
Guest Article - Will Cryptocurrency and Data Mining Add New Complexity to Oil & Gas Zoning

Will Cryptocurrency and Data Mining Add New Complexity to Oil & Gas Zoning?

Brendan A. O'Donnel, Esq., Director
Houston Harbaugh, P.C.
Permission to Re-Publish
All Rights Reserved

Houston Harbaugh is well known for its traditional strength in the fundamental areas of legal practice like business and corporate transactional law, litigation, estates and trusts, health care, employment and labor, ERISA, environmental, oil and gas, and intellectual property litigation and prosecution.

This commentary is offered for information purposes only and is not intended to provide legal advice or forming an attorney-client relationship.



Questions about the zoning of oil and gas development operations have persisted in Pennsylvania for years. Now, cryptocurrency and data mining operations may create new wrinkles in long-running disputes about oil and gas zoning.

The “police power” of a municipality allows it to “manage the growth of a community through its placement of private development into zoning districts within the community.” *In re Charleston Outdoor, LLC*, 280 A.3d 948, 957 (Pa. 2022). “A basic purpose of zoning is to ensure an orderly physical development of the city, borough, township or other community by confining particular uses of property to certain defined areas.” *Omatick v. Cecil Township Zoning Hearing Board*, 286 A.2d 413, 421 (Pa. Commw. Ct. 2022). By their nature, zoning ordinances limit individuals’ rights to use property as they desire by confining particular property uses to certain geographic areas. But, zoning has long been found to be proper use of the government’s “police power” because, under a proper zoning scheme, there is a “reciprocity of advantage” where “all property owners in a designated area are placed under the same restrictions, not only for the benefit of the municipality as a whole but also for the common benefit of one another.” *In re Realen Valley Forge Greenes Associates*, 838 A.2d 718, 729 (Pa. 2003) (quoting *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922)); *United Artists Theater Circuit, Inc. v. City of Philadelphia, Philadelphia Historical Commission*, 595 A.2d 6, 13 (Pa. 1991).

In Pennsylvania, technical details of “how” oil and gas development occurs are controlled by the state, but “where” those developments are located fall within municipalities’ zoning purview. See, *Huntley & Huntley, Inc. v. Borough Council of Borough of Oakmont*, 964 A.2d 855, 866 (Pa. 2009). The Pennsylvania General Assembly passed Act 13 of 2012 wherein it attempted to require all local zoning ordinances to allow for the “reasonable development of oil and gas resources” that included certain requirements that were applicable on a statewide basis. See, 58 Pa.C.S. § 3304. In *Robinson Township, Washington County v. Commonwealth*, 83 A.3d 901, 1000 (Pa. 2013), the Pennsylvania Supreme Court enjoined this by concluding that it violated the Environmental Rights Amendment to the Pennsylvania Constitution. See, Pa. Const. Art. 1 Sec. 27.

With this backdrop, disputes involving the zoning of oil and gas operations in Pennsylvania have frequently turned on whether zoning restrictions for oil and gas preserve this “reciprocity of advantage” between authorized land uses within zoning districts. A common point of dispute is the nature of oil and gas development and its compatibility with other uses in the zoning districts where it has been authorized, with courts often deferring to municipalities’ zoning determinations about where oil and gas development may occur. For example, in *Frederick v. Allegheny Township Zoning Hearing Board*, 196 A.3d 677, 690–91 (Pa. Cmmw. 2018), the Pennsylvania Commonwealth Court rejected a challenge to a zoning ordinance’s authorization of oil and gas development in a residential zoning district by concluding that “the municipality has evaluated its landscape and has chosen to allow oil and gas operations to take place in every zoning district, so long as certain exacting standards are satisfied.” A common point of contention is whether the intensive process to construct a well pad and drill wells is representative of the land use as a whole, or

Data Mining
continued on page 35

whether the actual representative land use is the passive production of oil and gas from wells located on a well pad.

The development of cryptocurrency mining and data mining have the potential to insert a new layer to the existing debates about locations of oil and gas development under zoning ordinances. Cryptocurrency and data mining activities use tremendous amounts of computing power, which requires a large amount of electricity. That electricity can come from generators powered by natural gas wells. And, that is not just associated with electricity generated by natural gas power plants. Applications requiring large computing power can be located at natural gas well sites themselves, using the gas produced from those wells to generate electricity.

Although not in the zoning realm, the recent *Big Dog Energy, LLC v. EZ Blockchain, LLC*, No. CV 3:23-11 (W.D. Pa. June 15, 2023) case is illustrative of the new potential zoning issues involving oil and gas development. Big Dog Energy operated an oil and gas well in Clearfield County, Pennsylvania and contracted with EZ Blockchain to establish mobile data mining operations at that well site. Big Dog Energy asserted that under its contract, it would “make available for sale, and [EZ Blockchain] would purchase, certain quantities of natural gas to power mobile data mining operations; Big Dog [Energy] would provide space at the Well for [EZ Blockchain] to operate mobile data centers but [EZ Blockchain] was responsible for constructing, maintaining, and operating the centers.” *Id.* at *1. A dispute arose between Big Dog Energy and EZ Blockchain about performance under the agreement, which prompted the lawsuit.

The particularities of the dispute between Big Dog Energy and EZ Blockchain are not material to this discussion. However, the existence of an agreement between a gas well operator and a data mining entity to locate data mining operations at oil and gas well sites is consequential. Not only does the presence of cryptocurrency and data mining operations on well sites pose interesting questions for the duration of oil and gas leases, it signifies that oil and gas drill sites may not necessarily be used for the singular purpose of oil and gas extraction. Instead, oil and gas drill sites may be hubs for other types of land uses that rely on the gas produced from the wells but are completely different than the extractive industry itself.

This presents fundamental questions for municipal zoning ordinances’ treatment of oil and gas drill sites and courts’ potential evaluations of disputes regarding these activities. While courts defer to municipalities’ decisions about where particular land uses are placed, questions arise about whether municipalities’ zoning of oil and gas drill sites contemplated the presence of other land uses, such as cryptocurrency and data mining operations, at those sites. These inquiries will inherently be specific to individual municipalities, but it is reasonable to expect questions and disputes to arise about whether these other land uses, like cryptocurrency and data mining, are principal land uses, or whether they are merely *accessory* use to an oil and gas well.

The placement of cryptocurrency and data mining operations at gas well sites does not appear to be pervasive in Pennsylvania or across the country at this time. However, it is reasonable to expect that the placement of cryptocurrency and data mining operations at and around gas well sites will expand, as pipeline permitting issues continue and as economic factors may incentivize the locations of these power-intensive activities close to sources of generation. Municipalities, and their residents, should consider the potential for oil and gas well sites to be home to more than just the extractive equipment to bring hydrocarbons out of the ground and tailor their zoning ordinances accordingly.

Mr. O’Donnell can be reached at odonnellba@hh-law.com.

