

An Industrial Landscape: Central New York Transformed by the Gas Industry

Last spring, the NYS legislature (at the request of the Department of Environmental Conservation) amended the law governing the spacing of wells by establishing new Drilling Unit sizes. According to the Amendment, drilling in the Marcellus shale can be done vertically or horizontally. The 640 acre spacing was created to accommodate the Halliburton-originated horizontal-drilling/hydrofracturing technology. However, when drillers cannot buy/lease enough land to establish a 640-acre unit, they may use existing vertical-drilling/hydrofracturing technologies on the 40-acre unit plan.

DOESN'T ONE BIG WELL PER SQUARE MILE (640 ACRES) HAVE A SMALLER IMPACT ON THE ENVIRONMENT THAN A BUNCH OF SMALLER WELLS?

Maybe. However, **the same square mile can also contain *other* gaswells bored into different gas-bearing rock formations.** The following formations are being exploited (so far) in the Chenango–Delaware – Otsego county area :

STONE TYPE formation	WELL TYPE (shales, limestone) WELL DEPTH (sandstones)	MINIMUM UNIT SIZE IN ACRES
SHALES	vertical	40 acres
Marcellus	directional	40
Vernon	horizontal	640
Utica		
LIMESTONE	vertical	40
Onondaga	horizontal	160
LIMESTONE	4-8000'	320
Trenton Fault-bounded	>8000'	640
Trenton other		40
SANDSTONES	<4000'	80
Herkimer	4-6000'	160
Oneida	6-8000'	320
Potsdam	>8000'	640
Oriskany		

Note: The gas-well spacing units for the different gas-bearing formations listed above are not exclusive. Much of central New York is underlain by multiple formations. Therefore a given square mile will contain many different formations, each of them with their own spacing densities.

This example is from the Town of Smyrna, in Chenango County

