <http://rockproducts.com/mag/rock_highway_bill/>, date accessed December 9, 2005.
89. Carroll, J. R., 2005, \$58 million set aside for bridges over Ohio: Louisville Courier-Journal, July 30, 2005, p. A1.

90. Murray, A., 2005, Highway bill routes \$4 million to city: Bloomington Herald-Times, July 30, 2005, p. A1.
91. Hernan, P., 2005, TEA-21 reauthorization may take back seat to other issues in Congress: Pit & Quarry, August 2005, p. 46.
92. Barringer, F., 2005, House bill would limit U.S. power to protect species: New York Times, September 20, 2005, p. A16.
93. Brosnam, J. W., 2005, House alters Endangered Species Act: Bloomington Herald-Times, September 30, 2005, p. D1.
94. Werner, E., 2005, Endangered Species Act is overhauled by House: Indianapolis Star, September 30, 2005, p. A4.
95. Anonymous, 2005, State-by-State, Indiana: Aggregates Manager, July 2005, p. 13, <<http://aggman.com/articles/jul05sbs.htm>>, date accessed September 9, 2005.
96. Anonymous, 2005, Forest land opening draws fire: Rock Products, July 2005, p. 11, <http://rockproducts.com/mag/rock_nepa_reviewers_scrutiny/>, date accessed December 9, 2005.
97. Anonymous, 2005, Final DPM rule issued: Aggregates Manager, August 2005, p. 9, <<http://aggman.com/articles/aug05aggbeat.htm>>, date accessed December 12, 2005.
98. Anonymous, 2005, Court reverses NWP ruling: Rock Products, August 2005, p. 20, <http://rockproducts.com/mag/rock_court_reverses_nwp/>, December 9, 2005.
99. Bruggers, J., 2005, EPA calls for fewer pollution reports: Louisville Courier-Journal, September 23, 2005, p. A1.
100. Cement Newline, 2005, Steel prices drop from dizzying heights: Cement Americas e-newsletter, July 8, 2005.
101. Steel Dynamics, 2005, Steel Dynamics announces net income of \$51 million for second quarter: press release, July 18, 2005, <http://steeldynamics.com/index.php?menu_id=23&news_id=13>, date accessed September 27, 2005.
102. U.S. Steel, 2005, U.S. Steel announces common stock repurchase program: press release, July 26, 2006, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/07-26-2005/0004075125&EDATE=Jul+26,+2005>, date accessed December 13, 2005.

103. U.S. Steel, 2005, U.S. Steel reports equipment failure on Gary Works' No. 14 Blast Furnace Rebuild: press release, September 12, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/09-12-2005/0004105055&EDATE=Sep+12,+2005>, date accessed December 13, 2005.
104. U.S. Steel, 2005, U.S. Steel provides updates on Gary blast furnace rebuilt and third quarter business conditions: press release, September 20, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/09-20-2005/0004111321&EDATE=Sep+20,+2005>, date accessed December 13, 2005.
105. Glader, P., 2005, Steel industry plots mergers to reduce capacity: Wall Street Journal, July 20, 2005, p. A2.
106. Kropko, M. R., 2005, Steel unions take worldly view toward expansion: Indianapolis Star, August 29, 2005.
107. Anonymous, 2005, Clark Maritime tonnage down 5 percent in first half: Business First of Louisville, July 29, 2005.
108. Steel Dynamics, Inc., 2005, Steel Dynamics addresses hydrogen gas supply issues: press release, September 2, 2005, <http://steeldynamics.com/index.php?menu_id=23&news_id=12>, date accessed December 9, 2005.
109. Alcoa, Inc., 2005, Alcoa announces highest quarterly income and revenue in the company's history: news release, July 7, 2005, <http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20050707005730en&newsYear=2005>, date accessed September 28, 2005.
110. Glader, P., 2005, Alcoa's net profit jumps 14% as gains offset energy costs: The Wall Street Journal, July 8, 2005, p. A3.
111. Alcoa, Inc., 2005, Alcoa investing \$375 million for Warrick, IN facilities: news release, July 22, 2005, <http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20050722005314en&newsYear=2005>, date accessed April 13, 2006.

Indiana Mineral Industry News

4th Quarter 2005

By Kathryn R. Shaffer
Indiana Geological Survey

Production

Indiana **coal production** through the week ending December 31, 2005, was 33.6 million short tons, a 4.7 percent decrease from the same period of the previous year according to the **U.S.**

Department of Energy (DOE), Energy Information Administration (EIA). Indiana ranked eighth nationally as of December 31.¹ The EIA released revised projections of **coal consumption**.

The agency believes that the total share of coal use by the electric power industry in the U.S. will increase from 50 percent in 2004 to 57 percent in 2030. More coal-fired capacity will most likely be added, mostly after 2020. While **natural gas** use may increase from 18 percent in 2004 to 22 percent in 2020, it will likely fall to 17 percent in 2030. The agency expects that of 174 gigawatts of new coal-fired generating capacity, 19 gigawatts will be at coal-to-liquids plants. In addition 140 gigawatts of new natural gas generating capacity are expected to be in place by 2030.²

The most current data published by the **U.S. Geological Survey (USGS)** for the third quarter of 2005 showed Indiana **production of crushed stone** was 17.4 million metric tons (mt) and Indiana **production of construction sand and gravel** was 8.9 million mt, demonstrating a decrease of 6.9 percent and a decrease of 1.9 percent for each commodity, respectively, when compared to the same period of 2004.³

The **Portland Cement Association** expects **cement imports** to reach 33 million tons in 2005 and increase to 35 million tons in 2006. Although rebuilding the New Orleans area after Hurricane Katrina will require an increase in **cement consumption**, the association expects that a small economic downturn in the first part of 2006 will counterbalance that effect so that additional imports will not be needed to fill the need.⁴

Nationwide, **gypsum** demand is expected to increase by about 1.7 percent each year through the year 2009, according to the Freedonia Group, an international business research company. Values should increase by 3.7 percent each year over the same time period. Production in 2009 should reach 55 million short tons, valued at \$4.9 billion, according to the report. Also by 2009, consumption of synthetic gypsum may rise to 38 percent of all gypsum consumed.⁵

Industry news

Indiana Land & Mineral Co., LLC, the group that purchased **Kindill #1 and #2 Mines**, will most likely produce underground at Kindill #1 because most of the surface coal has been mined. Large quantities of underground coal also remain at the Kindill #2 Mine. A large amount of waste coal also remains at the mines which could be used for **integrated gasification combined cycle (IGCC)** power plants at some point in the future.^{6,7} The mines have been renamed **Pike #1 and #2**.⁸

If the weather cooperates, **Solar Sources** will open a new mine in 2006. The surface **Shamrock**

Mine will be in Dubois County near Dublin and production is estimated at 1 million tons per year. The company may also open an underground mine.⁹

Little Sandy Coal Company, which currently owns one nonproducing coal mine in Indiana, will apply for a permit for a surface mine in Pike County in 2006.¹⁰

The new underground **Sunrise Coal, LLC, Howesville Mine** in Clay County was opened. A new underground mine called **Carlisle** will be opened by the company next year in Sullivan County.¹¹

A new underground coal mine with deep reserves could eventually open in Vigo County to supply material for **SG Solutions**, a company that provides **syngas** for the **PSI Wabash River IGCC** plant currently in the process of being sold to the Wabash Valley Power Association. SG Solutions is currently using petroleum coke and they will have to switch to coal for the mine to be constructed.¹²

James River Coal reports that **Triad Mining** was purchased because the expected installation of scrubbers at more power plants to meet clean air requirements will mean more consumption of high-sulfur coal by those plants. The company is planning other projects for Triad Mining.¹³

Canadian Pacific Railway sold 92.3 miles of track in southern Indiana to the **Indiana Rail Road Co.** The tracks connect Terre Haute to Bedford. Rights over **CSX** tracks connecting to

Chicago and Louisville are included in the deal. The tracks are primarily used for coal hauling, but other markets may be pursued.^{14,15} **Rogers Group, Inc.**, opened a 3-mile **railroad spur** to connect its Bloomington quarry to the Indiana Rail Road Company's Ellettsville line.¹⁶

Duke Energy and **Cinergy** received approval of their **merger agreement** from the Federal Energy Regulatory Commission.¹⁷ An agreement was also made with state agencies.¹⁸

Established by the **Energy Security Act of 2005**, **Purdue's Energy Center** was opened in Discovery Park at Purdue University. The center is staffed with 100 employees. A major research area for the group will be to study the liquefaction and gasification of coal for transportation fuels.¹⁹

The Indiana Department of Natural Resources, **Division of Reclamation** received the Mid-Continent regional award for exemplary reclamation presented by the U.S. Office of Surface Mines (OSM) as part of its Abandoned Mine Land Reclamation Awards program. The award was for reclamation at the **Black Beauty Coal Company Sugar Ridge Mine** in Clay County which created a useful fish and wildlife area. **Black Beauty Coal Co., Farmersburg Mine**, in Vigo and Sullivan Counties won a Third Place Bronze Award when OSM presented its annual Excellence in Surface Mining and Reclamation Awards. The award was won for community involvement.²⁰

Vincennes University is presenting **Compliance Training for the Mining Industry** in Indiana.

In addition, the 2-year university is developing a mining degree program. This program will benefit both the coal and nonfuel mining industries in the state. There has been a shortage of miners in Indiana and this program is expected to help the situation. Within the next 5 years, the coal industry may need up to 3,000 new miners.^{21,22,23} The problem exists in other states also.²⁴

With passage of the energy bill last quarter, there has been a lot of activity concerning **ethanol**. A \$60 million **ethanol plant** will be constructed in Grant County to produce E85, a fuel that is 85 percent ethanol, from corn. Construction is expected to begin late this year and the plant should be in production by early 2007. Rushville is the site selected for an \$82 million ethanol plant which will also utilize locally grown corn. It is expected to produce 60 million gallons per year.

Liter's Quarry, Inc.'s three Indiana mines, **Atkins and Cooper Lane**, both producing crushed stone in Clark County, and **Tom Miller** underground crushed stone mine in Scott County, were sold to **Hanson Aggregates Mideast**. Tom Miller may not be operated under the new ownership.²⁵

Rogers Group, Inc., Block and Wall in Martinsville is forming a joint venture with **Irvin's Interstate Brick & Block Company, Inc.**, in Indianapolis to improve product lines and distribution in the Brownsburg, Indianapolis, Lafayette, and Martinsville areas. The joint venture will be called Irvin-Rogers Brick & Block, LLC.²⁶

Although the company has admitted to participating in price fixing, **Irving Materials, Inc., (IMI)** will be able to work on contracts for the **Indiana Department of Transportation (INDOT)** and possibly some for the federal government by subcontracting work and supplying materials for projects. Other state agencies have not banned the company. IMI could be sued by the state for return of money it believes it was overcharged over a period of 4 years when the price fixing occurred.^{27,28} An article providing more details about the price fixing and IMI personnel, and also their positive community involvement, appeared in the Indianapolis Star newspaper.²⁹

The Indiana aggregates industry stepped forward to help with recovery efforts following **Hurricane Katrina**. The National Stone Sand and Gravel Association (NSSGA) also helped, providing an avenue for communication between the industry and those needing its assistance. Many producers in the south were damaged by the storm and aftermath flooding.³⁰

NSSGA named **Hanson Aggregates Midwest Versailles Quarry** a Showplace Award winner in its About Face program. The award will be presented in March.³¹

Rogers Group, Inc., Sieboldt Quarry in Lawrence County won a Safety Achievement Award for medium-sized operations in NSSGA's Sterling Safety Awards program.^{32,33} The company also had two winners in NSSGA's Community Relations award program: **Bloomington Crushed Stone** won an Excellence Award and **Morgan County Sand and Gravel** won an Achievement Award.³⁴

The **Indiana Mineral Aggregates Association** awarded gold awards in its Excellence in Mining Awards to 14 mines operated by Hanson Aggregates Mideast (2), Irving Materials, Inc. (1), Material Service Corporation (3), Mulzer Crushed Stone, Inc. (4), Rogers Group, Inc. (3), and U.S. Aggregates, Inc. (1). Silver awards were also earned by ten mines operated by Martin Marietta Aggregates (3), Rogers Group, Inc. (2), Sellersburg Stone Co., Inc (1), and Vulcan Materials Company (4). Bronze awards were earned by two mines operated by Engineering Aggregates Corp. The awards recognize member aggregate producers for their safety programs, environment protection, community relations, and employee relations.³⁵

A new \$55 million **brick plant** will be built in Terre Haute, Indiana, by **Boral Limited**. The plant will produce up to 120 million clay bricks in various sizes and colors per year to help satisfy the company's Midwest markets and should be in operation by the end of 2007.^{36,37}

A short human-interest article about **Clay City Pottery's** history and business appeared in the Indianapolis Star in its Made in Indiana series. The family-owned business has been in existence since 1885.³⁸

The Keystone Building in Harrisburg, Pa., a state office building, was awarded a Tucker Award, a prestigious architectural design award for use of dimension stone, by the Building Stone Institute. The stone was provided by the **Indiana Limestone Company**.³⁹ Another building constructed of stone supplied by Indiana Limestone Company was recently completed on the Northwestern

University campus in Chicago, Ill.⁴⁰ Limestone trim, supplied by **Bybee Stone Co.**, adorns the expansion of the Duke Divinity School at Duke University in Durham, N.C. An article about the construction of the building, completed in 2003, appeared in *Stone World* magazine.⁴¹

An article about how dimension limestone is quarried and about employees at **Independent Limestone Company** appeared in a local newspaper.⁴²

A possible **limestone quarry park** is being considered for Lawrence or Monroe County, but no definite plans have been made. The old **Woolery Stone Mill** in Bloomington is being renovated into a convention center with a pub, restaurant, hotel, and condominiums. Neighboring areas could become a park.⁴³

Environmental issues

There has been an increase in the number of **IGCC** electric-generating plants under consideration, with construction of at least five plants being considered in the Indiana, Illinois, Kentucky, and Ohio area.⁴⁴ Some financiers are cautious about backing IGCC projects because of uncertainties of cost in construction and operation.⁴⁵ **Cinergy** is studying the possibility of building one at **Edwardsport**. The company says that tax incentives in the Energy Policy Act could be used to help build it. The company also states that it is being proactive, believing that carbon dioxide (CO₂) emissions will eventually be regulated.⁴⁶ The company plans to invest \$1 billion in environmental compliance in the state of Indiana. The plan has been filed with the Indiana Utility

Regulatory Commission and the company is awaiting approval, which is hoped for by mid-2006.^{47,48} Indiana coal prices may increase as more power companies install **scrubbers** to meet requirements of the next phase of the Clean Air Act Amendments according to Cinergy's Chairman and CEO James Rogers.⁴⁹

Tondu Corp.'s plan to build an **IGCC** plant in St. Joseph County fell through because of strong local opposition and the company's inability to acquire the necessary rezoning. Other sites are being considered in Indiana, Ohio, and West Virginia.⁵⁰

Peabody Energy purchased a 30 percent interest in a company that produces modular coal-gasifiers called **Econo-Power International**. The system works well in co-generators and is expected to also work well in industrial applications and for small- to medium-sized plants.^{51,52}

Annual **sulfur dioxide (SO₂)** levels, released by electric power plants, are estimated to have decreased overall by 34 percent since 1990, and by 40 percent since 1980. Some areas have experienced decreases of 50 percent in **acid rain** deposition, with an average being about 30 percent, according to a report from the **U.S. Environmental Protection Agency (EPA)**.⁵³

It is estimated that 5 percent of the man-made CO₂ released is produced by the **cement** industry. The **Cement Sustainability Initiative**, composed of cement companies interested in promoting environmental responsibility amongst their members and stated to be the largest such organization

formed by any industry, has established six task forces to study “climate protection and CO₂ management, responsible use of fuels and materials, employee health and safety, emissions monitoring and reporting, local impacts on land and communities, and reporting and communications.” A progress report was released this quarter.⁵⁴

The EPA issued a six-count notice of violation to **Lehigh Cement company** for air pollutant emissions during 2005. The plant was given 30 days to respond to the charges. The company had settled a claim with the EPA last quarter pertaining to air emissions in 2003.⁵⁵

The DOE announced that an alliance of companies called **FutureGen Industrial Alliance, Inc.**, will conduct phase one of the FutureGen project. Phase one will study siting, conceptual design, National Environmental Policy Act compliance, and determining what else must be accomplished. The FutureGen project will construct an electric power plant that will convert coal into hydrogen-rich gas instead of directly burning it. The **hydrogen** will be used to operate the plant, either directly or after storage in a fuel cell, or could be sent to a refinery and used to upgrade petroleum. **Nitrous oxides (NO_x) and SO₂ emissions** will be trapped and converted to such useful byproducts as fertilizers. Approximately 90 percent of **CO₂ emissions** will be sequestered underground in the beginning, but that could increase. The hydrogen byproduct could be used to power hydrogen-fueled vehicles.⁵⁶ The governors of the states of Indiana and Illinois signed a joint agreement to work to bring the FutureGen project to the Illinois Coal Basin. The agreement is to attempt to site the project in Illinois, and if this is accomplished, to assure that Indiana is able

to participate in carbon sequestration research.^{57,58}

In December, two overlapping groups met in Montreal to discuss what to do about greenhouse gas emissions following the expiration of the **Kyoto Protocol** in 2012. Representatives of countries that signed the Kyoto pact composed one group and countries that signed the **1992 U.N. Framework Convention on Climate Change**, a pact that does not have binding emissions limits, make up the other. At the conference it was agreed to have formal talks between nations about setting new mandatory standards after 2012, but the U.S. declined to participate in those talks.^{59,60,61}

The EIA released a report that **greenhouse gas emissions** increased by 2 percent during 2004.⁶² An examination of deep Antarctic ice indicates that CO₂ is at its highest level in 650,000 years, averaging about 27 percent higher than at any time during that period.⁶³

As expected, the EPA announced that it is tightening standards for **fine particulate matter**. The proposed rule would reduce the current acceptable limit, roughly halving it from 65 micrograms per cubic meter to 35 micrograms per cubic meter, but leaving the average annual limit unchanged at 15 micrograms per cubic meter. Many counties in Indiana exceed the current standard, including all of Clark, Dubois, Floyd, Hamilton, Hendricks, Johnson, Lake, Marion, Morgan, Porter, Vanderburgh, and Warrick Counties, and parts of Dearborn, Gibson, Jefferson, Pike, and Spencer Counties. About 191 counties nationwide are expected to fall short of meeting the

standards, up from the current 116 counties.⁶⁴ However, the comment period has been extended until January 27, 2006, with public hearings concluding January 13, 2006.⁶⁵

Construction industry developments

Engineers, bridge designers, concerned citizens, and environmentalists were among those who took a riverboat tour along the Ohio River to examine the area where **two bridges** will be built connecting Indiana and Kentucky in the Jeffersonville/Louisville area.⁶⁶ Also, a meeting was held in Louisville where the public was allowed to view plans for correcting the “**spaghetti junction**” of highways in Louisville, a project related to the bridge construction.⁶⁷ An alternate plan was offered that would remove this “spaghetti junction” from Louisville entirely by routing I-64 through Utica, Indiana, using an eastern bridge already planned over the Ohio River, and not building the new bridge downtown that is currently planned. Details of that plan can be seen at <<http://www.8664.org>>. Public exhibits were also held to show possible designs for the two bridges and to collect public input.^{68,69}

Work on the \$300 million **Borman Expressway (I-80/94)** improvement project in Lake County was completed for this year. Work will continue on the Illinois portion of the highway through fall of next year. Work will resume on the Indiana portion in 2007.⁷⁰

A \$45 million luxury four-star hotel connected through a \$118 million parking garage to the new midfield terminal may be built at the **Indianapolis airport**.⁷¹

Clarion Health Partners and Arnett Physician Group plan to build a new **\$100 million hospital** in Lafayette. Construction is slated to begin in 2006.⁷²

A new \$20 million **Wal-Mart Supercenter** will be built in the Indianapolis Lafayette Square area. The area has been economically depressed and was named a Community Redevelopment and Enhancement District in 2004, allowing state tax credits to be offered for business development there.⁷³

Plans for a 269-acre community south of Greenfield called **Simpler Times Village**, designed to resemble an old-time village with 300 homes and shops within walking distance of each other, fell through for lack of financial backing. However, the land was sold to other developers who plan to build 600 units on the property, while maintaining some green space.⁷⁴

INDOT was accused by the state inspector general of spending \$68 million more in 2004 than was needed. The overspending was said to have occurred primarily because of “change orders,” spending that was not planned for when contracts were awarded. Two employees were fired.⁷⁵ An Indianapolis television station, WISH, ran a series on INDOT problems for which they won a George Bliss Award for excellence in investigative journalism.⁷⁶

Legislation and regulatory issues

President Bush signed the **federal highway bill** into law on November 30.⁷⁷ The appropriations

bill passed the House and Senate and went to conference committee to reconcile differences. The House version funds highways at \$36 billion and the Senate funds highways at \$40.2 billion.⁷⁸

Federal legislation passed the House of Representatives that encourages the **construction of refineries** and redefines the word refinery to include **coal-to-liquefaction** facilities.⁷⁹

Public meetings were held to discuss **I-69** route and interchange options in Morgan, Monroe, and Greene Counties.^{80,81} The Governor's plan to privatize the **I-69 toll road** came under attack from some sources. An article appeared in the Indianapolis Star telling how similar efforts have met with mixed results in other states. One major problem has been highway maintenance issues. In some cases, toll road use has not met expectations, causing financial problems.^{82,83} Some concerns in the **Bloomington area** include paying a toll for a highway that citizens currently use for free. Concern was also expressed that the public may use other local roads to avoid paying tolls, which will add to congestion on those roads and higher maintenance costs. A town meeting was held in Bloomington about the privatization proposal, attended by **Governor Daniels**.^{84,85} Opponents of I-69 held a rally in **Indianapolis**.⁸⁶ The privatization proposal needs approval of the Indiana General Assembly.⁸⁷

About \$257 million in **coal research funds** would be set aside for for the **FutureGen** project through the Energy and Water Development Appropriations Bill for Fiscal Year 2006.⁸⁸

The **U.S. Supreme Court** has agreed to review **wetlands** regulatory issues in an attempt to clear up long-standing ambiguity in the law.⁸⁹ Included are whether or not the **U.S. Army Corps of Engineers** can regulate isolated wetlands that are not connected to navigable waters or are only marginally connected.⁹⁰

The U.S. Chamber of Commerce expects the **Highway Trust Fund** to run out of money by 2009 unless steps are taken to increase revenue.^{91,92}

U.S. Department of Labor, Mine Safety and Health Administration (MSHA) signed an alliance agreement with the Gypsum Association to promote **safety practices**.⁹³

Concern was also expressed over **INDOT's 10-year plan** for highway construction, stating that the most expensive projects have been shifted to the latter part of that period and funds may not be available to pay for them. INDOT responded that those projects need many years to plan and prepare and that state officials are hoping for income from the privatization of roads to help pay for them.^{94,95}

Amendments were made to **Morgan County's mining ordinance** which, while still protecting the public, eases some of the burden placed on mining companies by the original law.⁹⁶

Monroe County Commissioners altered the county zoning ordinance to make **rock crushers** a

conditional use rather than an accessory use for approved quarries. A public hearing and zoning approval will be needed to add a rock crusher to a mining operation.⁹⁷ Changes to how the Commission makes decisions regarding **subdivision development** were made.⁹⁸ The Commission also discussed a 5-year community plan for the **Stinesville area**. Most development will be kept downtown owing to extensive limestone quarries in the area and limestone deposits that could be quarried in the future.⁹⁹

Martin Marietta Aggregates agreed to pay a \$12,500 fine to MSHA in the death of a maintenance worker at the North Indianapolis quarry in 2004.¹⁰⁰ The mining profession ranked second in total number of **reported fatalities** nationwide during 2004, with 56 fatalities or a fatality rate of 28.3 per 100,000.¹⁰¹ There were two deaths in the Indiana metal/nonmetal sector and one in the Indiana coal sector during 2004 (<<http://www.msha.gov>>).

The National Institute of Occupational Safety and Health updated its Web site by revising mining safety and health information at <<http://www.cdc.gov/niosh/mining>>.¹⁰²

Metals

Imports of steel are rising, increasing by 18 percent during October, which was double the imports of the previous month. Concerns remain about **overproduction of steel in China** that may negatively impact steel production in the United States in 2006 through the dumping of lower-priced steel in this country. Some effects from this are currently being experienced.¹⁰³

After months of negotiation, and as a result of name recognition, lower start-up costs, and extensive tax breaks, **Mittal Steel USA** chose Chicago, Ill., over a number of potential northwest Indiana sites for their company headquarters.^{104,105} A new collective bargaining agreement was signed at the **Ispat Inland** plant.¹⁰⁶ As reported in an earlier report, Mittal Steel is planning to expand its **East Chicago research and development center** by 40 percent, making it the largest one operated by Mittal Steel. It will also be one of the nation's largest. The research center works to improve the quality of steel produced by the company and employs specialists from around the world. The company is awaiting final approval from its board of directors before proceeding with the project. Once completed the Bethlehem, Pa., research center will close.¹⁰⁷

U.S. Steel Corp. is rebuilding its major **Gary Works** blast furnace, reducing the amount of steel produced in the third quarter. Lower steel production is expected to continue until the rebuild is completed.¹⁰⁸ Work on the furnace was hampered by many problems, but is expected to be completed by the end of January and the repaired furnace should last for at least 20 years.¹⁰⁹ The **coke battery** at U.S. Steel Co., Inc., Gary Works closed in October because of a company decision that it was no longer needed. Less than 25 percent of the coke used at Gary Works came from the plant and coke will be brought from other U.S. Steel Co. plants.¹¹⁰

Steel Dynamics, Inc., based in Fort Wayne, will merge with **Roanoke Electric Steel**, based in Roanoke, Virginia.^{111,112} The company is adding an \$18-million expansion to its **Bar Products** mill in **Pittsboro** to add needed processes and additional services for their customers. It is

expected to be completed by March of 2006.^{113,114} The steel company received approval from the Indiana Department of Environmental Management to build a \$200 million **rolling mill** at its **Columbia City plant**. However, no final decision has been made as to whether or not to build it; the company is still studying the economics of the project.¹¹⁵

A company that will recycle waste such as paints, solvents, and household hazardous wastes into **hydrogen** will build a plant in DeKalb County near Steel Dynamics, Inc., a company that uses hydrogen in its process. **ForeverGreen Enterprises** says that its process is environmentally safe and that in addition to hydrogen, carbon will also be produced and recycled, and no emissions will be released back into the environment. Eventually the company plans to also produce **hydrogen for fuel cells**.^{116,117}

A **steel strapping company** will be built near **Nucor Corp.'s Crawfordsville plant**. The company cuts straps from Nucor's steel coils and also provides straps to Nucor. Transportation costs will be reduced by locating near the Nucor plant.¹¹⁸

Toyota Motor Corp. announced that it would nearly double automobile production at its **Lafayette** factory. Steel mills in northern Indiana provide steel for that plant. However, the steel industry will be negatively affected by the closure of several **General Motors (GM)** plants nationwide, although the Indiana GM plant will be spared.¹¹⁹

Voss Clark is expanding its operations with an addition of warehouse space and an upgrade of its **flat-rolled steel picking operation**. The company, which removes iron scale and impurities from steel, slits, inspects, and coats it, is one of 13 steel processing companies located at **Clark Maritime Centre** on the Ohio River at Jeffersonville. Steel shipments in 2005 were second only to grain in the products shipped through the port.¹²⁰

MZG Associates, Inc., parent company of **LB Steel**, will purchase **Trump Iron Works** in Crown Point which had been in bankruptcy proceedings. A steel fabrication plant is expected to be in operation there by April of 2006.¹²¹

Alcoa was recognized by the Climate Group and BusinessWeek Magazine as one of the top **Green Companies in the World** for their efforts to reduce emissions of greenhouse gas. It was also recognized as a top **Company of the Decade** and for **Best Management Practices** for its environmental efforts. The judges were an international group.¹²² In Warrick County, Alcoa operates a plant that is currently undergoing renovations to improve its impact on the environment and to decrease fuel costs.¹²³

References cited

1. U.S. Department of Energy, Energy Information Administration, 2005, Weekly U.S. coal production overview: December 31, 2005.
2. Anonymous, 2005, New energy market outlook raises projected world oil price path and adds more coal and nuclear power: U.S. Department of Energy, Energy Information Administration news release, December 12, 2005, <<http://www.eia.doe.gov/neic/press/press265.html>>, date accessed December 12, 2005.
3. Tepordei, V., 2005, Crushed stone and sand and gravel in the third quarter 2005: U.S. Geological Survey Mineral Industry Surveys, December 2005, 8 p., 6 tables, 3 figs., <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/csmis3q05.pdf>, date accessed January 30, 2005.
4. Cement Newslines, 2005, PCA economist firm on 5% consumption boost for 2005: Cement Americas e-newsletter, November 25, 2005.
5. Anonymous, 2005, Gypsum demand to continue its increase through 2009: Mining Engineering, November 2005, p. 20.
6. Buchbaum, L., 2005, Hoosier happenings: Coal Age, October 2005, p. 35-36.
7. Anonymous, 2005, Partnership considers plan to reopen Indiana's Kindill mines: Platts Coal Outlook, November 7, 2005.
8. Anonymous, 2005, Modifications: Indiana Department of Environmental Management Public Notice No. 2005-12D-GP, December 15, 2005, <http://www.in.gov/idem/permits/water/wastewater/public_notice/12-15-05b.html>, date accessed February 15, 2006.
9. Anonymous, 2005, Solar Sources to open Indiana mine: Platts Coal Outlook, November 28, 2005.
10. Anonymous, 2005, Little Sandy Coal to return to mining in Indiana after a several-year hiatus: Platts Coal Outlook, November 28, 2005.
11. Anonymous, 2005, Sunrise Coal opens underground mine, plans to develop deep mine: Platts Coal Outlook, November 28, 2005.
12. Anonymous, 2005, Family-owned Mineral Resources may open new Indiana deep mine: Platts Coal Outlook, October 24, 2005.

-
13. Anonymous, 2005, Remark prompts JRCC's Triad purchase: Platts Coal Outlook, December 12, 2005.
 14. Adams, B., 2005, Indiana Rail Road buys Canadian Pacific line: Business First of Louisville, November 11, 2005.
 15. Associated Press, 2005, Indiana Rail Road buys new line: Bloomington Herald-Times, November 10, 2005.
 16. Anonymous, 2005, Rail spur ribbon cutting held in Bloomington: Rogers Group, Inc. Conveyor Express newsletter, December 2005, p. 17, <<http://www.rogersgroupinc.com/aboutrgi/conveyor/ConveyorDec05.pdf>>, date accessed September 18, 2006.
 17. Anonymous, 2005, FERC approves Duke Energy-Cinergy merger: Duke Energy news release, December 15, 2005, <<http://www.duke-energy.com/news/releases/2005/Dec/2005121501.asp>>, date accessed September 18, 2006.
 18. Kusmer, K., 2005, PSI reaches deal with state, industrial users: Louisville Courier-Journal, December 16, 2005, p. B2.
 19. Anonymous, 2005, Research center aims to expand liquefaction process to diversify fuels: Platts Coal Outlook, October 31, 2005.
 20. Anonymous, 2005, 2005 Awards: Coal Age, October 2005, p. 12.
 21. Associated Press, 2005, Demand for coal spurs miner search: Bloomington Herald-Times, October 6, 2005, p. A5.
 22. Alaria, J., 2005, Safer mining in Indiana: Indiana Department of Labor newsletter, November 1, 2005, p. 3, <http://www.in.gov/labor/pdfs/Newsletter_V1_1.pdf>, date accessed March 22, 2006.
 23. Anonymous, 2005, Miner training program: IMAA, The Source Report, October 2005, p. 1, <<http://www.indmaa.org/upload/newsletters/TheSourceReport1005.pdf>>, date accessed March 22, 2006.
 24. Schelzig, E, 2005, Companies compete to hire, retain coal miners: Louisville Courier-Journal, November 26, 2005.
 25. Robert Jones, IMAA, personal communication, January 2006.

-
26. Chaudoin, L., 2005, Joint venture announced by Irvin's Interstate Brick & Block and Rogers Block & Wall: Rogers Group, Inc., news release, October 21, 2005, <<http://www.rogersgroupinc.com/aboutrgi/rginews/2005pressreleases/Irvin%20Rogers%20Brick%20%20Block%20LLC.pdf>>, date accessed September 18, 2006.
 27. Wall, J. K., 2005, Ban isn't exactly set in concrete: Indianapolis Star, October 19, 2005, p. A1.
 28. Heikens, N., 2005, No work for IMI, lawyer urges: Indianapolis Star, December 23, 2005, p. C1.
 29. Wall, J. K., 2005, Price fixing a rocky fall for concrete 'royalty': Indianapolis Star, October 16, 2005, p. D1.
 30. Sympton, T., 2005, Industry responds to Hurricane Katrina, Pit & Quarry, October 2005, p. 10.
 31. Edwards, G., 2005, About Face award winners announced: National Stone, Sand and Gravel Association e-Digest, December 6, 2005, <http://www.nssga.org/newsletter/digest/120605_ed.cfm#9>, date accessed January 9, 2006.
 32. Anonymous, 2005, Industry news: Rock Products, October 2005, p. 25, <http://rockproducts.com/mag/rock_boraston_environmental_pro/index.html>, date accessed September 18, 2006.
 33. Anonymous, 2005, NSSGA announces safety award winners: Mining Engineering, November 2005, p. 20.
 34. P&Quick News, 2005, Industry news: Pit & Quarry e-newsletter, December 27, 2005.
 35. Robert Jones, IMAA, personal communication, September 2006.
 36. Anonymous, 2005, Terre Haute lands clay brick plant: Inside Indiana Business, December 12, 2005, <<http://www.insideindianabusiness.com/newsitem.asp?ID=16119>>, date accessed December 13, 2005.
 37. Anonymous, 2005, New brick plant to be built in Terre Haute: WSBT, December 14, 2005, <<http://www.wsbt.com/news/indiana/2071196.html#>>, date accessed December 14, 2005.
 38. Savka, David, 2005, Clay City Pottery spins a niche: Indianapolis Star, November 16, 2005, p. C2.

-
39. Anonymous, 2005, Providing a workplace of the future: Stone World, November 2005, p. 138-145.
 40. Stinnard, M., 2005, Indiana limestone upholds campus tradition: Stone World, November 2005, p. 128-132.
 41. Stinnard, M., 2005, “Duke Stone” helps create gothic style: Stone World, November 2005, p. 68-78.
 42. Lough, A., 2005, Buried in stone: Indiana University Indiana Daily Student, October 5, 2005, p. 9, <<http://www.idsnews.com/news/story.php?adid=search&id=31552>>, date accessed October 2, 2006.
 43. Anonymous, 2005, Plan to turn old quarries into a limestone park considered: Louisville Courier-Journal, November 10, 2005, p. B1.
 44. Wolfe, B., 2005, Energy companies push coal-gasification plants: Louisville Courier-Journal, October 23, 2005.
 45. Anonymous, 2005, IGCC plants have not won financiers’ total support: Platts Coal Outlook, November 7, 2005.
 46. Anonymous, 2005, Cinergy reduces CO₂ emissions despite lack of regulations and laws: Platts Coal Outlook, November 28, 2005.
 47. Anonymous, 2005, PSI Energy to invest \$1 billion in environmental compliance plan: Inside Indiana business, December 15, 2005, <www.insideindianabusiness.com/newsitem.asp?id=16155&print=1>, date accessed December 15, 2005.
 48. Anonymous, 2005, PSI to spend \$1.1 billion on scrubbers, baghouse to allow coal supply flexibility: Platts Coal Outlook, December 19, 2005.
 49. Anonymous, 2005, Midwest scrubbers may strengthen Illinois Basin prices: Platts Coal Outlook, October 31, 2005.
 50. Anonymous, 2005, Tondu eyes six sites for IGCC plant: Platts Coal Outlook, December 19, 2005.
 51. Anonymous, 2005, Peabody Energy buys piece of coal gasification company: Mining Engineering, November 2005, p. 18.

-
52. Anonymous, 2005, Peabody Energy acquires interest in industrial coal gasification technology company: Coal Age, October 2005, p. 7.
53. Anonymous, 2005, Acid rain emissions have decreased, EPA reports: Mining Engineering, December 2005, p. 5.
54. Klee, H., 2005, The task at hand: Cement Americas, November/December 2005, p. 13-14, 17, <http://cementamericas.com/mag/cement_task_hand/>, date accessed September 18, 2006.
55. Lane, L., 2005, EPA puts cement plant on notice: Bloomington Herald-Times, December 14, 2005, p. A1.
56. Anonymous, 2005, FutureGen Project takes shape: Clean Coal Today, Winter 2005, p. 4, <http://www.netl.doe.gov/technologies/coalpower/cctc/newsletter/documents/cctoday_winter_2005.pdf>, date accessed September 18, 2006.
57. Jankowski, J., 2005, Governor Daniels announces joint bid with Illinois for \$1 billion FutureGen Clean Coal Project: Office of Governor Mitch Daniels news release, December 14, 2005, <<http://www.in.gov/serv/presscal?PF=gov2&Clist=196&Elist=85007>>, date accessed June 16, 2006.
58. Anonymous, 2005, Illinois, Indiana join forces in bid for \$1 billion FutureGen clean-coal project: Platts Coal Outlook, December 19, 2005.
59. Eilperin, J., 2005, Global warming beyond Kyoto: Indianapolis Star, November 27, 2005, p. A3.
60. Associated Press, 2005, World pressures U.S. to set limits on 'greenhouse gases': Indianapolis star, December 8, 2005, p. A14.
61. Hanley, C., 2005, Greenhouse gas talks to exclude U.S.: Bloomington Herald-Times, December 11, 2005, p. D1.
62. Anonymous, 2005, U.S. greenhouse gas emissions grow but intensity falls in 2004: U.S. Department of Energy, Energy Information Administration, news release, December 16, 2005, <<http://www.eia.doe.gov/neic/press/press266.html>>, date accessed December 19, 2005.
63. Neergaard, L., 2005, Ice samples boost warming data: Louisville Courier-Journal, November 25, 2005, p. A3.
64. Bruggers, J., 2005, EPA to seek stricter fine-particle limit: Louisville Courier-Journal, December 21, 2005, p. B4.

-
65. Anonymous, 2005, Implementation of new DPM rule delayed until May, Aggregates Manager e-news, December 15, 2005, <<http://www.aggman.com/newsletters/051215.htm>>, date accessed September 18, 2006.
66. Poynter, C., 2005, River cruise lets advisory teams visualize locations of new bridges: Louisville Courier-Journal, October 7, 2005, p. B1.
67. Poynter, C., 2005, Residents get a glimpse of plans for bridges at Louisville session: Louisville Courier-Journal, October 28, p. B1.
68. Green, M., 2005, Utica forum shows design options for eastern bridge: Louisville Courier-Journal, December 14, 2005, p. B1.
69. Green, M., 2005, Ideas unveiled for new bridge to Louisville: Louisville Courier-Journal, November 30, 2005, p. B5.
70. Zorn, T., 2005, Borman Expressway construction takes a break in northwest Indiana: Chicago Post-Tribune, November 5, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=22477&SectionID=31&SubSectionID=198&S=1>>, date accessed September 18, 2006.
71. Kim, T., 2005, Plans for airport hotel in the air: Indianapolis Star, November 28, 2005, p. B1.
72. Anonymous, 2005, Clarian, Arnett make plans to build hospital in Lafayette: Inside Indiana business, December 22, 2005, <www.insideindianabusiness.com/newsitem.asp?id=16249&print=1>, date accessed December 22, 2005.
73. Anonymous, 2005, Economic boost for Indianapolis westside: Inside Indiana business, December 19, 2005, <www.insideindianabusiness.com/newsitem.asp?id=16210&print=1>, date accessed December 19, 2005.
74. North, E., 2005, Simpler Times concept dropped for 269-acre Greenfield residential plan: Greenfield Daily Reporter, December 1, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23124&SectionID=31&SubSectionID=183&S=1>>, date accessed September 18, 2006.
75. Peacock, E., 2005, INDOT accused of unnecessarily spending \$68M: Indiana University Indiana Daily Student, November 21, 2005, p. 1, <<http://www.idsnews.com/news/story.php?adid=search&id=32679>>, date accessed September 28, 2006.

-
76. Anonymous, 2005, WISH-TV's I-Team 8 receives Bliss Award: WISH news release, October 25, 2005, <<http://www.wishtv.com/Global/story.asp?s=4051275>>, date accessed October 2, 2006.
77. Anonymous, 2005, President Bush signs FY 2006 transportation appropriations bill into law: Aggregates Manager e-News, December 15, 2005, <<http://www.aggman.com/newsletters/051215.htm>>, date accessed September 18, 2006.
78. Anonymous, 2005, Senate passes FY 2006 transportation appropriates bill: Pit & Quarry, December 2005, p. 60.
79. Anonymous, 2005, Measure expands refinery definition to include coal-to-liquefaction facilities: Mining Engineering, November 2005, p. 6.
80. Creps, M., 2005, Residents critical of I-69 plans: Bloomington Herald-Times, October 12, 2005, p. A1.
81. Van der Dussen, K., 2005, INDOT officials to host forum: Bloomington Herald-Times, November 16, 2005, p. A3.
82. Kim, T., 2005, Plan to privatize roads may have bumps: Indianapolis Star, October 3, 2005, p. A1.
83. Associated Press, 2005, Plan to privatize I-69, add tolls criticized: Louisville Courier-Journal, October 4, 2005, p. B3.
84. Maurer, R., 2005, Local reaction mixed to road toll funded I-69 project: Indiana University Indiana Daily Student, October 7, 2005, p. 5, <<http://www.idsnews.com/news/story.php?adid=search&id=31613>>, date accessed September 18, 2006.
85. Woodson, B., 2005, Common Council says I-69 will make city 'generic': Indiana University Indiana Daily Student, November 7, 2005, p. 4, <<http://www.idsnews.com/news/story.php?adid=search&id=32337>>, date accessed September 18, 2006.
86. Van der Dussen, K., 2005, I-69 foes to rally at Capitol today: Bloomington Herald-Times, October 22, 2005, p. D2.
87. Van der Dussen, K., 2005, 2006 may be do-or-die year for I-69 project: Bloomington Herald-Times, December 28, 2005, p. A1.

-
88. Anonymous, 2005, Coal, energy programs could receive \$257 million under House bill: Mining Engineering, December 2005, p. 5.
89. Anonymous, 2005, Hopes raised for wetlands clarity: Rock Products, December 2005, p. 10, <http://rockproducts.com/mag/rock_chafee_flexes_moderate/>, date accessed September 18, 2006.
90. Anonymous, 2005, ARTBA & industry allies file brief in Supreme Court wetlands case: Aggregates Manager e-News, December 15, 2005, <<http://www.aggman.com/newsletters/051215.htm>>, date accessed September 18, 2006.
91. Anonymous, 2005, Chamber says highway account will go bust: Rock Products, December 2005, p. 16, <http://rockproducts.com/mag/rock_chamber_says_highway/>, date accessed September 18, 2006.
92. Hernan, P., 2005, U.S. will need to find new ways to pay for road construction: Pit & Quarry, December 2005, p. 102.
93. Anonymous, 2005, MSHA, Gypsum Association officials sign alliance agreement: Gypsum Association news release, November 1, 2005, <<http://www.gypsum.org/11.01.05.htm>>, date accessed September 18, 2006.
94. Kim, T., 2005, Dems see a fork in Daniels' road plan: Indianapolis Star, October 15, 2005, p. B1.
95. Associated Press, 2005, Critics say Daniels' 10-year plan delays major road projects: Bloomington Hoosier Times, October 16, 2005, p. A7.
96. Jones, R., 2005, Morgan County ordinance update: The Source Report, IMAA newsletter, October 2005, p. 4, <<http://www.indmaa.org/upload/newsletters/TheSourceReport1005.pdf>>, date accessed September 28, 2006.
97. Anonymous, 2005, Rock crushers will need approval: Bloomington Herald-Times, December 13, 2005, p. A3.
98. Van der Dussen, 2005, Commissioners clarify plan commission's subdivision authority: Bloomington Herald-Times, December 13, 2005, p. A3.
99. Van der Dussen, K., 2005, Stinesville development plan up for hearing and possible vote: Bloomington Herald-Times, October 18, 2005, p. A6.
100. Smith, E., and Aclander, M., 2005, Limestone operation pays to settle case arising from fatal fall: Pit & Quarry, November 2005, p. 44.

-
101. Anonymous, 2005, Workplace fatality rates up slightly: Pit & Quarry, October 2005, p. 36.
102. Anonymous, 2005, NIOSH redesigns mine safety site: Mining Engineering, November 2005, p. 4.
103. Holecek, A., 2005, China fuels steel import fears: Times of northwest Indiana, December 18, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23555&SectionID=31&SubSectionID=217&S=1>>, date accessed September 18, 2006.
104. Shidler, L., 2005, Mittal chooses Chicago for U.S. headquarters: Chicago Post-Tribune, October 4, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=21717&SectionID=31&SubSectionID=217&S=1>>, date accessed September 18, 2006.
105. Shidler, L., 2005, Chicago snags Mittal Steel headquarters with tax breaks: Chicago Post-Tribune, October 8, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=21833&SectionID=31&SubSectionID=135&S=1>>, date accessed September 18, 2006.
106. Anonymous, 2005, Mittal Steel Company N.V. reports third quarter and nine months results 2005: Mittal Steel Company N. V. news release, November 9, 2005, <<http://www.mittalsteel.com/News+and+Press/News+Releases/>>, date accessed September 18, 2006.
107. Shidler, L., 2005, Mittal Steel planning \$10 million expansion in East Chicago: Chicago Post-Tribune, December 16, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23500&SectionID=31&SubSectionID=198&S=1>>, date accessed September 18, 2006.
108. Anonymous, 2005, United States Steel Corporation reports 2005 third quarter results: U.S. Steel Corp. press release, October 25, 2005, <http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=929150&TICK=X&STORY=/www/story/10-25-2005/0004194103&EDATE=Oct+25,+2005>, date accessed September 18, 2006.
109. Holecek, A., 2005, U.S. Steel extends completion date for rebuilding Gary blast furnace: Times of Northwest Indiana, December 29, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23747&SectionID=31&SubSectionID=198&S=1>>, date accessed September 18, 2006.
110. Sidler, L., 2005, U.S. Steel shuts No. 3 coke battery at Gary Works: Chicago Post-Tribune, October 4, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=21718&SectionID=31&SubSectionID=198&S=1>>, date accessed September 18, 2006.

SubSectionID=198&S=1>, date accessed September 18, 2006.

111. Anonymous, 2005, Steel Dynamics and Roanoke Electric Steel announce merger agreement: Steel Dynamics, Inc. press release, October 18, 2005, <http://steeldynamics.com/news_releases/corporate/101805merger.pdf>, date accessed September 18, 2006.

112. Parmar, A., 2005, Fort Wayne-based Steel Dynamics to merge with Virginia steel company: Fort Wayne Journal Gazette, October 18, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=22047&SectionID=31&SubSectionID=155&S=1>>, date accessed September 18, 2006.

113. Anonymous, 2005, Steel Dynamics plans bar processing facility: Steel Dynamics, Inc., press release, November 30, 2005, <http://steeldynamics.com/news_releases/corporate/BarProductsExpansion.pdf>, date accessed September 18, 2006.

114. Evanoff, T., 2005, Mini-mill growth will add 55 jobs: Indianapolis Star, December 1, 2005, p. C1.

115. Anonymous, 2005, Steel Dynamics gets IDEM approval to expand in Whitley County: Columbia City Post & Mail, December 1, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23132&SectionID=31&SubSectionID=245&S=1>>, date accessed September 18, 2006.

116. Kurtz, D., 2005, Hydrogen-maker coming to DeKalb County with 150 jobs: Auburn Evening Star, November 23, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=22906&SectionID=31&SubSectionID=259&S=1>>, date accessed September 18, 2006.

117. Anonymous, 2005, ForeverGreen chooses Fort Wayne-based start-up helpers: Auburn Evening Star, December 2, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23143&SectionID=31&SubSectionID=259&S=1>>, date accessed September 18, 2006.

118. Flora, M. J., 2005, New company scheduled to move in beside Nucor Steel in Crawfordsville: Crawfordsville Journal Review, November 15, 2005, accessed through Indiana Economic Digest, <<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=22681&SectionID=31&SubSectionID=207&S=1>>, date accessed September 18, 2006.

119. Benman, K., 2005, Hoosier Thanksgiving includes Toyota, GM: Times of Northwest Indiana, November 24, 2005, accessed through Indiana Economic Digest,

<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=22955&SectionID=31&SubSectionID=232&S=1>>, date accessed September 18, 2006.

120. Adams, B., 2005, Voss Clark to spend \$2 million on facility expansion: Business First of Louisville, December 23, 2005.

121. Dolan, P., 2005, Illinois firm buying former iron works in Crown Point, bringing about 15 jobs back: Chicago Post-Tribune, December 29, 2005, accessed through Indiana Economic Digest,

<<http://www.indianaeconomicdigest.net/main.asp?Search=1&ArticleID=23743&SectionID=31&SubSectionID=198&S=1>>, date accessed September 18, 2006.

122. Alcoa, 2005, Alcoa recognized as a top green company by BusinessWeek Magazine and the Climate Group; Alcoa cited as a leader in climate change over past decade and for best management practices: Alcoa news release, December 5, 2005,

<http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20051205005568en&newsYear=2005>, date accessed September 18, 2006.

123. Alcoa, 2005, Alcoa announces income from continuing operations of 290 million or \$0.33 per share in Third Quarter 2005: Alcoa news release, October 10, 2005,

<http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20051010005760en&newsYear=2005>, date accessed September 18, 2006.