



SITE CONSTRUCTION & PREPARATION

- **DESCRIPTION:** Prepare site for the drilling process
- **BUSINESSES INVOLVED:** Excavation equipment manufacturers, contractors and dealers; pump manufacturers and dealers; painters and haulers; mulch and fertilizer suppliers; safety equipment manufacturers and suppliers; electrical equipment suppliers and contractors; surveying and engineering companies; aerial mapping services
- **FACT:** 5,000 tons of aggregate per location, using full-time operation of dozer, excavator and roller



PRODUCTION & SITE COMPLETION

- **DESCRIPTION:** Restoration of the site and maintenance of the producing well
- **BUSINESSES INVOLVED:** Solar panel manufacturers; metering device manufacturers; landscaping companies; top soil suppliers; road aggregate suppliers; fencing suppliers
- **FACT:** One Marcellus Shale well can produce enough clean-burning natural gas for 24,000 homes a year



WELL PRODUCTION

- **DESCRIPTION:** Casing and drilling of the well
- **BUSINESSES INVOLVED:** Crane manufacturers and dealers; drill bit manufacturers; steel and associated manufacturers; cement producers; chemical manufacturers; safety equipment manufacturers and suppliers
- **FACT:** 125 tons of locally produced cement per well



PIPING

- **DESCRIPTION:** Construction of flow lines at the site before natural gas enters gathering lines
- **BUSINESSES INVOLVED:** Steel pipe manufacturers; compressor engine manufacturers
- **FACT:** A single MSC company has invested \$75 million in PA for midstream Marcellus development (25% to local companies, 11% to landowners, 8% to national suppliers with outlets in PA, and the remainder to contractors with personnel working in the Commonwealth)



TRANSPORTATION & LOGISTICS

- **DESCRIPTION:** Moving materials to and from the well site
- **BUSINESSES INVOLVED:** Rail, barge and trucking; asphalt producers; road grading and paving companies; sand and water suppliers
- **FACT:** 25 rail cars of sand used for a single well



WATER MANAGEMENT

- **DESCRIPTION:** Water and materials management
- **BUSINESSES INVOLVED:** Steel coil manufacturers; welding equipment manufacturers; pump manufacturers; crane manufacturers and assemblers; chemical manufacturers and suppliers; welding companies; sand suppliers; tank constructors
- **FACT:** \$50,000 per well paid for water to local governments to reinvest

FAST FACTS

- \$5 million is invested in producing each Marcellus Shale well
- At 2,500 produced annually, Pennsylvania can expect to see \$12.5 billion invested in well site operations alone
- Each mile of Marcellus pipeline represents more than a \$1 million investment into PA's economy