

# THE ENERGY TO FUEL PROGRESS

**TALISMAN**  
ENERGY

**Talisman Energy USA**





## WHO WE ARE

**TALISMAN ENERGY USA INC.**, formerly Fortuna Energy Inc., is a natural gas exploration and production company. Founded in 2002, Talisman Energy USA is an indirect wholly owned subsidiary of Calgary, Alberta-based Talisman Energy Inc. – one of North America's largest independent producers of natural gas.

Since 2002, Talisman Energy USA has invested in the Twin Tiers of New York and Pennsylvania. We have grown to become the most successful natural gas producer in New York State and are now exploring opportunities and achieving success in Pennsylvania's Marcellus Shale. This growth and success has come through both exploration and acquisition of assets and local land lease holdings. Talisman Energy USA maintains oil and gas leases in nearly thirty NY and PA counties and pays monthly royalties on producing wells to over 2,300 landowners in the Twin Tiers.

Talisman Energy USA works proactively to align our business interests with the interests of the communities in which we operate. Successful natural gas production is a cooperative effort among many parties. Every employee, contractor, supplier, landowner, regulator, and public official is essential to our success. We are committed to developing long-term, mutually beneficial relationships to create positive lasting impacts on local communities.

## WHAT WE DO

Clean, affordable, and abundant domestic natural gas plays a significant role in meeting U.S. energy requirements. As one of our principle sources of energy, natural gas currently meets nearly a quarter of our country's energy needs.

Talisman Energy USA's operations in the Twin Tiers are now primarily focused on the safe development of a huge untapped reservoir of natural gas known as the Marcellus Shale. This geological formation, which extends beyond the Twin Tiers across Pennsylvania into Ohio and West Virginia, may be the largest natural gas reserve in the country. Marcellus natural gas has existed for literally millions of years; however, due to the low-permeability of shale rock, it was not until recent advances in horizontal drilling and hydraulic fracturing ("fracing") techniques that it became economically viable to recover.



Talisman Energy USA's extensive experience drilling deep horizontal wells in the Trenton-Black River formation of New York's southern tier has provided a competitive edge in developing similar Marcellus Shale drilling plays throughout the Twin Tiers region. We adhere to strict safety and environmental codes, which includes paying careful attention to environmental issues and making consistent efforts to minimize our environmental footprint. Talisman Energy USA believes that the best environmental policy is the one that puts prevention first. Our excellent environmental track record since 2002 provides strong evidence of this commitment.

The nature of our business regularly brings us into contact with many people across our operating regions. We are committed to working with each person in a fair, honest, and open manner.

## HOW WE OPERATE

**Leasing:** Talisman Energy USA views the lease as an opportunity to partner with the landowner and actively seeks to understand a landowner's priorities in order to negotiate an acceptable lease for all.



**Locating Possible Drilling Sites:** Existing knowledge of the subsurface geology accompanied by seismic surveys that transmit sound waves into the earth and record the reflected signals identify gas-bearing structures. Horizontal drilling provides some flexibility in choosing surface sites.

**Obtaining Permits:** Natural gas drilling operations are strictly regulated by the New York State Department of Environmental Conservation (DEC) and the Pennsylvania Department of Environmental Protection (DEP). Daily water withdrawals and overall consumptive use limitations are subject to strict permitting and oversight by the Susquehanna and Delaware River Basin Commissions and the DEP.

**Drilling:** Talisman Energy USA employs both vertical and horizontal drilling techniques to maximize well production while minimizing our environmental impact.

**Completions:** After penetrating the shale, the rock must be hydraulically fractured, or "fraced", to maximize the production of natural gas from Marcellus Shale. A fracture stimulation fluid comprised of fresh water, sand, and additives is injected into the well to enhance fractures in the rock and free more gas. These fractures start at the wellbore and extend as much as several hundred feet into the reservoir rock.



**Testing:** Although used less frequently with our pre-build of pipelines and facilities, controlled flare tests may be conducted in accordance with DEC and DEP flaring regulations. Flaring may be used to estimate the size, characteristics, and potential productivity of the reservoir before the well is connected to a gathering line.

**Building a Gathering System:** Before production, viable wells must be connected to a gathering system that will transport the natural gas to large interstate transmission pipelines for sale to residential and industrial users. Standards for pipelines are regulated at both the state and the federal level.

**Operating a Well:** All well and compression facilities are the responsibility of Talisman Energy USA's Operations team, who follow established procedures to produce marketable gas.

**Restoring a Site:** When a well is no longer economically productive, Talisman Energy USA abandons the well and reclaims the landscape to its original state in accordance with existing regulations.

## OUR PEOPLE

Talisman Energy USA employs a team of experienced natural gas industry professionals from many backgrounds. Our employees are committed to high levels of performance in all areas and are dedicated to ensuring our operations are conducted in a safe, healthy, and environmentally responsible manner. As your neighbors in the Twin Tiers, we share your concerns and hopes for the future of our communities.

In addition, our business draws on the skills and experience of numerous local contractors and suppliers. We provide and insist on appropriate training to ensure that all our personnel and contractors are competent and can perform their work safely and effectively.

## LOCAL ECONOMIC IMPACT

Talisman Energy USA's operations in the Twin Tiers not only generate jobs but also have a significant direct and indirect economic 'ripple effect', which touches many regional industries. Many natural gas industry service companies are locating and investing in the region to support the plans of Talisman Energy USA and other operators. We invest millions of dollars annually buying local services and products to support our activities (leasing, drilling, facilities and pipeline construction, maintenance, etc.). This new business activity helps to grow the local economies where we conduct our business.

The economic impact of Talisman Energy USA's operations benefit landowners, other area residents, school districts, municipal and state governments, and others through lease, royalty, and annual tax payments. Talisman Energy USA's activities in the Twin Tiers will generate economic activity that will create thousands of jobs in the region and have a lasting positive impact on the region.

## CORPORATE RESPONSIBILITY

Corporate responsibility is something we take very seriously at Talisman Energy USA. As an integral part of creating value throughout our operations, we strive to be responsible corporate citizens and good neighbors. Our Good Neighbor Program ensures that our relations with communities and landowners are conducted with courtesy and respect. This is reflected in the mission statement of the Good Neighbor Program:

*We are committed to building positive, long lasting relationships in the community in which we operate through open and honest communication.*

*To accomplish this goal we will:*

- *Inform the public about our business*
- *Keep interested parties apprised of our operations*
- *Provide outreach to those affected by our presence*
- *Participate in community activities*
- *Make contributions to local organizations in order to support the communities in which we operate.*

## FUELING PROGRESS

Talisman Energy USA's continued success is directly linked to the success of the communities in which we operate. Our work together will fuel progress in the Twin Tiers and provide energy for us to live by now and in the future.



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Good Neighbor Hotline: 866-566-4747

[www.talismanusa.com](http://www.talismanusa.com)

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