

From: Thomas West <twest@westfirmlaw.com>
To: Russo, Steven
CC: Hennessey, Yvonne
Date: 7/7/2011 11:40:45 AM
Subject: Local Law Preemption -- <http://www.pressconnects.com/article/20110706/NEWS01/107060359/DEC-Local-hydrofracking-bans-could-end-up-court?odyssey=tab|topnews|text|FRONTPAGE>

Steve, we look forward to the meeting on the 20th to discuss local law preemption issues. It looks like there may be some people coming in from out of town to attend that meeting. Also, there are some who may want to participate by telephone. We will set up the dial-in number if you can make sure that we are in a conference room with a speakerphone. I will let Cathy know well in advance of the meeting who will be attending in person so that appropriate arrangements can be made with security.

In the meantime, statements being made by the Commissioner, as reflected in the attached article, overstate both the law and the discussion of the local preemption issues in the draft document. The draft document seems to be more in line with what we discussed on the telephone the other day. He is, of course, correct that issue will ultimately be decided by the courts, but statements concerning how the law will be interpreted may lead to false expectations.

Thanks for your ongoing attention to this issue.



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From: Thomas West <twest@westfirmlaw.com>
To: Russo, Steven
Date: 7/7/2011 2:54:21 PM
Subject: SGEIS Committee

Steve, one thing that I did not mention to you the other day relates to a possible candidate to represent the municipal sector on the Committee. Joe Sluzar is the Broome County Attorney who has extensive experience regarding natural gas drilling issues in New York State. You can check with Barbara Fjala, the DMV Commissioner, who was his boss when she was the Broome County Executive regarding his experience and qualifications. Joe would provide real balance on behalf of the municipal sector.



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From: Steven Russo
To: twest@westfirmlaw.com
Date: 7/7/2011 3:32:20 PM
Subject: Re: SGEIS Committee

He may be playing a different role ... Stay tuned.

>>> Thomas West <twest@westfirmlaw.com> 7/7/2011 2:53:59 PM >>>

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From: Thomas West <twest@westfirmlaw.com>
To: Maglienti, Jennifer; Russo, Steven
CC: Hennessey, Yvonne
Date: 7/20/2011 10:26:59 AM
Subject: Preemption

Steve and Jennifer, in preparation for our meeting today, we have completed an analysis of the scope of the preemption of local laws under Section 23-0303(2) of the Environmental Conservation Law. We will be bringing hard copies of this document and the attachments to the meeting today and look forward to a discussion of how this section of law plays into the Department's analysis of local land use issues under SEQRA. Thanks again for your willingness to meet to discuss these issues.



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Attachments: 20110720 Local Preemption WhitePaper for DECO & G Industry_SGEIS.pdf

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PREEMPTION OF LOCAL LAWS UNDER ECL § 23-0303(2)

The Marcellus Shale dialogue in New York has brought to the fore many questions and concerns over whether and how local municipalities can regulate the oil and gas industry, either directly or as part of local zoning. At issue is Section 23-0303(2) of the Environmental Conservation Law (“ECL”) enacted in 1981 which provides that ECL Article 23 supersedes “all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries,” subject only to two limited exceptions for the exercise of jurisdiction by local governments – local roads and real property tax. The New York State Department of Environmental Conservation’s (“Department”) release of its Preliminary Revised Draft SGEIS has elevated this issue even more.

This White Paper, therefore, addresses the background, history and scope of the ECL’s supersedure provision for the oil, gas and solution mining industries. It further details why local municipalities do not retain any authority to regulate land use (i.e., zoning) or other matters involving public health, safety and welfare despite the arguments propounded by opponents to the contrary. More specifically, it sets forth the multiple reasons why ECL § 23-0303(2) precludes any regulation of the oil and gas industry at the local level, including zoning regulation or other local laws or ordinances putatively based upon public health, safety and welfare, as it has for the past thirty years.

ANALYSIS

A. New York’s Environmental Conservation Law (“ECL”)

New York’s Oil, Gas and Solution Mining Law first became effective in 1963. Codified in Article 23 of the ECL, it was enacted to appropriately regulate in a uniform manner across the state the development, production and utilization of oil and gas resources in order to prevent waste and protect the correlative rights of all landowners and the general public. The 1963 law was based almost entirely upon recommended statutory language from the Interstate Oil and Gas Compact Commission, of which New York State is a member.

After its enactment in the 1970s, New York experienced many problems with the regulatory program for the oil and gas industry. This arose due to major budget cuts in the 1960s and the resultant reduction in staff at the state level. As a result, many local municipalities began their own regulatory initiatives. This local regulation of the oil and gas industry resulted in many

problems, including, for example: (1) safety concerns resulting from untrained local staff; (2) the significant costs to hire proper professional staff, which was often too burdensome for local municipalities; (3) a patchwork of local regulation, which resulted in differing requirements for drilling; (4) double bonding; (5) conflicts between municipal boundaries and setbacks; and (6) taxation.

In 1981, the oil and gas industry agreed to pay substantially increased fees to the state, the purpose of which was to hire sufficient professional staff at the state level to regulate the industry. With these new fees in place and in an effort to address the problems noted above relative to local regulation, the New York's Oil, Gas and Solution Mining Law was amended in 1981 to include the following provision:¹

The provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries; but shall not supersede local government jurisdiction over local roads or the rights of local governments under the real property tax law.

ECL § 23-0303(2).

On its face, this provision is a broad, all encompassing directive that limits the regulation of oil, gas and solution mining industries to the exclusive provenance of the Department; i.e., it stands as a clear-cut example of an express preemption directive by the State Legislature. By its plain language, the statute's express exclusion of two discrete subject areas (i.e., roads and property taxes) renders all other matters that are related or subject to the oil, gas and solution mining industry within the scope of this supersedure provision. This analysis is supported by one of the authors of the legislation that enacted this provision into law, Gregory H. Sovas.²

[t]he law was enacted with the clear understanding that local governments could not in any way regulate the industry, that the regulation of the industry would need to be accomplished at the state level as in other states, that the state was likely the only entity that could afford to hire experienced petroleum engineers and geologists, that the oil and gas activities posed both environmental and safety concerns that should be handled by professionals, and that the state was the only entity in a position to establish a

¹ Although the written legislative history did not explicitly address the preemption question, we did locate several statements in the legislative history that addressed the need for an improved, centralized regulatory program for the oil and gas industry as a general matter. A brief summary of those legislative statements/comments from the Bill Jacket is annexed in Exhibit A. Moreover, the unwritten legislative history confirms the analysis set forth herein that the 1981 amendments were intended to leave local municipalities with jurisdiction over the oil, gas and solution mining industry in only two instances – local roads and real property taxation.

² Gregory H. Sovas, President of XRM, LLC, previously served as the Chief of the Department's Bureau of Mineral Resources and was also the primary author of the 1981 Amendments to ECL, Article 23.

uniform and consistent regulatory framework under which the industry could operate efficiently and effectively.³

Mr. Sovas has further opined that “[t]here was no question about legislative intent – by the Governor’s Office, the DEC represented by me as the Chief of the Bureau of Mineral Resources, and the Assembly – that the supersedure clause extinguished the right of municipalities to regulate any aspect of oil and gas development including the right to zone oil and gas wells.”⁴ And, Mr. Sovas’ articulation of the legislative intent is supported by the then-existing patchwork of local laws and regulations which served as the impetus for the legislative change.

B. New York Case Law

The New York courts have already addressed the scope of the preemption provision of ECL § 23-0303(2). In *Envirogas*, the New York State Supreme Court (the state’s lowest court) invalidated a Town zoning ordinance requiring the payment of a \$2500 compliance bond and a \$25 permit fee for oil and gas wells due to the preemption provision of ECL § 23-0303(2). That decision was affirmed on appeal by the Appellate Division, Fourth Department, and the New York Court of Appeals denied leave to appeal. See *Matter of Envirogas, Inc. v. Town of Kiantone*, 112 Misc. 2d 432, 435 (N.Y. Sup. Ct, Erie Cty 1982), *aff’d* 89 A.D.2d 1056 (4th Dep’t 1982), *app. den.*, 58 N.Y.2d 602 (1982).

In *Envirogas*, the Court held that “the mere fact that a State regulates a certain area of business does not automatically pre-empt all local legislation which applies to that enterprise ... [b]ut where a State law expressly states that its purpose is to supersede all local ordinances then the local government is precluded from legislating on the same subject matter unless it has received ‘clear and explicit’ authority to the contrary.” *Envirogas*, 112 Misc. 2d at 434 (citing *Robin v. Inc. Vill. Of Hempstead*, 30 N.Y.2d 347, 350-51 [1972]). As a result, the Court found that ECL § 23-0303(2) expressly “pre-empts not only inconsistent local legislation, but also any municipal law which purports to regulate gas and oil well drilling operations, unless the law relates to local roads or real property taxes which are specifically excluded by the amendment.” *Id.* (emphasis supplied). The Court rejected the Town’s argument that the bond and permit fees were intended to address local roads because the ordinance did not apply to other operators of heavy equipment (i.e., contractors and farmers). Because the ordinance did not apply to any other “business or land use,” the Court found that the Town had exceeded its jurisdiction and encroached on the regulatory authority reserved to the Department. *Id.*

In reaching its decision, the *Envirogas* Court relied, in part, on the Court of Appeals’ decision in *People v. DeJesus*, (54 N.Y.2d 465, 468 [1981]). There, New York’s highest court noted that “the fount of the police power is the sovereign State, such power can be exercised by a local governmental unit only when and to the degree it has been delegated such lawmaking

³ See Gregory H. Sovas, *Differences between the NYS Oil, Gas and Solution Mining Law and the NYS Mined Land Reclamation Law Concerning Supersedure Provisions* (“Sovas Fact Sheet”), at p. 1.

⁴ See Gregory H. Sovas, *The Supersedure Provisions of the 1981 Oil, Gas, and Solution Mining Law Preclude Zoning of Oil and Gas Wells* (the “Sovas Article”), at p. 6. A copy of that article is annexed as Exhibit B.

authority [.]” *DeJesus*, 54 N.Y.2d at 468 (also stating that “in the spirit of this broad principle, article IX (§ 2, subd [c], par [ii]) of the New York State Constitution specifies that any local law be ‘not inconsistent with * * * any general law’ and that the legislative power of local government is limited ‘to the extent that the legislature shall restrict the adoption of such a local law’”).

Notably, the Court in *Envirogas* was fully appreciative of the Town’s local concerns that served as the basis for its zoning ordinance. *Envirogas*, 112 Misc. 2d at 434. However, the Court looked to the supersedure provision of the ECL and determined that the Legislature knew of these concerns and addressed them “by permitting municipalities to request compensation for damages to property caused by granting the [Department] authority to impose financial security requirements, and by requiring new well permit holders to notify both the local governments and the affected landowners of their intention to drill before beginning such drilling.” *Id.* at 434-35.

In short, the *Envirogas* Court held that “[s]ince the State Legislature clearly intended ECL Article 23 to supersede and preclude the enforcement of all local ordinances in the area of oil and gas regulation,” the Town’s zoning law was contrary to law. *Id.* at 434. Accordingly, there should be no doubt but that ECL § 23-0303(2) precludes any regulation of the oil and gas industry at the local level, including zoning regulation or other local laws or ordinances putatively based upon public health, safety and welfare.

C. The New York State Preemption Debate and Application of Mining Precedent

Advocates of local zoning authority over the oil and gas industry maintain that while industry and municipalities have generally interpreted ECL § 23-0303(2) to preempt local governments from regulating oil, gas and solution mining activities, New York case law under a separate ECL provision concerning excavation mining (ECL Article 23, title 27) and recent case law from Pennsylvania may lend support for local governments to exercise some dominion over the oil and gas industry based on general land use and zoning principles. In support of this proposition, they cite to the similarity of the introductory text to the two ECL preemption provisions.

With respect to the New York excavation mining analogy, opponents rely on a 1987 Court of Appeals decision addressing the distinction, if any, between the proscribed regulation of the excavation mining industry and the exercise of home rule and zoning. *See Frew Run Gravel Products, Inc. v. Town of Carroll*, 71 N.Y.2d 126 (1987). In *Frew Run*, the Court of Appeals upheld the Town’s decision to prohibit extractive mining in the AR-2 Zoning District, rejecting the argument that such a decision improperly impinged on the mining industry, the regulation of which is solely within the scope of the state’s regulatory program. The applicable supersession language in *Frew Run* (from the Mined Land Reclamation Law) preempted “all local laws relating to the extractive mining industry.” *Frew Run*, 71 N.Y.2d at 129. The Court, however, distinguished the Town’s zoning ordinance as having an entirely different subject matter and purpose than the plain language of the statute, since the ordinance purportedly did not *relate* to the extractive mining industry but, rather, to “regulating the location, construction and use of buildings, structures, and the use of land in the Town....” *Id.* at 131. In other words, the Court

of Appeals looked closely at the relationship and purpose of the Town ordinance relative to the operations of the extractive mining industry to determine whether such was preempted under the statute.

The holding in *Frew Run*, although unfavorable for New York's extractive mining industry at the time, is irrelevant to the preemption issue in the context of the oil and gas industry. Although the two statutory provisions begin with similar preemption language, they have differing statutory exceptions and the preemption provision at issue in *Frew Run* applies to a wholly distinct regulatory program (excavation mining) with significant, long-lasting surface impacts. Indeed, the operative language at that time for mining was as follows:

For the purposes stated herein, this title shall supersede all other state and local laws relating to the extractive mining industry; provided, however, that nothing in this title shall be construed to prevent any local government from enacting local zoning ordinances or other local laws which impose stricter mined land reclamation standards or requirements than those found herein.

As this language shows, the supersedure provisions analyzed in *Frew Run* and ECL § 23-0303(2) are dissimilar, particularly as to the enumerated exceptions. In *Frew Run*, the Court of Appeals looked to the “provided, however” clause to ascertain the dual legislative purpose – “to prohibit any local regulation pertaining to actual mining activities” while preserving “more stringent local laws pertaining to reclamation” due to the “legitimate concerns of localities in the aftereffects of mining[.]” 71 N.Y.2d at 132-33. The Court of Appeals, therefore, determined that the sole purpose of the supersedure provision was to prevent local municipalities from “enacting laws which would conflict with or frustrate one or both of the statute’s purposes[.]” *Id.* at 133.

Here, unlike the statutory exception applicable to traditional mining, the statutory exception applicable to oil, gas and solution mining exempts only the regulation of roads and local taxation. This exception is, of course, vastly different from the operative language analyzed in *Frew Run*, which reserves to municipalities the power to enact “local zoning ordinances or other local laws which impose stricter mined land reclamation standards or requirements[.]” These differences alone distinguish the breadth of preemption relative to mining that was analyzed in *Frew Run*.

Another major distinguishing feature is that extractive mining, unlike oil and gas drilling, is an industrial land use. As aptly summarized by Mr. Sovas:

The extractive mining industry is different from the oil and gas industry because mining by definition is a consumptive land use. Without concurrent reclamation which is difficult in most cases, mines continue to grow in size before reaching their boundary and economic limits. Mines, particularly quarries, can have economic lives in the hundreds of years. Therefore, the nuisance impacts

(noise, dust, traffic) from a mine continue for many years. Oil and gas wells, on the other hand, have impacts limited to weeks. If the state requires that all Marcellus wells be drilled within three years for each 640 acre pad, then the impacts can be argued to be only three years and intermittently at best.⁵

Given this distinction, the decision in *Frew Run* to allow the local municipality to exercise its zoning power (i.e., to decide “whether a mining operation – like other uses covered by a zoning ordinance – should be permitted or prohibited in a particular zoning district”) does not apply to oil and gas drilling due to the temporal nature of drilling. Similarly, unlike in *Frew Run* where the Court determined that local zoning authority would *not* conflict or frustrate the statute’s purposes, the same cannot be said for New York’s Oil, Gas and Solution Mining Law, which purpose includes: “prevent[ing] waste,” providing for the “greater ultimate recovery of oil and gas” and protecting correlative rights. ECL § 23-0301. Consistent with this statutory directive, the ECL contains exacting requirements concerning the location and size of spacing units and the location of well pads. ECL §23-0501. As such, any suggestion that municipalities can regulate the location of oil and gas wells or exclude oil and gas extraction in any portion of a municipality based upon zoning principles directly conflicts with and frustrates the purpose of the statutory scheme in the ECL. *See* Point E, *infra*. On that basis, *Frew Run* actually supports the proposition that local municipalities are preempted from regulating the oil, gas and solution mining industry, either directly or through local zoning.

Finally, it is important to highlight that after many years of continued litigation, amendments to the Mined Land Reclamation Law (“MLRL”) were passed in 1991 clarifying the roles of state and local governments in the regulation of the mining industry and essentially codifying case law, including *Frew Run*. The 1991 MLRL amendments give clear authority to local governments to establish permissible uses in zoning districts and to require a limited special use permit. Clearly, the state understood the need for local governments to have a role in the land use impacts of mining operations. Notably, there are no analogous provisions in New York’s Oil, Gas and Solution Mining Law because local zoning control over oil and gas exploration and development was never contemplated.

Accordingly, the *Envirogas* decision, which addressed zoning within the context of the oil and gas industry, not *Frew Run*, is the operative precedent and New York. Moreover, because the ECL includes express mandates to promote the full recovery of the resource and prescribes in detail the location and size of spacing units and the location of well pads, the analytical framework of *Frew Run* actually supports the conclusion that municipalities are preempted from asserting zoning authority over oil and gas drilling activities because any such effort would conflict with and frustrate the purpose of the detailed statutory scheme set forth in the ECL.⁶

⁵ *See* Sovas Fact Sheet at p. 2.

⁶ This analysis is fully supported by comments submitted by the NRDC on the September 2009 Draft SGEIS. In its comments on behalf of NRDC, Sive, Paget & Riesel, P.C., recognized, and indeed premised certain comments on the fact that that the Department has the “exclusive authority to regulate oil, gas and solution

D. Pennsylvania Case Law

The proponents of municipal regulation also site to Pennsylvania precedent to support the argument that municipalities may regulate oil and gas extraction through zoning powers. The often cited Pennsylvania case was decided on grounds similar to *Frew Run*. See *Huntley & Huntley v. Borough Council of Borough of Oakmont*, 964 A.2d 855 (Pa. Sup. Ct 2009). In *Huntley*, the court upheld a local ordinance zoning-out natural gas wells, finding no preemption under the state's Oil and Gas Act since municipalities must be permitted to determine what types of land uses are permitted within their boundaries. In doing so, the court rejected the argument that Pennsylvania Oil and Gas Act § 602⁷ preempted the local ordinance even though it expressly provided for the placement/location of gas wells. Of course, the statute at issue in Pennsylvania includes an express carve out from preemption of municipal planning (zoning) and municipal floodplain regulation. As such, the precedential value of *Huntley* to the New York debate should, at best, be very limited.

Also significant are two other late 2009 Pennsylvania decisions that enforced the preemptive language of the Pennsylvania Oil and Gas Act. See *Range Resources – Appalachia, LLC v. Salem Township*, 600 Pa. 231 (Pa 2009) (finding that local ordinance that attempted to impose additional permitting procedures, bonding requirements, and well head regulations, among other things, impermissibly encroached on matters to be determined by the state; distinguishing *Huntley's* zoning-based decision); see also *Range Resources – Appalachia, LLC v. Blaine Township*, 2009 U.S. Dist. LEXIS 100932, **21-23 (U.S. Dist. Ct, W.D. Pa 2009) (finding Pennsylvania Oil and Gas Act § 602 preempted local disclosure ordinance that required businesses to provide details on the nature and extent of business pursued, as well as history of actual and alleged regulatory violations, since, while not facially purporting to regulate the oil and gas industry, the ordinance prohibited in many instances what the Oil and Gas Act allowed; noting also that the Oil and Gas Act was intended to promote uniformity in the regulation of the oil and gas industries and that the ordinance was an “obstacle to the accomplishment and execution of the full purposes and objectives of [legislature] as codified in the Oil and Gas Act”).

And, there is another significant distinction between New York and Pennsylvania law regarding the regulation of the oil and gas extraction industry. New York law, as noted above, totally occupies the field of regulation regarding the location of spacing units and well pads within the spacing units through the detailed statutory requirements set forth in ECL § 23-0501

mining industries.” Sive, Paget & Riesel Dec. 30, 2009) Comments on the Draft SGEIS, at p. 7 (citing Draft SGEIS p. 1-2 and ECL 23-0303[2]).

⁷ In relevant part, the PA Oil and Gas Act section 601.602, “Local ordinances,” provides: “Except with respect to ordinances adopted pursuant to the act of July 31, 1968 (P.L. 805, No. 247), known as the Pennsylvania Municipalities Planning Code, and the act of October 4, 1978 (P.L. 851, No. 166) known as the Flood Plain Management Act, all local ordinances and enactments purporting to regulate oil and gas well operations regulated by this act are hereby superseded. No ordinances or enactments adopted pursuant to the aforementioned acts shall contain provisions which impose conditions, requirements or limitations on the same features of oil and gas well operations regulated by this act or that accomplish the same purposes as set forth in this act. The Commonwealth, by this enactment, hereby preempts and supersedes the regulation of oil and gas wells as herein defined.”

and implementing regulations. This is in contrast to Pennsylvania law, which does not, for the most part, regulate the size and location of spacing units or the location of well pads for all formations. As such, New York law stands on much stronger grounds in favor of finding both express preemption and conflict preemption with any attempt by local municipalities to regulate oil, gas and solution mining through zoning initiatives.

In sum, while opponents may argue that Pennsylvania's *Huntley* decision (which applied the zoning law rationale of the *Frew Run* court in the context of an oil and gas issue) is the persuasive authority of a sister state, the decision is an outlier and is patently irrelevant here where New York's Oil, Gas and Solution Mining Law expressly states that local laws other than those pertaining to local roads and real property taxes are preempted and there is no carve out for municipal planning and floodplain regulation as exists in Pennsylvania law.

E. Conflict Preemption

Express preemption is not the only basis for which a court could limit the authority of local municipalities to regulate the oil and gas industry. Conflict preemption is, as suggested above, further refutes any claim that a local municipality may regulate the oil and gas industry through either zoning or other land use laws.

Admittedly, the State Constitution's "home rule" provision (art IX, § 2), upon which opponents rely, "confers broad police power upon local government relating to the welfare of its citizens." *New York State Club Assn. v. City of New York*, 69 N.Y.2d 211, 217, (1987) (citing *People v. De Jesus*, 54 N.Y.2d 465, 468 [1981])⁸, *aff'd*, 487 U.S. 1 (1988). This grant of authority includes the ability of a municipality to enact local laws regarding the "protection, order, conduct, safety, health and well-being of persons or property" within its borders. N.Y. Const, art IX, § 2[c][ii][10]; *see* Municipal Home Rule Law § 10.

Municipal police powers, however, are not unlimited. *See New York State Club Assn.*, 69 N.Y.2d at 217. Under the doctrine of conflict preemption a "local government ... may not exercise its police power by adopting a local law inconsistent with constitutional or general law." *Id.* As the Court of Appeals has explained:

The legislative intent to preempt need not be express. It is enough that the Legislature has impliedly evinced its desire to do so and that desire may be inferred from a declaration of State policy by the Legislature or from the legislative enactment of a comprehensive and detailed regulatory scheme in a particular area.

Id.; *accord Frew Run*, 71 N.Y.2d at 133 (upholding local law only after determining that it would not "conflict with or frustrate" the statute's purpose).

Here, assuming that express preemption is not found, the Legislature has impliedly evidenced its intent to preempt local regulation, including local zoning, of the oil and gas

⁸ Notably, this is the same precedent cited by the *Envirogas* Court.

industry. As suggested by the legislative history, the reasons for the ECL's broad preemption relative to oil and gas drilling is because decisions about where drilling units are formed must be decided by the State and not be based upon a patchwork of often inconsistent and perhaps, politically driven, local land use policies. To reach a contrary holding would either severely inhibit this objective or completely prohibit drilling. More specifically, to interpret the ECL supersedure provision to allow local municipalities to enforce zoning and/or other land use laws as to oil and gas drilling would obviate the collective interest and policy of the State. It would also conflict with statewide spacing requirements and the need to site wells based upon geology and environmental considerations, not local zoning. Indeed, setback requirements do not respect municipal boundaries or, for that matter, zoning districts.

These problems are compounded by the fact that the majority of local municipalities do not possess the knowledge or expertise to effectively regulate the oil and gas industry in a manner consistent with the state's statutory scheme. In addition, the Department is obligated by statute to maximize the recovery of the resource to protect the correlative rights of landowners and prevent waste. Again, the location of units cannot be based upon zoning considerations and neither can the location of well pads that need to be based upon landowner considerations and avoidance of environmental impacts.

Moreover, and as supported by the legislative history of the statutory scheme, the oil and gas operational expertise, regulatory history, and research capabilities properly reside at the state regulatory level with the Department. Indeed, the Department has greater resources to hire the necessary professional staff, establish appropriate spacing, protect correlative rights, and hold any necessary hearings. Additionally, it is the state regulators that have a statutory obligation to implement and enforce many of the federal environmental protection laws. To reach a contrary conclusion would bring back the very evil the 1981 amendment was meant to eliminate; namely, a patchwork approach to energy resource development and enforcement in the state.

F. Absent a Cogent Explanation, the Department Cannot Reverse its Long-standing Interpretation of the Supersedure Law – the Field Doctrine

The Preliminary Revised Draft SGEIS indicates that all permit applications will be required to identify whether the proposed location of the well pad, or any other activity under the jurisdiction of the Department, conflicts with local land use laws or regulations, plans or policies and/or is located in an area where the affected community has adopted a comprehensive plan or other local land use plan. Where an inconsistency exists, the Department will request additional information in the permit application to determine whether this inconsistency raises significant adverse environmental impacts that have not been addressed in the SGEIS. The scope of this local zoning/land use consideration is unclear, but suggests that the Department is taking a new and different interpretation of Article 23's supersedure provision found in ECL § 23-0303(2) from the long-standing position taken by the Department concerning the limited role of municipalities. Assuming that this reading is correct, the Department's new interpretation cannot stand as it would be arbitrary and capricious.

The *Field Doctrine* requires that when an administrative agency changes its prior policy or interpretation of law, it must explain its reasons for doing so. Failure to provide an explanation is *per se* arbitrary and capricious. *Matter of Charles A. Field Delivery Service, Inc.*, 66 N.Y.2d 516, 520 (1985) (holding that “when an agency determines to alter its prior stated course it must set forth its reasons for doing so”; failure to provide such an explanation requires “reversal on the law as arbitrary”).

Here, for over thirty years, the Department has interpreted of ECL § 23-0303(2) to completely preempt local municipalities from regulating the oil and gas industry, whether through zoning or other local laws and ordinances putatively based on public health, safety and welfare. Indeed, in 1992, the Department relied on ECL § 23-0303(2) to establish itself as lead agency because, as noted in the 1992 GEIS, “for the purposes of being the lead agency under SEQR, only the Department has approval or permit jurisdiction with regard to the granting of an oil and gas drilling permit[.]” 1992 GEIS, Vol. 1, p. 3-9 (emphasis added); *see also* 1992 GEIS Findings Statement (Sept. 1, 1992). Clearly, if a local municipality retained the right to apply its zoning or other land use laws to the oil and gas industry, local approvals or permits would have been acknowledged in the 1992 GEIS and, tellingly, they were not. The 1992 GEIS also states that the Department’s desire to be lead agency would be “consistent with the general intent of Chapter 846 of the Laws of 1981 to establish the [Department] as the primary regulator of the oil, gas and solution mining industries in New York State.” *Id.*

Furthermore, the Department has a long-standing history of sending letters to local municipalities asserting complete jurisdiction over the oil and gas industry and reminding local municipalities of ECL § 23-0303(2)’s broad preemptive scope.⁹

Accordingly, the apparent about-face in the Preliminary Revised Draft SGEIS and public statements by Commissioner Martens regarding a local municipality’s ability to regulate the oil and gas industry through zoning or other local land use laws, regulations, plans or policies violates the *Field Doctrine*. The Department should avoid this result and reinforce its 30-year plus interpretation of Article 23’s supersedure provision found in ECL § 23-0303(2).

CONCLUSION

Based on the plain meaning of the statute, legislative history, including the legislative intent as explained by Mr. Sovas, and the applicable case law, all local laws or ordinances (other than those pertaining to roads or real property taxes) are preempted under ECL § 23-0303(2).

⁹ A copy of a sample letter is attached hereto as Exhibit C.

EXHIBIT A

SUMMARY OF LEGISLATIVE HISTORY RELATED TO ECL §23-0303(2)

1) Governor's Approval Memorandum dated June 27, 1981

- “The bill, which is part of my 1981 Legislative Program, amends various provisions of Article 23 of the Environmental Conservation Law to provide an efficient and effective oil, gas and solution mining regulatory program in the Department of Environmental Conservation.” ... “This bill amends the existing law to ...provide an updated regulatory program, and grant the Department of Environmental Conservation additional enforcement powers necessary to enable it to provide for the efficient, equitable and environmentally safe development of the State's oil and gas resources.”

2) Senator Present's Ten Day Bill Budget Report

- Summary of Provisions:

Provisions for local governments to receive reimbursement from the oil and gas fund for repairing damages to municipal land or properties would be established.

The existing oil and gas law would supersede all local laws or ordinances regulating the oil, gas and solution mining industries.

- Arguments in Support:

This bill revises and updates the existing 1963 law regulating the oil and gas industry. Since 1963 many changes have occurred in this industry including increased demand for oil and gas, higher prices, and new recovery techniques. These changes are reflected in the various provisions of the bill.

3) Memorandum of Senator Present

- Purpose of the Bill:

To promote the growth, development and proper regulation of oil and natural gas resources in New York State ...

- Summary of Provisions:

Consolidating Spacing Statutes – Current law distinguishes between old oil and gas fields (drilled before 1963) and new fields (drilled after 1963). Spacing in old fields has essentially been unregulated. Recent drilling activity has caused the need for standardized spacing depending on the formation being drilled....

EXHIBIT B

Article published in the December 2009 edition of the IOGA Newsletter, *The Pipeline*

“The Supersedure Provisions of the 1981 NYS Oil, Gas, and Solution Mining Law Preclude Zoning of Oil and Gas Wells”

Gregory H. Sovas, President, XRM, LLC

With the advent of the Marcellus shale gas play, there are many new communities in the state that have not experienced oil and natural gas drilling and production. The public, in one way or another, is being educated on the technical aspects of leasing, exploration, and development. While the landowner groups have generally done a very good job of educating their members, there are others who don't stand to benefit from natural gas development or who don't seem to embrace the facts and science for whatever reason. IOGA's educational efforts with the public are extremely important because of the lack of technical information on drilling and hydrofracturing and the misinformation being distributed by individuals with limited knowledge and experience in the oil and natural gas industry.

The overall result of this educational void is that all of the environmental impacts and issues that we thought were resolved are now being reviewed again in a more public light: horizontal drilling, protection of fresh waters, hydrofracturing, to name just a few. Presumably the public has reviewed the Supplemental Generic Environmental Impact Statement (SGEIS) and concluded that the state can move forward with their findings to allow Marcellus gas development to proceed. Very likely wishful thinking on my part. I presume that most people who have opposed Marcellus development have not read the document; and if they had, they would not have changed their minds.

Along with the education challenges to the technical aspects of exploration and production, elected officials in areas of the state where drilling has not occurred previously, are now being questioned by their constituents concerning the regulatory authority that they may have or not have with regard to oil and gas regulation. Many of these elected officials are asking their lawyers and their association lawyers about the bounds of authority for local governments in the oil and gas regulation business. They want to assure their constituents that they will protect and preserve their communities from the environmental impacts of Marcellus development, while capturing the significant economic benefits.

A recent newsletter by a prominent environmental law firm in Albany has suggested that perhaps local governments have more authority than previously thought under the 1981 Amendments to the NYS Oil, Gas and Solution Mining Law in the context of zoning authority vested to municipalities. The conclusion of the newsletter is that a plain meaning interpretation of the qualifying language in the Oil and Gas Law “may support the argument that New York municipalities may regulate the industry outside of the scope of the State's regulatory program.”

My view, as the primary author of the 1981 Amendments to the NYS Oil, Gas and Solution Mining Law, almost thirty years later, is that localities are superceded from any and all regulation of the oil and gas industry with the exception of local roads and real property taxes. The language of Section 23-0303(2) was very tightly drawn to both limit and accommodate the legitimate concerns of the municipalities.

In the 1970's, there were many problems with the oil and gas regulatory program in NY that needed to be addressed in legislation. One of the problems was local regulation of the industry including setbacks,

differing requirements for drilling and bonding, method of taxation, and zoning. Many of the problems occurred as a result of the state not having adequate staff to oversee oil and gas operations.

In 1980 as the then Bureau of Mineral Resources in the NYS Department of Environmental Conservation (DEC), my staff and I presented a comprehensive legislative proposal to mitigate a number of problems in both the regulation and the economic development of the oil and gas industry. One of the important provisions for the Department was the imposition of new fees to hire additional staff to oversee the industry, and the key provision of support from the industry was the supersedure clause. The industry had been having significant troubles with local governments over a variety of issues as noted above. The primary negotiators of the legislative proposal were Frank Murray, Governor's Office who is now the NYSEDA President, Assembly Majority Leader Dan Walsh who later became the President of the Business Council and now retired, and Senator Jess Present, a wonderful gentlemen and advocate for the oil and gas industry in western NY who has since passed away. There was no question about legislative intent --- by the Governor's Office, the DEC represented by me as the Chief of the Bureau of Mineral Resources, and the Assembly --- that the supersedure clause extinguished the right of municipalities to regulate any aspect of oil and gas development including the right to zone oil and gas wells. Shortly after passage of the bill, the issue of zoning was raised to me again, and I called Senator Present to confirm our "Democratic" view of the supersedure clause with regard to zoning. The Senator unequivocally agreed.

Therefore, after almost thirty years of experience in administration and implementation of the 1981 Oil and Gas Law, the state has never been challenged about its authority under the Law with regard to zoning. My view remains that zoning authority is absolutely precluded along with the entire local regulation of the oil and gas industry with the exception of local roads and real property taxes. We do not need to encourage local governments to pursue litigation concerning their zoning authority. It is a waste of time and effort by all. Rather, the industry needs to negotiate road agreements and work with the communities to address their legitimate concerns.

There is not time and space here to debate whether temporal oil and gas wells constitute a land use in any event, as opposed to a surface mining activity that is a consumptive land use lasting years, decades, and centuries in some cases. However, the law firm newsletter tried to compare and analogize surface mining case law before the 1991 Amendments to the Mined Land Reclamation Law (for which I was also the primary author). The supercession provisions under the state's Oil, Gas and Solution Mining Law and the 1991 Amendments to the Mined Land Reclamation Law are completely different and were intended to be that way. The 1991 Amendments to the Mined Land Reclamation Law specifically address the authority of the municipalities to zone permissible uses in zoning districts and to issue limited special use permits.

On a positive note, the Albany law firm has met with me to consider my views and has indicated that they will work cooperatively to address my concerns.

EXHIBIT C

New York State Department of Environmental Conservation
60 Wolf Road, Albany, New York 12233-0001



Henry G. Williams
Commissioner

March 26, 1984

The Honorable William O. Smith
Mayor of the City of Olean
Olean Municipal Building
Olean, New York 14760

*Oil & Gas
Local
Authority*

Dear Mayor Smith:

This Department recently became aware of the City of Olean's proposed ordinance to regulate the drilling and maintenance of oil and gas wells within the City limits and regulating strip mining and pit mining within the City limits. Among other things, this ordinance requires mining and well operators to obtain permission from the City to operate a mine or well within the City's borders and to file indemnity bonds or public liability insurance for the benefit of the City.

The New York State Mined Land Reclamation Law and its regulations [ECL Article 23, Title 27 and 6 NYCRR Parts 420-426] permit local governments to regulate the mining industry, provided the local requirements are at least as strict as the State requirements. With respect to regulation of the oil and gas industry, however, I respectfully draw your attention to subdivision 2 of §23-0303 of the Environmental Conservation Law which states:

The provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries; but shall not supersede local government jurisdiction over local roads or the rights of local governments under the real property tax law.

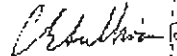
Hence, only the State, through the Department of Environmental Conservation, has the authority to regulate the oil and gas industry, except as to matters concerning local roads and real property taxation. See *Envirogas, Inc. v. Town of Kiantone*, 112 Misc. 2d 432, 447 N.Y.S.2d 221 (Sup.Ct., Erie Co., 1982), *aff'd* 454 N.Y.S.2d 694 (4th Dept., 1982). The Department's regulations concerning the oil and gas industry are contained in Parts 550-558 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York. I also draw your

attention to ECE 23-0305.13, which requires every person granted a permit to drill to give notice by certified mail to any local government affected and to any landowner whose surface rights will be affected by drilling operations of the location of the drilling site before starting those operations.

In summary, then, while it has the power to regulate the mining industry at least as strictly as is those provided for in State law and regulations, the City of Olean is without statutory authority to regulate any of the matters set forth in the proposed ordinance pertaining to oil and gas wells.

If you have any questions on this matter, please do not hesitate to contact me.

Sincerely yours,



Charles E. Sullivan, Jr.
Senior Attorney

cc: William J. O'Reilly, Esq.
bcc: G. Suvas
J. Corr
J. Spagnoli
L. Nelson
B. McGranahan

From: Thomas West <twest@westfirmlaw.com>
To: Maglienti, Jennifer; Russo, Steven
CC: Hennessey, Yvonne
Date: 7/21/2011 10:43:31 AM
Subject: FW: See Attached re SEQRA and Zoning

FYI.

Thomas S. West
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Albany, NY 12207
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Direct Fax: 518-615-1501
E-Mail: twest@westfirmlaw.com
Website: www.westfirmlaw.com

*This transmittal is subject to our standard e-mail legend.

From: Thomas F. Puchner
Sent: Wednesday, July 20, 2011 12:51 PM
To: Thomas West; Yvonne Hennessey
Subject: See Attached re SEQRA and Zoning

See attached excerpt from Ruzow's treatise. This line of cases (both NYSDEC and Court decisions) state that NYSDEC is not empowered to consider local zoning compliance in the context of permitting or SEQRA. This was borne mostly from the mining cases, but is based on SEQRA itself so that should be applicable. I am reviewing the cases now. *Flacke* looks solid.

Ruzow, Section 8.16, p. 8-74

SEQRA states that its "provisions . . . do not change the jurisdiction between or among state agencies and public corporations." While this language does not mention local governments, DEC has interpreted it to include them and has held, on this wording, that its jurisdiction under SEQRA "does not include authority to adjudicate legal issues concerning compliance with local government zoning." Thus, a town's assertion that a proposed landfill would violate local zoning laws *could not serve as a basis for DEC to deny the landfill a permit either under the landfill licensing provisions of the Environmental Conservation Law or under SEQRA.*

I like this quote from *Flacke*:

"On the question of jurisdiction, if the commissioner attempted to arrogate unauthorized power to himself by deciding the zoning question, it would be akin to a workers' compensation referee reaching a determination not only on the issue before him, but also ruling on the merits of any third-party action the compensation claimant might assert."



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Attachments: 20110720 Ruzow Treatise Excerpt Re_Local ZoningO & G Industry_SGEIS.PDF, 19811228 Matter of Town ofPoughkeepsie v FlackeO & G Industry_SGEIS.doc

The primary purpose of SEQRA—the establishment of an analytical process to aid in governmental decisionmaking—happens to be closely analogous to the basic needs of zoning decisionmaking. The analysis of proposed actions against a comprehensive plan is designed to lead to a rational approach for solving community development problems for the benefit of the community itself.⁵

However, the question of whether an action (other than a zoning amendment itself) comports with local zoning law is not an issue to be resolved under SEQRA review, although of course SEQRA review may help inform the issue. SEQRA states that its “provisions . . . do not change the jurisdiction between or among state agencies and public corporations.”⁶ While this language does not mention local governments, DEC has interpreted it to include them and has held, based on this wording, that its jurisdiction under SEQRA “does not include authority to adjudicate legal issues concerning compliance with local government zoning.”⁷ Thus, a town’s assertion that a proposed landfill would violate local zoning laws could not serve as a basis for DEC to deny the landfill a permit either under the landfill licensing provisions of the Environmental Conservation Law or under SEQRA.⁸

One court has made clear that DEC cannot consider a mining permit until the applicant has obtained the necessary zoning change from the town, so that “there would be no point in the Town’s issuance of a positive declaration” until the zoning issues are resolved.⁹ Similarly, SEQRA does not empower a town planning board to impose height restrictions on a project that meets the existing height limits in that

⁵ Damsky, *SEQRA and Zoning Law’s Requirement of a Comprehensive Plan*, 46 Alb. L. Rev. 1292, 1297 (1982).

⁶ E.C.L. § 8-0103(6).

⁷ *In re Dutchess Sanitation Serv., Inc.* (DEC Comm’r Decision, Apr. 11, 1980) at 1.

⁸ *In re Dutchess Sanitation Serv., Inc.* (DEC Comm’r Decision, Apr. 11, 1980) at 1. The reviewing court likewise so held. *Town of Poughkeepsie v. Flacke*, 84 A.D.2d 1, 5, 445 N.Y.S.2d 233, 235, 1981 N.Y. App. Div. LEXIS 15819 (2d Dept. 1981) (“SEQRA was not intended to and did not pre-empt nor in any way interfere with the zoning ordinance”).

See to the same effect, *In re General Crushed Stone Co.* (DEC Comm’r Interim Decision, Oct. 7, 1985) at 2 (town free under SEQRA to zone with regard to mine seeking DEC permit); *In re Lake Minnewaska Joint Venture* (DEC Comm’r Interim Decision, July 16, 1984) at 2 (town free to designate area as open space; issue not within jurisdiction of DEC in proceeding for water supply permit or SEQRA review thereof).

See also *WEOK Broadcasting Corp. v. Planning Bd. of Town of Lloyd*, 79 N.Y.2d 373, 382, 583 N.Y.S.2d 170, 174, 592 N.E.2d 778 (1992) (“except where the proposed action is a zoning amendment, SEQRA review may not serve as a vehicle for adjudicating ‘legal issues concerning compliance with local government zoning’ ” (citing this publication)); *In re Hyland Facility Assoc.* (DEC Comm’r Interim Decision, Aug. 20, 1992) at 4 (DEC may not consider zoning issues in ashfill application); *In re Seaboard Contracting & Material, Inc.* (DEC Comm’r Decision, June 5, 1990); *In re Empire Bricks, Inc.* (DEC Comm’r Decision, Aug. 1, 1990); *In re 110 Sand Co.* (DEC Comm’r Decision, Oct. 22, 1990) (all cases holding that DEC may not consider project’s compliance with local zoning under SEQRA in DEC permit application).

⁹ *Carlson Assoc. v. Town Bd. of Smithtown, N.Y.L.J.*, Jan. 15, 1992 at 27, col. 5 (Sup. Ct. Suffolk Co.).

84 A.D.2d 1

(Cite as: 84 A.D.2d 1, 445 N.Y.S.2d 233)

▷

Town of Poughkeepsie v. Flacke
84 A.D.2d 1, 445 N.Y.S.2d 233
N.Y.A.D., 1981.

84 A.D.2d 1, 445 N.Y.S.2d 233

In the Matter of the Town of Poughkeepsie, Appellant,
v.
Robert F. Flacke, as Commissioner of the New York
State Department of Environmental Conservation, et
al., Respondents
Supreme Court, Appellate Division, Second Depart-
ment, New York

December 28, 1981

CITE TITLE AS: Matter of Town of Poughkeepsie v
Flacke

SUMMARY

Appeal from a judgment of the Supreme Court at
Special Term (Joseph Giudice, J.), entered September
10, 1980 in Dutchess County, which, in a proceeding
pursuant to CPLR article 78, dismissed the petition.

Matter of Town of Poughkeepsie v Flacke, 105 Misc
2d 149, affirmed.

HEADNOTES

Environmental Conservation--Environmental Impact
Statement--Related Litigation Pending

(1) A CPLR article 78 proceeding to annul a deter-
mination of respondent Commissioner of the De-
partment of Environmental Conservation, which au-
thorized the operation of a solid waste management
facility on certain property located in petitioner town
and which determination was based upon a hearing
report, made by an Administrative Law Judge after a
public hearing and consideration of a final environ-
mental impact statement, was properly dismissed; that
the property was in a residential district and that the *2
town was involved in litigation with the property

owner concerning the valid use of the property under
the town's zoning ordinance, facts of which respon-
dent was aware when the decision was made, did not
bar the Department of Environmental Conservation
from acting, since the invocation of the State Envi-
ronmental Quality Review Act (ECL art 8) was not
intended to and did not pre-empt or in any way inter-
fere with the zoning ordinance or with the pending
litigation, nor did it conflict with section 269 of the
Town Law, because it was not an attempt to impose
higher standards in derogation of that statute and,
moreover, the department is not interfering with the
physical *status quo* of the land while the litigation is
pending.

APPEARANCES OF COUNSEL

David D. Hagstrom (Anthony DeRosa of counsel), for
appellant.

*Robert Abrams, Attorney-General (Kathleen Liston
Morrison, James A. Sevinsky and Shirley Adelson
Siegel of counsel)*, for Robert F. Flacke, respondent.

OPINION OF THE COURT

Cohalan, J.

This appeal is from a judgment of the Supreme Court,
Dutchess County, that dismissed the petition in a
CPLR article 78 proceeding (105 Misc 2d 149). The
proceeding was brought on the petition of the Town of
Poughkeepsie (Town) to annul the determination of
the Commissioner of the State Department of Envi-
ronmental Conservation (DEC) which authorized the
operation of a solid waste management facility (land-
fill) by Dutchess Sanitation Service, Inc. (Dutchess),
in a residential portion of the Town, subject to nu-
merous conditions.

The issues to be resolved on this appeal are:

(1) The jurisdiction of the State Environmental Qual-
ity Review Act; and,

(2) To what extent and when it may be exercised with
respect to the factual circumstances of this case.

The current Environmental Conservation Law (ECL)

84 A.D.2d 1

(Cite as: 84 A.D.2d 1, 445 N.Y.S.2d 233)

was enacted by section 2 of chapter 664 of the Laws of 1972, effective September 1, 1972. In large part it is comprised of the former Environmental Conservation Law and also *3 includes certain portions of the Agriculture and Markets Law, the Conservation Law, the Executive Law, the Public Health Law, and certain unconsolidated laws.

By section 1 of chapter 612 of the Laws of 1975, effective September 1, 1976, a new article 8 came into being entitled (State) Environmental Quality Review (Act) whose acronym is SEQRA. As stated in section 8-0101 of the article: "It is the purpose of this act to declare a state policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and enhance human and community resources; and to enrich the understanding of the ecological systems, natural, human and community resources important to the people of the state."

In ECL 8-0103 (subd 6) (as amd by L 1977, ch 252, § 1), entitled legislative findings and declaration, we find that: "It is the intent of the legislature that to the fullest extent possible the policies, statutes, regulations, and ordinances of the state and its political subdivisions should be interpreted and administered in accordance with the policies set forth in this article. *However, the provisions of this article do not change the jurisdiction between or among state agencies and public corporations.*" (Emphasis added.)

Pursuant to the provisions of the ECL, Dutchess filed an application with DEC to carry out specific operations on its real property within the Town; among other items a sanitary landfill. Dutchess owns approximately 64 acres of land in the Town. On about 10 of the acres it operates a baling facility for waste paper products. This operation is a nonconforming use of 20 years' duration, by virtue of which Dutchess is permitted to conduct a "business consisting of the collection of garbage, commercial and residential", on the site.

The chronology indicates that the Town adopted an overall zoning ordinance on February 20, 1974; and that Dutchess, according to the Town, has illegally operated a landfill at the site since 1977.

A public hearing on Dutchess' application was held

before an Administrative Law Judge (ALJ). Due notice of *4 the hearing was advertised and the hearing itself was conducted. It terminated on March 4, 1980.

As a part of its proof, Dutchess prepared a draft environmental impact statement (DEIS) which was accepted as sufficient for hearing purposes. In his decision accepting the hearing report of the ALJ (which included 11 conditions satisfactory to the parties) the respondent commissioner noted in part that: "The Hearing Report in this case reveals that environmental impacts have been adequately addressed and that in exercising this Department's jurisdiction over the instant permit applications the findings under 6 NYCRR § 617.9 (c) can be made in the affirmative. *In this regard, the Hearing Report, together with the draft EIS constitutes the final EIS.* Accordingly, consistent with 6 NYCRR § 617.9 (a) this Decision will be effective 15 days from the date of service of this Decision whereupon the Department staff is directed to issue the relevant permits approved herein consistent with the recommendations of the Hearing Report." (Emphasis added.)

At the time he issued his decision, the commissioner was aware that the property was in a residential district and that Dutchess was involved in litigation with the Town concerning the valid use of the property.

The main thrust of the Town's appeal is that the DEC is barred as a matter of law from acting until Dutchess has proved its compliance with all applicable laws, including the zoning ordinance. As a corollary, states the Town, the commissioner as head of the "lead agency",^{FN1} may not, in violation of ECL 8-0109 (subd 8) issue any permits until the Town suit is determined. That subdivision reads: "When an agency decides to carry out or approve an action which has been the subject of an environmental impact statement, it shall make an explicit finding that the requirements of this section have been met and that consistent with social, economic and other *essential considerations*, to the maximum extent practicable, adverse environmental effects revealed in the environmental impact statement *5 process will be minimized or avoided." (Emphasis added.)

^{FN1} A "lead agency" is "an agency principally responsible for carrying out, funding or approving an action, and therefore responsible for determining whether an environmen-

84 A.D.2d 1

(Cite as: 84 A.D.2d 1, 445 N.Y.S.2d 233)

tal impact statement is required in connection with an action, and for the preparation and filing of the statement if one is required.” (6 NYCRR 617.2 [q].)

The Town now contends, on appeal, as it did at the public hearing, that the zoning ordinance and comprehensive plan were “essential considerations”; that any action in conflict with them leads to the conclusion of adverse environmental effects; and that an approving agency (in this case DEC) as the lead agency must make an explicit finding as to all adverse environmental effects (see ECL 8-0109, subd 8). In addition, it contends that Dutchess failed to sustain its burden of proof.

In support of its position, the Town cites section 269 of the Town Law, which in pertinent part, states: “Wherever the regulations made under authority of this article ... impose other higher standards than are required in any other statute or local ordinance or regulation, the provisions of the regulations made under authority of this article shall govern.” DEC found that the landfill at issue met all the environmental requirements; and so, subject to the Town zoning ordinances and with the knowledge, as noted above, that the Town is seeking a permanent injunction against Dutchess, it granted the relief sought. It may have been premature from the standpoint of the municipality but it was, nonetheless, lawful. The hearing officer (ALJ) and the commissioner observed all the statutory enactments with meticulous exactness. The ALJ included in his report a statement that “Granting of the approvals and permits for this overall Project [landfill] does not relieve the Applicant [Dutchess] of its responsibility to obtain any other required approvals from any other unit of government having jurisdiction” (bracketed matter added); and in confirming the report, the commissioner wrote: “It is fundamentally clear that the jurisdiction of this Department under the ECL does not include authority to adjudicate legal issues concerning compliance with local government zoning. It is equally clear that SEQR [*sic*] did not intend to confer, directly or indirectly, any such authority.”

Thus, the invocation of SEQRA was not intended to and did not pre-empt nor in any way interfere with the zoning ordinance or with the pending litigation. (See *6 Monroe-Livingston Sanitary Landfill v Town of Caledonia, 51 NY2d 679, 684; ECL art 27.) Nor did it

conflict with section 269 of the Town Law because it is not attempting to impose higher standards in derogation of that statute.

From a practical standpoint, the precise timing of the draft EIS (and the final EIS) is meaningless in this instance. There is little or no likelihood that the subject property is going to experience any physical changes. “The hills rock-ribbed and ancient as the sun, the vales stretching in pensive quietness between”^{FN2} will remain undisturbed, at least until the determination of the pending litigation. There is no indication that DEC is interfering with the physical *status quo*; and indeed the statements of the ALJ and the commissioner directly negate any such intention.

FN2 Thanatopsis -- by William Cullen Bryant.

On the question of jurisdiction, if the commissioner attempted to arrogate unauthorized power to himself by deciding the zoning question, it would be akin to a workers' compensation referee reaching a determination not only on the issue before him, but also ruling on the merits of any third-party action the compensation claimant might assert.

In certain circumstances, as at bar, the ECL necessarily comes into play; and as noted in H.O.M.E.S. v New York State Urban Dev. Corp. (69 AD2d 222, 232): “there is a relatively low threshold for impact statements” and SEQRA requires an EIS for any action “which may have a significant effect on the environment”. (See, also, Matter of Kravetz v Plenge, 102 Misc 2d 622.) Research has uncovered no case that dictates when the EIS is to be prepared, just so long as it is done before the project (herein the landfill) commences.

Thus we conclude that DEC and Special Term acted properly and accordingly affirm the judgment, without costs or disbursements.

Finally, we strongly urge Dutchess and the Town to employ all means at their disposal to expedite the trial of the pending litigation.

Hopkins, J. P., Rabin and O'Connor, JJ., concur. *7
Judgment of the Supreme Court, Dutchess County, dated September 10, 1980, affirmed, without costs or

disbursements. *8

Copr. (c) 2011, Secretary of State, State of New York
N.Y.A.D.,1981.

TN OF POUGHKEEPSIE V FLACKE
84 A.D.2d 1, 445 N.Y.S.2d 233602

END OF DOCUMENT

KEYCITE

P Town of Poughkeepsie v. Flacke, CITE TITLE AS: Matter of Town of Poughkeepsie v Flacke, 84 A.D.2d 1, 445 N.Y.S.2d 233 (N.Y.A.D. 2 Dept., Dec 28, 1981) (NO. 2726 E)

History

Direct History

H 1 Town of Poughkeepsie v. Flacke, 105 Misc.2d 149, 431 N.Y.S.2d 951 (N.Y.Sup. Sep 10, 1980)

Judgment Affirmed by

=> 2 Town of Poughkeepsie v. Flacke, 84 A.D.2d 1, 445 N.Y.S.2d 233 (N.Y.A.D. 2 Dept. Dec 28, 1981) (NO. 2726 E)

Appeal Denied by

H 3 Town of Poughkeepsie v. Flacke, 57 N.Y.2d 602, 439 N.E.2d 1245, 454 N.Y.S.2d 1026 (N.Y. Jul 02, 1982) (Table)

Negative Citing References (U.S.A.)

Distinguished by

C 4 Tayntor v. New York State Dept. of Environmental Conservation, 130 A.D.2d 571, 515 N.Y.S.2d 513 (N.Y.A.D. 2 Dept. May 11, 1987) (NO. 3906E, 3907E) * * **HN: 1 (N.Y.S.2d), 1 (A.D.2d)**

From: Alison Crocker
To: yeh@westfirmlaw.com
CC: Spreitzer, Carin; Maglienti, Jennifer; Russo, Steven; Crisafulli, Scott; Berkman, Thomas; Garlick, Sandra
Date: 8/15/2011 12:58:09 PM
Subject: Summaries of Regulatory Revisions

Dear Yvonne - Attached you will find summaries prepared by the Divisions of Mineral Resources, Water, Lands and Forests and Fish, Wildlife and Marine Resources, to guide our discussion this afternoon. Please forward these to all the attendees, particularly those participating by telephone (apologies for short turnaround time). I will also have paper copies available.

As all participants are most likely aware, the Department is seeking input from the regulated industry regarding the costs of complying with the regulatory restrictions and protections on high-volume hydraulic fracturing.

Alison H. Crocker, Esq.
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Attachments: Summary of DLF and DFWMR Regulations_1_1_1.pdf, Rulemaking Proposal, Outreach.pdf, 081511 DOW reg summary.pdf

Summary of Proposed Regulations addressing HVHF on State Lands

Consistent with the proposal set forth in the July 2011 preliminary DSGEIS, the Division of Lands and Forests and the Division of Fish, Wildlife and Marine Resources will propose regulations that would prohibit surface activity associated with HVHF on State owned lands administered by these two Divisions. Specifically, the regulation would prevent the issuance of a permit for HVHF when the well pad is proposed to be located on State owned lands, notwithstanding the existence of a mineral rights lease executed by the State.

OIL AND GAS RULEMAKING

STAKEHOLDER OUTREACH

August 15, 2011

The Department proposes to adopt the following regulations in Part 550-558:

Part 550, Promulgation and Enforcement of Rules and Regulations

- Part 550 will receive a new heading and Section 550.2 will be revised to reflect to current organizational structure of the Division of Mineral Resources.
- Several new definitions will be added to Section 550.3 including hydraulic fracturing, true measured depth and true vertical depth.

Part 551, Reports and Financial Security

- Minor changes will be made to paragraph 551.1(a) to clarify that organizational reports are needed for any company that deepens, plugs back or converts a well, and further will clarify that drilling of wells applies to storage, stratigraphic and geothermal wells.
- Section 551.6 will be revised to conform the regulations to statutory language.

Part 552, Permits to Drill, Deepen, Plug Back or Convert Wells

- Section 552.1 will be clarified to indicate that a permit is required before construction of the well pad begins. Other regulations refer to the “commencement of operations” and this has caused confusion in the regulated community.
- A new permit will be required to re-fracture a well.
- Section 552.2 will be modified to extend the permit term from six months to two years.
- Section 552.2 will also include language to clarify that once an operator commences operations, the permit remains valid for the life of the well.
- Section 552.3 will be revised to allow the department to re-issue a permit for the same location when there is a change in operator. The existing regulation allows the department to re-issue the same permit for a different location, however, review of a permit application for a different location would require a significant amount of staff time. Reissuance of a permit for a new location was also rare, so the proposed change would be more consistent with current practice.

Part 553, Well Spacing

- Since the 2005 legislative changes to ECL Article 23, Title 5, the regulatory definition of “statewide spacing” continued to reflect the pre-2005 method of establishing spacing units. The statutory definition of statewide spacing will be incorporated into Part 553, verbatim.
- For wells in pre-1995 gas wells, the regulations will be conformed to ECL Article 23, Title 5 and for wells exempt from Title 5, the default setbacks for well spacing will remain at 660 feet from any boundary line of the lease and 1,320 from any other well in the same pool.
- Section 553.3, which currently refers to spacing orders, will reflect that permit issuance establishes the spacing unit. The proposed regulations will also remove the requirement for a public hearing prior to adoption of the spacing unit, since spacing orders are no longer required for wells that meet statewide spacing. The regulations will retain the Department’s authority to issue spacing orders, since on occasion, there are wells drilled in pre-1981 oil fields and pre-1995 gas fields. The statutory language in ECL Article 23, Title 5 for non-conforming units is not currently part of the department’s proposed rulemaking.
- Section 553.3 will also incorporate verbatim, a portion of Title 5 that allows the Department to modify statewide spacing units.
- Changes will be made to Part 553.4 to conform the variance process to current practice. As written, the existing rule required a hearing on any request for an exception to the setbacks listed in Sections 553.1, 553.2 and 553.3 of Title 6. The proposed rulemaking will convert this to a notice and public comment period, and will instead give department staff the ability to schedule a hearing if substantive and significant issues are raised. Current practice is to request the assignment of an ALJ from OHMS after a substantive and significant issue has been raised, so the change will not significantly alter how the department presently handles variances.

Part 554, Drilling Practices and Reports

- A requirement will be added to subdivision (a) to require submission of a plan for disposal of drill cuttings.
- The regulation will also be modified to remove the sentence which indicates that drilling muds are not polluting fluids.
- Section 554.5, which concerns deviation from the surface location, will be modified to describe the deviation of a horizontal well. Existing regulations also do not reflect current drilling practices, in that the regulations required specific approval and application requirements for intentionally deviated wells. The department’s current Application to Drill, Deepen, Plug Back and Convert already provides the means for operators to notify the department of their intent to drill a horizontal well, so some of the application requirements in 554.5 are unnecessary.
- Section 554.7 will be modified to require an interim completion report, where the regulations now provide for a report 30 days after well completion.

Part 555, Plugging and Abandonment

- The minimum plugging requirements will be updated to reflect more modernized plugging practices by increasing the length of required plugs and will require that uncemented casing be pulled as low as practical. The regulation will also provide more specificity to what is considered heavy, mud-laden fluid.

A new Part 560 will be added, tentatively titled, “Drilling, Operation and Stimulation of Low-Permeability Reservoirs.”

- The proposed rulemaking contains seven new sections, addressing applicability, providing new definitions, application requirements, setbacks, recordkeeping requirements, well construction and reclamation.
- Part 560 will contain virtually all of the mitigation measures outlined in Appendix 10 of the preliminary Revised Draft SGEIS, with some limited exceptions.
- Part 560 will promulgate private well testing requirements, and will promulgate many of the environmental assessment form addendum requirements in Appendix 6 of the preliminary Revised Draft SGEIS.
- Part 560 will also include the protocols for chemical additive disclosure, and will specifically reference an operator’s ability to apply for trade secret protection. The draft rule will also make clear that information on chemical additives will not be considered a well record.

Proposed Changes
to
6 NYCRR Part 750

- * 750-1 text added for clarity, ex. New York State law provides authority greater in scope than the federal Clean Water Act.

A new section is created to gather all of the existing ECL Article 17 and Parts 750-1 and 750-2 requirements for groundwater and surface water resource protection and clarify the conditions that specifically apply to high volume hydraulic fracturing (HVHF). Currently, these requirements must be met by everyone who proposes an activity that may result in a discharge of pollutants to ground or surface water resources of the State, and who plans construction that will disturb more than one acre of land. The new Subpart clarifies in regulation the measures described in Chapter 7 of the draft Supplemental Generic Environmental Investigation Statement (dSGEIS) to avoid or mitigate potential impacts from HVHF upon water resources. The new section adds to the list of prohibitions in 750-1.3 by providing that no SPDES permit will be issued for HVHF activities and discharges within 4000 feet of unfiltered surface water supply watersheds, within 500 feet of a primary aquifer, within 100 year floodplains, or within 2000 feet of any public water supply.

The new section requires HVHF drillers to provide a written evaluation of the additive products they intend to use and the applicant must utilize additive products, which exhibit the least aquatic toxicity and pose the least risk to water resources and the environment, or provide documentation that the applicant has demonstrated to the Department's satisfaction, that some of the available alternative products are not equally effective or feasible.

Finally, the new section allows an eligible applicant to obtain a new SPDES general permit to cover all potential discharges associated with HVHF activities during construction of the wellpad, drilling and stimulation of wells including a plan for disposal of flowback, production of oil or gas including disposal of brine, and completion of the well. If an applicant is not eligible for the new general permit because the applicant proposes to build a wellpad within certain setback areas such as within 500 feet of a principal aquifer, for example, the new section provides that the applicant could be eligible for an individual SPDES permit.

From: Thomas West <twest@westfirmlaw.com>
To: Maglienti, Jennifer; Russo, Steven; Crocker, Alison
CC: Hennessey, Yvonne
Date: 8/17/2011 12:49:31 PM
Subject: RE: Draft Oil and Gas Regulations

Thanks for the update Steve. If everything the Division of Water is proposing will be in the GP, then we will do our best within the timeframe that you are proposing. If they are going to propose additional regulatory requirements in the regulations, which seemed evident from the discussion on Monday, then we will need an outline of those requirements, similar to what Minerals has provided, to get you a meaningful analysis. Of course, any information that we are able to submit will be subject to the caveat that the information is based upon the outline of proposals that was provided to us and our responses may change once we get to see the actual proposed rules and regulations.

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From: Steven Russo [mailto:scrusso@gw.dec.state.ny.us]
Sent: Wednesday, August 17, 2011 12:43 PM
To: Alison Crocker; Jennifer Maglienti; Thomas West
Cc: Yvonne Hennessey
Subject: RE: Draft Oil and Gas Regulations

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Not much more we can do beyond that and hopefully it will be sufficient. We need the information by a week from Monday. Please do your best.

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Sent: Wednesday, August 17, 2011 12:12 PM
To: Thomas West
Cc: Yvonne Hennessey
Subject: Draft Oil and Gas Regulations

Tom - as requested, attached is a more detailed summary of the proposed Part 560.

Jennifer

From: Thomas West <twest@westfirmlaw.com>
To: Maglienti, Jennifer; Russo, Steven; Crocker, Alison
CC: Hennessey, Yvonne
Date: 8/17/2011 1:03:49 PM
Subject: RE: Draft Oil and Gas Regulations

Thanks for the clarification Steve. We will comment on what you have provided or will provide to us by the close of business today, but it will be difficult to get meaningful information in such a short period of time. In addition, we remain concerned about the duplication of efforts by different programs within the DEC. Since the unnecessary duplication of efforts by state agencies is a theme of the Cuomo administration, you should expect comments from our group to that effect as part of our official comments.

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To: Maglienti, Jennifer; Russo, Steven; Crocker, Alison
CC: Hennessey, Yvonne
Date: 8/17/2011 3:26:27 PM
Subject: RE: Draft Oil and Gas Regulations

Thanks for the update Steve. We will endeavor to get the Department as much meaningful information as possible within the time allotted. We had a conference call with our group this afternoon and laid out a schedule to meet your deadline. The sooner you can get us the draft General Permit, the better. Our information will be organized consistent with what is contemplated by the State Administrative Procedures Act. Since IOGA New York includes a number of operators that will be active in the shale plays and fall within the definition of a small business under SAPA, you should be preparing a Regulatory Flexibility Analysis in addition to the Regulatory Impact Statement. We will get you information on that subject matter as well.

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Tom and Yvonne - we will be preparing all documents required by SAPA to accompany this rule-making proposal

>>> Thomas West <twest@westfirmlaw.com> 8/17/2011 3:25 PM >>>

Thanks for the update Steve. We will endeavor to get the Department as much meaningful information as possible within the time allotted. We had a conference call with our group this afternoon and laid out a schedule to meet your deadline. The sooner you can get us the draft General Permit, the better. Our information will be organized consistent with what is contemplated by the State Administrative Procedures Act. Since IOGA New York includes a number of operators that will be active in the shale plays and fall within the definition of a small business under SAPA, you should be preparing a Regulatory Flexibility Analysis in addition to the Regulatory Impact Statement. We will get you information on that subject matter as well.

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*This transmittal is subject to our standard e-mail legend.

From: Steven Russo [mailto:scrusso@gw.dec.state.ny.us]
Sent: Wednesday, August 17, 2011 1:36 PM
To: Alison Crocker; Jennifer Maglienti; Thomas West
Cc: Yvonne Hennessey
Subject: RE: Draft Oil and Gas Regulations

You may not get the GP until tomorrow. If you are not able to provide information within the time period proposed, or with the information provided, please let me know asap as it will have implications for our schedule going forward for both the rule making and the DSGEIS.

As for duplication of efforts, I assure you it is our intent to create a coordinated process for issuance of the requisite permits should this activity go forward.

Steven C. Russo
Deputy Commissioner and General Counsel
NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010
Ph: 518-402-9401/Fax: 518-402-9016

>>> Thomas West <twest@westfirmlaw.com> 8/17/2011 1:03 PM >>>

Thanks for the clarification Steve. We will comment on what you have provided or will provide to us by the close of business today, but it will be difficult to get meaningful information in such a short period of time. In addition, we remain concerned about the duplication of efforts by different programs within the DEC. Since the unnecessary duplication of efforts by state agencies is a theme of the Cuomo administration, you should expect comments from our group to that effect as part of our official comments.

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*This transmittal is subject to our standard e-mail legend.

From: Steven Russo [mailto:scrusso@gw.dec.state.ny.us]
 Sent: Wednesday, August 17, 2011 12:54 PM
 To: Alison Crocker; Jennifer Maglienti; Thomas West
 Cc: Yvonne Hennessey
 Subject: RE: Draft Oil and Gas Regulations

I did not say that. Everything DOW is proposing to regulate is presented in the materials previously provided, and you will have more detail as to precise stormwater regulations as described in the draft GP. The items such as the additive assessment will appear in DOW regulations, as well as the DSGEIS setbacks ... so a number of items beyond the stormwater requirements will be in DOW regulations, though they have already been outlined in the PSGEIS and in the material previously provided. Some items like the setbacks may appear in both draft parts (minerals and water) but if we do our job correctly they should be consistent with each other.

Hopefully the information as described will be sufficient.

Steven C. Russo
 Deputy Commissioner and General Counsel
 NYS Department of Environmental Conservation
 625 Broadway
 Albany, New York 12233-1010
 Ph: 518-402-9401/Fax: 518-402-9016

>>> Thomas West <twest@westfirmlaw.com> 8/17/2011 12:49 PM >>>

Thanks for the update Steve. If everything the Division of Water is proposing will be in the GP, then we will do our best within the timeframe that you are proposing. If they are going to propose additional regulatory requirements in the regulations, which seemed evident from the discussion on Monday, then we will need an outline of those requirements, similar to what Minerals has provided, to get you a meaningful analysis. Of course, any information that we are able to submit will be subject to the caveat that the information is based upon the outline of proposals that was provided to us and our responses may change once we get to see the actual proposed rules and regulations.

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*This transmittal is subject to our standard e-mail legend.

From: Steven Russo [mailto:scrusso@gw.dec.state.ny.us]
 Sent: Wednesday, August 17, 2011 12:43 PM
 To: Alison Crocker; Jennifer Maglienti; Thomas West
 Cc: Yvonne Hennessey
 Subject: RE: Draft Oil and Gas Regulations

We are going to send you a DRAFT (with an emphasis on draft) of the GP for purpose of developing costs of compliance. As for other details, you have what we can provide at this time which I think should be sufficient to develop some cost information.

Not much more we can do beyond that and hopefully it will be sufficient. We need the information by a week from Monday. Please do your best.

Steven C. Russo
 Deputy Commissioner and General Counsel
 NYS Department of Environmental Conservation
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 Ph: 518-402-9401/Fax: 518-402-9016

>>> Thomas West <twest@westfirmlaw.com> 8/17/2011 12:38 PM >>>

Thanks Jen. We will also need to see a similar list of proposals from any other Divisions or Bureaus in the DEC that will be proposing regulations. We are particularly concerned about some of the proposals that are being developed in the Division of Water, which seem to overlap some of the functions at Minerals. Since the cost of implementing and

overseeing this program will remain a significant issue in New York State, it will be important for the DEC to avoid unnecessary overlap.

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-----Original Message-----

From: Jennifer Maglienti [<mailto:jlmaglie@gw.dec.state.ny.us>]
Sent: Wednesday, August 17, 2011 12:12 PM
To: Thomas West
Cc: Yvonne Hennessey
Subject: Draft Oil and Gas Regulations

Tom - as requested, attached is a more detailed summary of the proposed Part 560.

Jennifer

From: Marc Gerstman
To: West, Thomas
CC: Leff, Eugene; Russo, Steven
Date: 8/22/2011 7:55:35 PM
Subject: Re: FW: SGEIS Schedule

Tom,
 Lets talk in the morning.
 Marc

>>> Thomas West <twest@westfirmlaw.com> 8/22/2011 12:29 PM >>>

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*This transmittal is subject to our standard e-mail legend.

From: Thomas West
Sent: Monday, August 22, 2011 12:16 PM
To: 'Steven Russo'; Jennifer Maglienti; 'mgerstman@gw.dec.state.ny.us'
Cc: 'robert.rosenthal@exec.ny.gov'; 'thomas.congdon@exec.ny.gov'; 'Paul Hartman'; 'Brad R. Gill'; Jim Carr
Subject: SGEIS Schedule

Steve, please see the information below, which indicates that there will be 180 day comment period on the revised SGEIS. We need to know if this information is accurate and, if not, what the actual schedule is given the outstanding request from the Department for cost information on an expedited basis. We have a conference call with our group tomorrow. Given the far-reaching, but vague proposals from the Division of Water that we received on Friday, it remains uncertain whether we will be providing any detailed cost information on an expedited basis.

On a more substantive level, it appears that the administration is still pushing the home rule issue, which we continue to believe is inconsistent with New York law and the consistent position taken by the Department concerning that issue for many years. The combination of promoting home rule and the many far-reaching proposals from the Division of Water are likely to kill the play and any opportunity for jobs and economic development for many years to come.

Information from the opposition:

Martha Robertson of Tompkins County Council of Government and Marion Karl of Cooperstown organized some important meetings in Albany.

Martha could not make the trek, but Marion was joined by Dr. John Davis, Helen Slottje, Harry Levine and myself.

Marion arranged a meeting for an hour at the Capital Building with one of the Governor's top aides.

Separate meeting was arranged by Martha at the DEC with 4 staff members.

The upshot of these meetings can be summarized as follows:

**1. The DEC and Administration are amenable to Home Rule - but need a political push
 From a ministerial perspective - requiring the applicant to show evidence of compliance with local zoning
 And to clarify Home Rule in the legislature.**

Some towns will pass ordinances, many will not - up to them - as it should be - at a minimum. Just like out West.

**2. The local shale gas prohibitions are having a major impact politically - and need to be expanded
 They were all very interested to see which towns and cities have adopted prohibitions.**

**Would be helpful for more cities to pass measures - Syracuse and Utica are prime examples.
 Even though they might be on the edge of shale gas industrialization, an important political gesture**

3. The DEC has no idea how to pay for the impacts of enforcement, etc. - they asked for ideas

This was in fact the main topic of the DEC's Advisory Panel - 'how are they going to cope' ?

We suggested that a severance tax as overdue and would have to be in place prior to the issuance of permits

They are well aware that NYS is the odd-man-out (along with Pa.) on this nationally - and globally . . .

Simply because of a lack of leadership in Albany.

One person (unnamed) said that the ad valorem tax was the same as a severance tax (a notion created by a lobbyist ?)

We explained how they differed and the trade-off between increased ad valorem taxes and decreased property values

The proposed application permits should cover costs of increased staffing - this needs to be an response to the dSGEIS

The proposed plugging liability - \$5,000 shows how behind the times the DEC is.

4. The DEC/ Admin wants insightful responses to the SGEIS -

For instance, they asked for suggestions on how to address cumulative impacts

We gave them some suggestions, and will follow up.

Get your responses ready now for the comment period.

TinyURL.com/2011SGEISFlaws

The more substantive the better, with attributions, with empirical data, tied to an SGEIS section.

For towns without local ordinances, the DEC's regulations will be their de facto industrial land use plan.

5. The comment period is likely to be extended to 180 days with 4 public hearings - thanks to your responses

So keep those phone calls coming into the Administration . . .

Call

• DEC dept of Public Affairs and Communication: 518-402-8044

▪ Gov. Cuomo's office: 518-474-8390

PLEASE MAKE THIS CALL... and say: "Extend the SGEIS public comment period to 180 days and hold public hearings."

Chip



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From: Thomas West <twest@westfirmlaw.com>
To: Gerstman, Marc
CC: Maglienti, Jennifer; Russo, Steven; Crocker, Alison
Date: 8/23/2011 4:56:50 PM
Subject: SGEIS and Associated Rulemaking Process

Marc, thanks for the opportunity to talk today. As mentioned, we had a long call this afternoon to discuss where industry stands as a result of the draft SGEIS and the more recent rulemaking proposals. Suffice it to say, there is great concern whether drilling can proceed in New York State given these proposals. We would like to suggest a high level meeting with the Executive Staff at DEC and representatives from industry to go over the more significant issues that we have identified that will either make New York noncompetitive or make drilling infeasible. Our working group has been given the task to identify those issues and alternatives by the end of this week with a view towards meeting with you and other members of the Executive Staff next week. Our preference would be to meet Wednesday afternoon if that works for you and your colleagues. We will be prepared to share our concerns with you in writing in advance of that meeting in full recognition that any document that we submit to you will be subject to disclosure under the Freedom of Information Law.

We recognize that the Department is looking for cost information concerning the regulatory proposals by early next week, but we feel that we must delay supplying any cost information to the Department until we have this meeting and feedback from the Department concerning whether there will be any adjustments to the regulatory proposals concerning those issues. Only then will industry be able to make a decision concerning the extent to which they will participate in this process.

Again, thank you for your time and attention to these important issues. If you have any questions or concerns, please feel free to contact me.



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From: Thomas West <twest@westfirmlaw.com>
To: Gerstman, Marc
CC: Maglienti, Jennifer; Russo, Steven; Crocker, Alison; Cornue', 'Dave; Hennessey, Yvonne
Date: 8/24/2011 11:45:56 AM
Subject: FW: Map sources

Marc, the Department has provided industry with baseline data for some of the data points that serve as the basis for the prohibitions and setbacks in the proposed SGEIS and regulations. However, we have not been provided copies of the Department's shape files that include GIS data on how the setbacks and prohibitions appear in map format. The practical impact of the setbacks and prohibitions is a significant concern to industry. We are preparing some examples to include in the analysis that will be provided to the Department next week and it would be good to have this GIS data, as applied, to include in that analysis.

Thanks again for your ongoing attention to these issues.

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*This transmittal is subject to our standard e-mail legend.

From: Yvonne Hennessey
Sent: Wednesday, August 24, 2011 10:41 AM
To: Dave Cornue
Cc: Thomas West
Subject: FW: Map sources

Dave,

Tom asked me to forward you the contact name for the shape files. Ken's information is listed below in his original email.

Thanks.

Yvonne E. Hennessey, Esq.
The West Firm, PLLC
677 Broadway - 8th Floor
Albany, New York 12207

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This email transmittal is subject to our standard email legend.

From: Kenneth Kosinski [mailto:kakosins@gw.dec.state.ny.us]
Sent: Wednesday, August 17, 2011 1:10 PM
To: Yvonne Hennessey
Cc: Carin Spreitzer; Christina Falk; Jack Dahl; Jennifer Maglienti; Kathleen Sanford; Mark Klotz; Peter Briggs; Scott Crisafulli
Subject: Map sources

requested info attached.

contact me with any questions. thanks

Kenneth Kosinski, P.E.
Section Chief
Watershed Implementation Section
Division of Water
Office: (518) 402-8110
FAX: (518) 402-9029
kakosins@gw.dec.state.ny.us

From: Eugene Leff
To: West, Thomas
CC: Maglienti, Jennifer; Gerstman, Marc; Russo, Steven; Crocker, Alison; Cornue', 'Dave; Hennessey, Yvonne
Date: 8/25/2011 10:56:02 AM
Subject: Re: FW: Map sources

Tom-

Marc asked me to get back to you on this request. I understand that for most of this data, we accessed publicly available files and already provided those data sources to you. However, I would suggest that you have a technical person contact the Division of Water's Christina Falk (402-8111) or Ken Kosinski (402-8086) to clarify this highly technical matter.

Please let me know if that does not provide what you need.

Thanks.

Gene

Eugene J. Leff
Deputy Commissioner
New York State Department of
Environmental Conservation
625 Broadway
Albany, NY 12233
518-402-2794

>>> Thomas West <twest@westfirmlaw.com> 8/24/2011 11:45 AM >>>

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Thanks again for your ongoing attention to these issues.

Thomas S. West

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Cc: Carin Spreitzer; Christina Falk; Jack Dahl; Jennifer Maglienti; Kathleen Sanford; Mark Klotz; Peter Briggs; Scott Crisafulli
Subject: Map sources

requested info attached.

contact me with any questions. thanks

Kenneth Kosinski, P.E.
Section Chief
Watershed Implementation Section
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From: "Brad Gill" <brad.earthenergy@gmail.com>
To: Martens, Joe; brad.earthenergy@gmail.com
CC: Field, Bradley; Leff, Eugene; Maglienti, Jennifer; Gerstman, Marc; Russo, Steven; Arthur', 'Dan; Cornue', 'Dave; Carr, Jim; Ginsburg, Mara; West, Tom; Hennessey, Yvonne
Date: 9/2/2011 3:41:51 PM
Subject: Preliminary industry comments

Dear Commissioner Martens:

Attached for your review is a document prepared by the Independent Oil and Gas Association of New York (IOGANY) reflecting industry's comments and concerns about the sGEIS, the rule-making process, and the resulting economic impacts to New York. This represents a collaborative effort from various industry sources and it may provide a good working basis for our meeting next Tuesday.

Please contact me at any time to discuss.

Best regards,

Brad

Brad Gill
Executive Director
Independent Oil and Gas Association of New York
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Hamburg, NY 14075
716.202.4688 Ph
716.202.4689 Fax
iogany.org

Attachments: IOGA-DEC Economic Impacts letter FINAL.pdf



**Independent
Oil & Gas Association
of New York**

September 2, 2011

Mr. Joe Martens, Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Subject: Preliminary Revised Draft Supplemental Generic Environmental Impact Statement
Economic Impediments to Shale Gas Development

Dear Commissioner Martens:

The Independent Oil and Gas Association of New York (IOGA of NY) respectfully submits the following concerns regarding the Preliminary Revised Draft Supplemental Generic Environmental Impact Statement (prdSGEIS), the associated rule-making, the parallel effort to expand the general permit program relative to stormwater discharges from natural gas drilling and completion activities, and the anticipated economic impacts to shale gas development in New York. We anticipate that this document will frame the issues for discussion at our meeting on Tuesday, September 6. IOGA of NY is submitting this document in part:

- (1) To assess the wisdom of proceeding with a broad rule-making in the face of the incremental and increasing economic costs associated with the requirements identified within the prdSGEIS, and
- (2) To assist the New York State Department of Environmental Conservation (DEC) in understanding the economic impacts to the oil and gas industry so that the decision-makers in New York State will have a better understanding of why a number of these proposals will delay or preclude drilling activities in New York for many years to come.

This document is not intended to be a comprehensive list of issues in prdSGEIS and the associated regulatory processes that are of concern to IOGA of NY. Rather, it is intended only to highlight critical issues that need to be addressed now. If not revised, the Supplemental Generic Environmental Impact Statement (SGEIS) and the associated regulatory processes will make shale gas development in New York non-competitive with other states. As a result, the capital that is necessary for drilling and production will continue to flow elsewhere. In turn, the lack of investment in New York will seriously impact landowners, local communities in the form of lost property taxes, and the state through lost income and sales taxes. Of course, the state will also forego the biggest prize of all: an indigenous supply of clean-burning natural gas.

IOGA of NY has had several discussions with its member companies, as well as other interested industry representatives, and has concluded that conducting broad rule-making concurrently with the adoption of the SEGIS is not in the best interests of the state, landowners or industry. Our comments in this document, therefore, are being submitted subject to a full reservation of rights regarding the propriety of and technical justification for the rule-making process. Although we recognize that the DEC has

requested specific cost information regarding all of the mitigation proposals that are intended to be incorporated in new rule-making, the IOGA of NY SGEIS Working Group has determined that it would be futile to provide detailed cost information regarding individual mitigation proposals unless the overall competitiveness of the entire regulatory process is evaluated now and significant changes are made to keep New York competitive with other states that are actually promoting the development of this resource. As demonstrated herein, IOGA of NY estimates that the overall cost of the regulatory proposals will increase the cost for each wellbore in New York State in excess of \$1 million above the cost to drill the same wellbore in other states, which will render New York non-competitive. In requesting significant changes, IOGA of NY is not asking the DEC to compromise on environmental protection. Rather, we are asking the DEC to recognize that many of the proposals go too far and must be adjusted before the costs associated with specific measures should be evaluated. Consistent with that goal, IOGA of NY has prepared this document to alert the DEC to a number of overriding concerns with the current draft of the SGEIS and the associated rule-making process that are critical to maintaining a modicum of economic competitiveness. Accordingly, IOGA of NY provides the following concerns, comments, and recommendations:

- If DEC decides to move forward with the rule-making process, it should limit that process to only the most essential regulatory requirements.
- The original Generic Environmental Impact Statement (GEIS) has served the state and operators extremely well since its adoption in 1992. Flexibility in both the conduct and practices of oil and gas operations and DEC's monitoring and enforcement is desirable and necessary to promote current and future efficiencies and technological advancements.
- Adopting conditions and standards in rule-making will blunt and delay implementation of new technologies that are advancing with exploration and development of natural gas (e.g., water recycling and disposal).
- No other industry operating within New York, even though possibly impacting the environment to a greater extent than the oil and gas industry, will be burdened by these unjustified, excessive and inequitable rules, regulations, requirements, mitigation measures, permit conditions and access restrictions.
- DEC should take a hard look at the incremental environmental benefits versus the oil and gas industry's significant costs incurred in order to implement the mandated mitigation. We believe that many of the requirements impose unnecessary costs with no tangible benefit to the environment.
- Many of the proposals are inconsistent with the DEC's statutory mandate to promote the development of the resource and protect correlative rights and go beyond the statutory authority of the DEC (e.g., the effort to regulate private land use).

In addition to these overriding concerns, IOGA of NY has identified a number of critical issues that will make New York non-competitive and preclude large portions of the state from development. These issues, which are similarly not meant to be exhaustive, include:

- the proposed prohibitions and setbacks, which make it virtually impossible to lay out spacing units and engage in any meaningful development of the resource;
- the draft stormwater general permit requirements, which go well beyond what is required of any other industry in New York State and include many requirements that will unnecessarily increase the cost of drilling and completion substantially, ultimately deterring any investment in New York State;

- the mitigation requirements currently being proposed to address air impacts, many of which are not feasible, most of which are not demonstrated to be beneficial, and all of which fail to recognize the need for equipment to move freely among states without state-specific requirements and may be preempted under the Clean Air Act;
- the codification of best management practices, which eliminates flexibility, stifles improvement and results in many unnecessary costs;
- the passby flow methodology being proposed by the DEC is unnecessarily conservative and conflicts with their statutory obligation to balance competing water resources; and
- a number of circumstances where the regulatory proposals conflict with New York law (e.g., the effort to impose a different passby flow standard in areas regulated by interstate compact commissions that conflicts with recently enacted water withdrawal legislation in New York State).

Finally, we have included an analysis of shale gas economics and the lost economic opportunities, which demonstrate how New York State is already at a competitive disadvantage given market conditions and the unproven geology and the reasons why, therefore, unnecessary regulatory burdens will make New York that much more non-competitive.

The following paragraphs provide more specific comments.

Setbacks and Prohibitions

Without a scientific basis or rationale, the DEC has proposed a series of prohibitions and setbacks never before contemplated, despite New York's long-standing history of natural gas exploration and development. Some of these prohibitions and setbacks preclude any development while others preclude the siting of well pads within prohibited areas. When these prohibitions and setbacks are mapped against leasehold interests, it often becomes impossible to lay out units or site well pads in a manner that makes development in New York State economically viable. As a consequence, operators will lose hundreds of millions of dollars already invested in minerals leases, landowners will lose millions of dollars in royalties, significant tax revenue will be lost, and very few operators, if any, will be willing to invest their drilling budgets in New York State. The result will be lost economic opportunity for New York totaling billions of dollars.

New York State's Environmental Conservation Law (ECL), as it pertains to oil and gas, has long since been recognized as a "conservation statute" that is designed to promote the recovery of the resource and protect the correlative rights of landowners. Consistent with that goal, ECL § 23-0301 declares that it is in the public interest to "regulate the development, production and utilization of natural resources of oil and gas in the state in such a manner as will prevent waste; *to authorize and provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas may be had, and that the correlative rights of all owners and the rights of all persons including landowners and the general public may be fully protected* [emphasis added]." These guiding principles serve as the basis for the oil and gas regulatory framework in New York State.

In furtherance of these goals and objectives, New York State has created detailed statutory schemes for spacing and compulsory integration to promote the greater recovery of the resource and protect correlative rights. The spacing and permitting provisions are generally found in ECL Article 23, Title 5. In accordance with the fundamental policy, ECL § 23-0503(2) authorizes the issuance of permits to drill wells if a proposed spacing unit "conforms to statewide spacing and is of approximately uniform shape with other spacing units within the same field or pool, and abuts other spacing units in the same pool, unless sufficient distance remained between units for another unit be developed." For the more

ubiquitous plays like the Marcellus and the Utica, this is likely to require relatively uniform rectangular-shaped abutting units in order to avoid gaps in the development of the resource.

Also paramount in the well permitting process is the need to site a well pad in a location that minimizes environmental impacts to the maximum extent practicable. This is frequently accomplished by looking for locations that avoid stream crossings, wetlands, steep slopes, endangered species, and known areas of historic significance, and by taking into account other siting considerations consistent with Best Management Practices (BMPs). The existing regulations found in 6 NYCRR Section 553.2 contain appropriate setbacks that have worked well for decades and have not led to any demonstrable problem with the 14,000 operating wells in New York State.

Against this backdrop, the DEC is proposing a series of setbacks and prohibitions. These include the following:

- Prohibitions:
 - the prohibition of well pads in the New York City and Syracuse watersheds and a buffer zone that is 4000 feet around those watersheds, and
 - certain State lands (State Forests, State Parks, etc.).
- Setbacks:
 - primary aquifers and within a 2,000-ft buffer;
 - within 2,000 feet of public water supply wells and reservoirs;
 - within 500 feet of private drinking water wells or domestic use springs, unless waived by the owner, and within 100-year floodplains.

The prdSGEIS also declares that a supplemental environmental analysis (i.e., a site-specific Environmental Impact Statement [EIS]) will be required in certain instances. These instances cover three categories: location, drilling depth and type of water-related issues. The location carve-outs require a site-specific EIS:

- within 1,000 feet of New York City's subsurface water supply infrastructure;
- principal aquifers or within 500 feet of the boundary of a principal aquifer;
- within 150 feet of a perennial or intermittent stream that is not a tributary to a public drinking water supply, storm drain, lake or pond; and
- within 500 feet of a tributary to a public drinking water supply.

Furthermore, private lands with tracts of grassland greater than 30 acres or forest greater than 150 acres may be off limits to surface occupancy and/or severely restricted insofar as their future development potential is concerned. IOGA of NY questions whether the DEC has the legislative authority to impose such restrictions on private lands. Moreover, the setbacks proposed by the DEC are to the "edge of location" (i.e., the well pad), not to the well itself. Therefore, all estimates of acreage excluded from development, particularly insofar as vertical wells are concerned, must add an additional 200 feet from the restricted area/edge of surface disturbance to the centrally located well, which increases the setbacks significantly.

As an initial matter, the proposed prohibitions directly conflict with the policy objectives of the statutory scheme in that they fail to promote the recovery of the resource or protect the correlative rights of the landowners in the prohibition areas. For this reason alone, the prohibitions should be eliminated.

Regarding the setbacks, although some reasonable setbacks are not objectionable (e.g., the existing regulations), when multiple setbacks are established without the authority of the DEC to grant waivers for good cause shown, it becomes extremely difficult, if not impossible, for an operator to lay out units in an orderly fashion. Further complicating this issue is the trend in the industry to drill longer horizontal wells, thereby reducing the number of well pads that are required. This trend further reduces the surface footprint of the industry and corresponding impacts to the environment. Because New York law limits the size of spacing units for shale wells up to 640 acres, it will be the practice of industry to layout back-to-back units with a common well pad for both units thereby draining areas up to 1280 acres (two square miles). As such, the location of the well pad becomes a critical factor in laying out spacing units based upon mineral lease rights and other environmental considerations.

By way of example, one operator has laid out spacing units based upon back-to-back 640 acre unit spacing, its mineral leases and traditional factors to avoid sensitive environmental areas. In the Owego area of Tioga County, this operator has sufficient mineral rights to develop twelve 640 acre spacing units with back-to-back spacing units and common well pads. Unfortunately, when land constraints are overlaid with the regulatory setbacks being proposed by the DEC, only two of the units are feasible. Because the spacing law allows spacing "up to" 640 acres, this operator may be able to develop other smaller units, but it will increase the number of well pads significantly, thus increasing the cost to the operator and increasing both the surface impacts and truck traffic from multiple locations. Even then, certain areas will be inaccessible, with the consequence that millions of dollars already invested in leases will not be practical to develop. Maps will be presented to the DEC during our upcoming meeting to demonstrate the significance of this issue.

Another operator has gone through a similar exercise in Chemung County, New York. The primary aquifer provision will eliminate significant developable acreage. This operator estimates that 50% to 60% of their current leasehold in Chemung County is located in primary aquifer areas. And, this prohibition is being proposed even though the same operator has developed four Trenton Black River wells through the very same primary aquifer without any environmental contamination. It is difficult to understand the rationale behind the prohibition for Marcellus-type wells while Trenton Black River wells are allowed to proceed. The primary aquifer prohibition and the many other setbacks proposed will require abandonment of attractive and logical drill sites and cause losses to the operator and the mineral owners of tens to hundreds of millions of dollars.

Given the foregoing, industry predicts that the acreage available to develop the shale resources in New York is far less than the 80% being predicted by the DEC and may approach numbers as low as 40% to 50%, if not lower. This situation will:

- (1) leave large tracts without development of the resource in direct contrast to the ECL's statutory directives,
- (2) subject operators to lost investments in many leases,
- (3) preclude landowners from reaping billions of dollars of economic benefits from the development of shale resources in New York State,
- (4) deny significant tax revenue to local municipalities as well as the State, and
- (5) deter most, if not all, operators from giving any serious consideration to New York State.

The overall result will be a large amount of stranded acreage that will not be drilled, leaving natural gas in the ground along with landowners who will be economically impacted and who will not understand why their land will not be drilled when neighboring properties have reaped the benefits.

As an alternative, the industry recommends that many of the setbacks be eliminated or reduced to the existing setbacks, or setbacks that are consistent with those in place in other neighboring states. Industry further recommends that broad waiver provisions be included in the regulations to allow setbacks to be waived by the DEC for good cause shown.

Stormwater General Permit for High-Volume Hydraulic Fracturing

Uncontaminated stormwater discharges associated with oil and gas extraction activities are exempt from the federal National Pollutant Discharge Elimination System (NPDES) program and therefore from the NY State Pollutant Discharge Elimination System (SPDES) program, as well as under § 402(l)(2) of the Clean Water Act as clarified in § 323 of the Energy Policy Act of 2005. Despite this, the DEC has proposed a new stormwater general permit (GP) for high volume hydraulic fracturing (HVHF) in complete disregard of this exemption. To compound this, the DEC's proposal unnecessarily creates requirements unique to the natural gas industry that are far too numerous, unnecessarily prescriptive and lacking the requisite flexibility.

- To acknowledge the exemption, the HVHF GP should reflect New York's current SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (GP-0-06-002) by requiring the HVHF GP only for "stormwater discharges associated with industrial activity from oil and gas extraction ... which have had a discharge of a reportable quantity (RQ) of oil or a hazardous substance for which notification is required under [federal regulations]."
- Similarly, statutory NPDES permit exemption applicable to stormwater discharges associated with construction activities remains in effect, even though a federal court overturned U.S. Environmental Protection Agency (EPA) regulations implementing it. The DEC should modify the HVHF GP to mirror Pennsylvania's streamlined Erosion and Sediment Control General Permit (ESCGP-1). The Pennsylvania permit requires robust planning for environmental protection along with expedited permit review and authorization.

IOGA of NY has the following technical concerns associated with the HVHF GP:

- Transition between construction and HVHF operations – The DEC should modify the final stabilization requirements to remove the requirement that all construction activities must be completed before drilling can begin to allow for the drilling of multiple wells on a single pad.
- HVHF fluid evaluation – The requirement that operators evaluate hydraulic fracturing fluid every time they conduct well stimulation should be removed. It is unique to New York, and it assumes falsely that hydraulic fracturing (HF) additives are constantly changing, equally effective, universally available, and not subject to trade secret protections.
- Site maps – The HVHF GP should incorporate the flexible site mapping requirements in the Multi-Sector GP at Part III.C.2. together with the provisions in Sector I for Oil and Gas Extraction and Refining.
- General Best Management Practices (BMP) requirements – The proposed HVHF GP should mirror the flexibility in structural and non-structural BMP selection available in the Multi-Sector GP Part IX.B.
- Specific BMP requirements – The BMP provisions in Part X are far too numerous and unnecessarily prescriptive. They should all be replaced with flexible narrative standards for BMP selection that could be modeled after Pennsylvania's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities (PAG-03).

- Benchmark monitoring – The benchmarking requirements in Part X are excessive, given the purpose of stormwater outfall monitoring as stipulated in section 3.e. The DEC should replace all of the proposed benchmark monitoring requirements with the current total suspended solids (TSS), chlorides and pH requirements in the Multi-Sector GP coupled with targeted supplemental sampling and analysis, if needed. These testing requirements go well beyond what is required of any other industry in New York State, are very expensive and will send a signal to the oil and gas industry that New York State is not open for business.
- Annual Inspections in lieu of Benchmark Monitoring – Pennsylvania's PAG-03 allows oil and gas extraction industry to conduct an Annual Inspection in lieu of benchmark monitoring. The facilities are only required to inspect annually due to the medium risk associated with stormwater discharges that they pose. The DEC should incorporate a similar annual inspection option into the HVHF GP in addition to the streamlined benchmark monitoring recommended here.

Attachment A contains more detailed explanation and background information.

Air Emissions

With the prdSGEIS the DEC is seeking to establish statewide regulations and mitigation requirements that conflict with existing and/or proposed EPA air quality regulations pertaining to the same emission sources and may be preempted by the Clean Air Act. As recently as August 23, 2011, the EPA proposed new standards specific to the oil and gas sector (sector).¹ The rule proposes a cost-effective regulation based upon proven technologies that would reduce air pollution from the sector while enabling responsible growth in U.S. oil and natural gas production. For the upstream sector EPA's proposed rule includes wells that are hydraulically fractured (both new wells and workover operations), emissions from storage tanks, pneumatic device fugitive emissions, and some glycol dehydrators.² In addition, over the last seven years the EPA has passed new regulations on every type of engine used in the oil and gas industry to include diesel-fired, new and reconstructed, and non-road engines. **Attachment B** contains a detailed explanation of these new and proposed federal rules and reasons why, in almost every case, they should be relied upon to control the air emissions addressed in the prdSGEIS as opposed to the DEC mandating different controls.

The DEC's approach in establishing their air emissions controls was based upon a worst-case dispersion modeling scenario. While this may provide assurance that the air emissions are controlled in a worst-case scenario, those prescriptive controls should not be required at every location in the state, at every time of day or year, nor at every tank battery regardless of production. To do so would be unnecessary and would greatly over-control most sources. It would also mandate controls, some of which are technically infeasible, not cost-effective, and/or potentially unsafe for certain sources. EPA's rules have provided the state with all the air emission control options necessary to regulate the development of shale gas. The DEC should remove the prescriptive source-specific emissions controls specified in the prdSGEIS and instead rely on the EPA's air emissions control requirements for those same sources both in the current version of the prdSGEIS and when conducting their air emissions permit application reviews.

Water Withdrawals and Natural Flow Regime Considerations

The prdGEIS states that a primary emphasis of the DEC is protection of water resources and that water withdrawals affecting surface or groundwater have been identified as a potential impact resulting from use by the natural gas industry for HVHF. While IOGA of NY certainly agrees that protection of water resources is critical, the utilization of the natural flow regime (NFR) method to calculate passby flows, as

proposed by DEC, is misguided, unduly stringent, and contradicts the passby methods employed by the Susquehanna River Basin Commission (SRBC) and Delaware River Basin Commission (DRBC), both of which have regulatory authorities for water withdrawals in their specific jurisdictions. The SRBC and DRBC have been effectively regulating water withdrawals for decades in New York State and the DEC acts as the New York State representative on these commissions. The SRBC has the most experience with the natural gas industry and SRBC methods in particular are proven to be protective of existing aquatic communities, are designed to be conservative, and incorporate data collected specific to the location of the proposed withdrawal.

It is unreasonable that DEC would impose the NFR method for passby conditions solely for the natural gas industry, when all other withdrawals, such as golf courses, water bottling and industrial sources, would be regulated using the guidance implemented by the commissions. Withdrawals within the Susquehanna and Delaware River Basins should be regulated by the SRBC and DRBC, respectively, to avoid duplication and to ensure regulatory consistency and streamlined approvals. As a result of the water withdrawal legislation adopted into law in New York State this year, outside of the Susquehanna and Delaware basins, the DEC would have primacy regarding water withdrawals greater than 100,000 gallons per day. That legislation specifically exempts from the permitting requirements withdrawals that are permitted by the DRBC or the SRBC. This is current legislative and gubernatorial recognition of the need for the DEC to defer to the Interstate Compact Commissions regarding water withdrawals subject to their jurisdiction. The DEC, therefore, should consider using the SRBC passby flow guidance, which is environmentally protective and with which the industry is familiar.

Under the NFR methodology, all withdrawals, including those on large river systems, regardless of withdrawal quantity and rate, would require a passby. While many operators have developed storage capacity and all are utilizing recycled waters, uninterrupted withdrawals with predictable availability are important for year-round operations by the industry. Using the NFR methodology would greatly increase the number of days per year that a source point is unavailable, when compared with the SRBC passby guidance. Since source points would be unusable during much of the year under NFR, the industry will be forced to construct a greater number of sources (withdrawal points), potentially increasing the overall habitat impact, and likely reducing the opportunities to share sources among operators. Additionally, industry may need to purchase additional waters from older and larger public water supplies in New York State that may not have undergone the rigorous environmental review currently employed by SRBC. Purchasing water from public water supplies also will increase costs to the industry. The NFR methodology is overly complicated, will be difficult and costly to implement and appears to be administratively burdensome on both the industry and the regulatory agency. Metering and monitoring requirements themselves are projected to exceed an additional \$200,000 per withdrawal location, with no demonstrated environmental benefits over the passby flow guidance conditions implemented by SRBC.

Moreover, the NFR methodology being proposed by the DEC does not take into account its statutory obligation to balance competing water resources as required by Environmental Conservation Law Section 15-0105 and the cases interpreting the balancing obligations of the DEC regarding water consumption and use. The unnecessarily conservative NFR methodology conflicts with this statutory obligation.

All of the concerns expressed by DEC in the prdSGEIS regarding potential water withdrawal impacts, including reduced stream flow, impacts to aquatic habitats and ecosystems, impacts to wetlands, and aquifer depletion, are addressed by the river basin commissions through their extensive water withdrawal regulatory programs. In the prdSGEIS, the DEC itself recognizes that the amount of water withdrawn specifically for HVHF is projected to be low compared to overall water use in New York State, increasing fresh water demand by only 0.24%. In light of this small increase in projected water use and the existing authorities operating in New York State, this proposed duplicative effort is unwarranted. The programs

implemented by SRBC and DRBC are environmentally protective, robust, and should be utilized by DEC for regulating withdrawals by the natural gas industry.

Best Management Practices and Burdensome Costs

The prdSGEIS includes a broad spectrum of specific mitigation measures, some of which DEC refers to as BMPs, others which they simply specify as required mitigation. IOGA of NY believes that this is a misguided approach on the part of DEC. In federal regulations, as well as that of other states, a BMP is normally intended as a practical and effective approach for the mitigation of an environmental impact under a specific set of circumstances. Quite simply, a BMP is not intended to be a one-size-fits-all solution that is also static in time. As such, BMPs should be presented as options that can be selected from in order to meet a site-specific mitigation need. BMPs should not be mandated as the sole required solution, which is how DEC has often presented them; doing so makes them requirements, not options, and, therefore, not BMPs. For instance, in regard to air emissions, the prdSGEIS should not be stipulating "control measures"; instead it should establish "control thresholds" and then allow the air permitting process and proven control technologies to determine the actual control measures applicable to a given set of circumstances.

Additionally, by stipulating specific mitigation measures the prdSGEIS does not effectively provide for the future development of new technologies that may achieve similar, or even better, levels of mitigation. If the roll-out of a new technology requires a specific environmental impact statement and positive determination prior to its use there will be an additional burden on the industry in both expense and time. This review process could cost tens, or even hundreds, of thousands of dollars and take anywhere from six months to two years to work through, causing costly delays in development. Such a process is not conducive to the timely roll-out of new technologies that might improve the industry's mitigation of environmental impacts. It is quite possible that this could actually serve to significantly hinder the deployment of new technologies in New York even while those same technologies are being successfully implemented in other states. As a result, New York would be behind the curve when it comes to the implementation of improved mitigation approaches for minimizing environmental impacts.

Furthermore, IOGA of NY believes that this could have even broader implications to the long-term useful life of the SGEIS (once it is completed). Early in the SGEIS process (2009), DEC expressed a desire that the resulting document would have a lifespan of decades, not a mere handful of years. The previous GEIS was finalized in 1992, giving it an effective useful life of approximately 20 years. And in many respects the 1992 GEIS continues to apply to the oil and gas industry in New York insofar as activities not involving horizontal drilling and high-volume hydraulic fracturing are concerned. Therefore, the GEIS in fact lives on as a useful document. Considering the rapid evolutionary improvements in industry practices happening in other states, the specific requirement of individual mitigation measures to address impacts associated with horizontal drilling and HVHF which are outlined in the prdSGEIS is likely to limit the valid life of the SGEIS to a number of years that could be counted on the fingers of even a single hand. The supplemental GEIS would itself then require a supplement.

The following provide a few examples but do not encompass all areas of concern:

- The prdSGEIS requires extensive management of invasive species. Each site (well pad and roadway) must first be surveyed for invasive species and a plan must be submitted to DEC for the management of any such plants found. The approach must include the removal and proper destruction/disposal of invasive species prior to initiating construction on the site. During work, all construction equipment, etc., must be inspected and, if necessary, decontaminated whenever the equipment enters or exits the site. The costs and other constraints associated with the invasive

species plan are difficult to predict; however, it would not be unreasonable to anticipate costs associated with plan development, equipment needs and implementation to exceed \$50,000 for every well pad or similar construction task (e.g., compressor stations). IOGA of NY is not aware of other states with such strict requirements.

IOGA of NY would suggest, as an alternative, the requirement to implement BMPs relative to the handling of invasive species common to the area of operations currently utilized by other construction industries active in the area. Absent such a requirement, IOGA of NY is prompted to pose the questions: Does New York place equivalent requirements on the logging and forest products industries that potentially disturb land and vegetation even more extensively than does the oil and gas industry? Also, does New York place equivalent requirements on the logging and forest products industries regarding the restoration and re-vegetation of disturbed land?

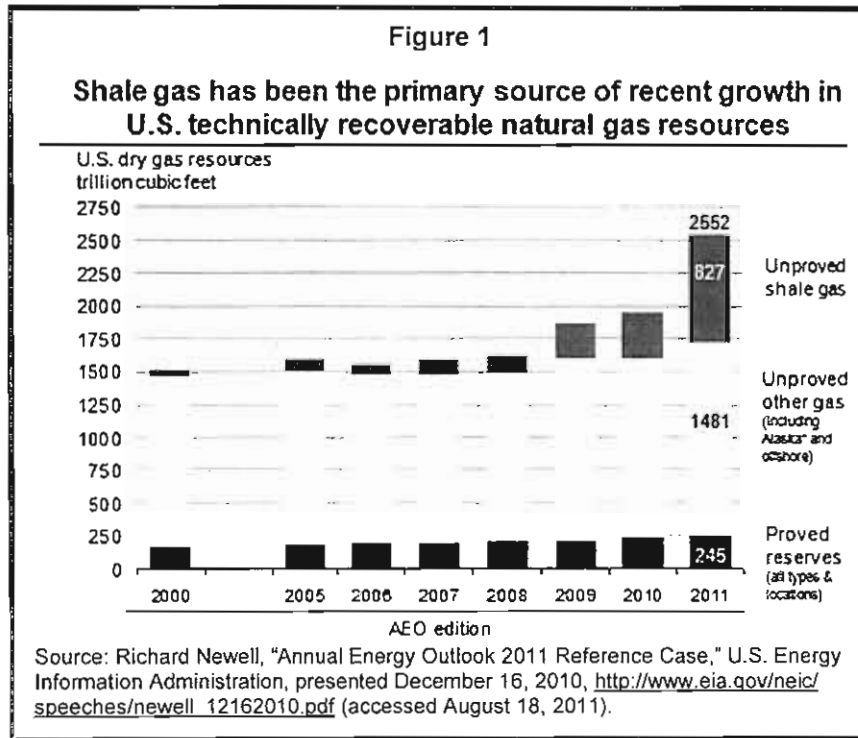
- The detailed invasive species plan is just one of many plans being required by the DEC that will choke the ability of industry to develop New York's indigenous natural gas resources in an economically viable manner. Another example is the requirement to conduct pre-disturbance biological studies and an evaluation of potential impacts on forest interior birds from a proposed project. Pre-disturbance studies by a qualified biologist would be required. These studies must include a compilation of historical information on forest interior birds and a minimum one-year field survey to determine the extent (if any) of such birds' use of the site. Similar pre-development surveys of plants and animals are required as is post-disturbance monitoring. Requiring a one-year pre-disturbance study will mean that many leases will expire without timely development. Industry simply cannot tolerate that kind of regulatory delay. In addition, these types of detailed surveys will add significant expense (\$100,000 or more) for each well pad. These types of studies, delays and expenses simply are not justified for the temporal activities associated with natural gas exploration and development. Again, this is just another example of a burdensome and costly requirement that is being selectively applied to the natural gas industry and will turn that industry away from New York State.
- Retrofitting every engine with Selective Catalytic Reduction (SCR) (not even considering particulate traps), which is difficult if not useless on variable load engines, has not been demonstrated to IOGA of NY's knowledge, and is expected to cost approximately \$140,000 in capital expenditures, plus every year another \$145,000 in operating costs in addition to manpower and reductant (chemical) costs.³ IOGA of NY would suggest guidelines to promote emissions controls such as the promotion of the use of state of the art equipment when available as well as emissions guidelines designed around the temporary nature of most of the equipment utilizing engines.
- In the development of a plan for handling hydrocarbon vapors that may be emitted from crude or condensate tanks, requiring a vapor recovery unit (VRU) for every tank battery is expected to cost upwards of \$80,000 in capital costs per tank battery (plus fuel, operations, and maintenance costs).⁴ Alternatively, a combustion device can be installed at roughly \$22,000 plus another \$1,000 each year in operating costs.⁵ The combustor typically achieves a destruction efficiency of 98% or greater, requires no electricity, is low maintenance, and is more appropriate for sites such as the dry gas development anticipated in New York where insufficient Volatile Organic Compound (VOC) emissions exist to operate the VRU.

Should operators decide to pursue development in New York their costs will no doubt be greater than in other states. One operator has estimated that the cost to drill and complete a generic Marcellus or Utica well will increase by at least \$1,000,000 per well, or more, as a result of the prdSGEIS. This is due to the requirements to obtain waivers from what is anticipated to be overly burdensome rulemaking (as DEC has indicated they are currently contemplating). Furthermore, it is not possible to quantify the additional costs

relating to the delays that must be anticipated due to permitting applications exceeding the capabilities of the DEC to process in a timely manner. In addition, these cost estimates do not take into account the lost investment in mineral leases due to the unworkable setbacks. Required use of add-ons, equipment and limiting best management practices that are not currently used or not readily available with no documented environmental improvement will cost New York billions of dollars to be invested in the state's resource development industry and put New York at a competitive disadvantage to neighboring states.

Shale Gas Economics

According to the Energy Information Administration (EIA), the majority of recent increases in natural gas production and potential are resulting from the emerging shale gas plays (see **Figures 1 and 2**).⁶

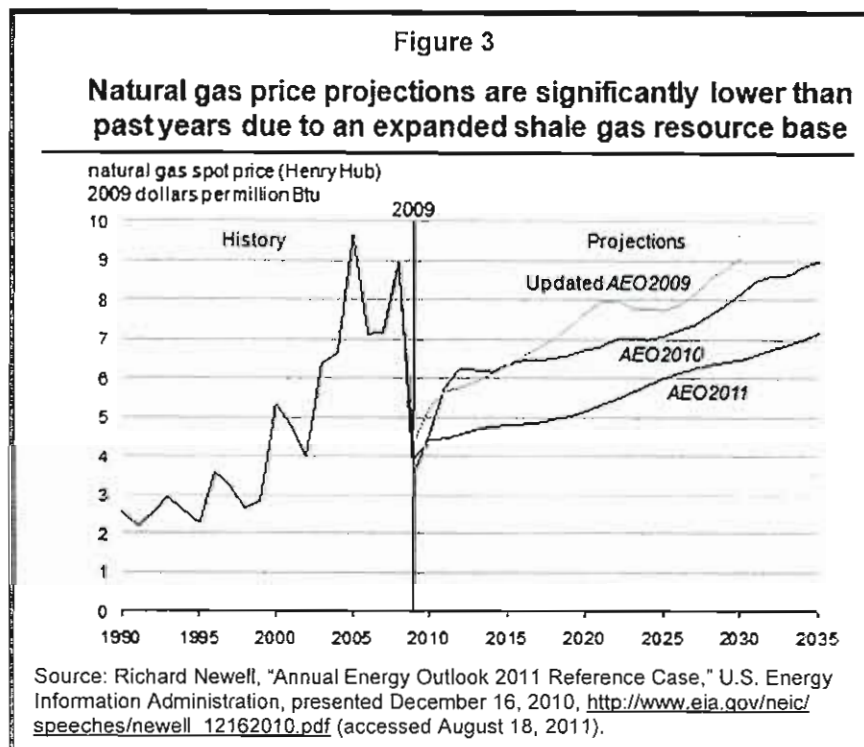
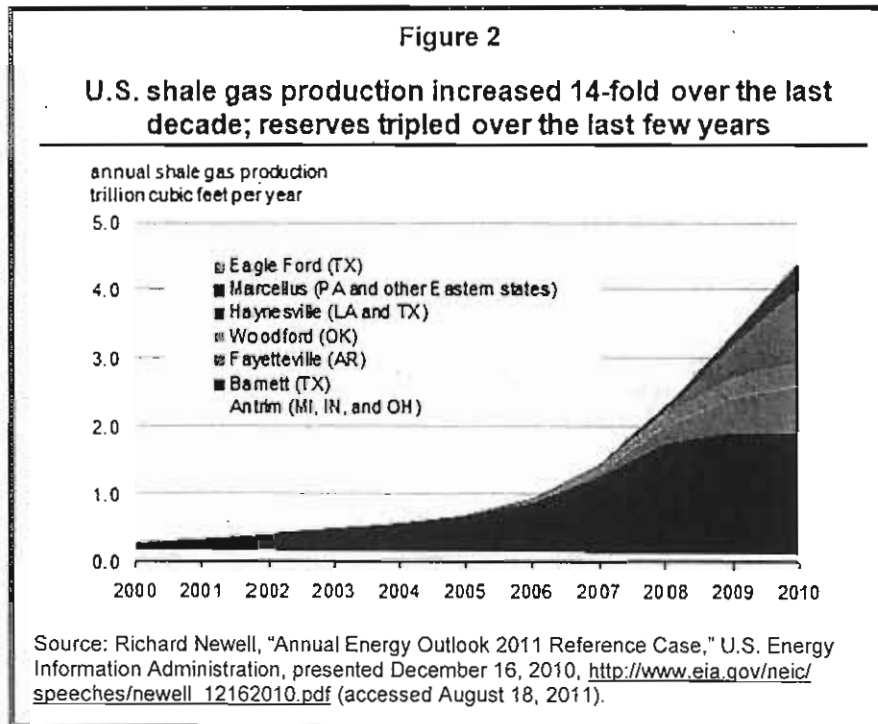


Currently (July 2011), the Henry Hub average spot price for natural gas is \$4.42 per million British thermal units (MMBtu). The average spot price in 2012 is expected to be roughly similar. For the last several years the market prices have been low and are continuing to track at low levels because of high rates of production.⁷ EIA's current outlook for natural gas prices does not rise above \$5.00/MMBtu until approximately 2020 (see AEO 2011 curve on **Figure 3**). Furthermore, for the past three years EIA's long-term projections have predicted lower and lower prices with each year's revisions (see AEO 2009, AEO 2010, and AEO 2011 curves on **Figure 3**).⁸

Based on the above trends indicating increasing natural gas production sourced primarily from shale gas and on the forecast low spot price looking to the future, it should be abundantly clear that the prospects for meaningfully higher gas prices are remote. In order for the profitability of shale gas plays to make a significant leap forward, commodity prices must increase. But there is no such increase predicted.

Figure 2 also demonstrates that there is significant unconventional gas drilling activity in a variety of plays under different state regulatory regimes. As noted above, there is likely to be a significantly higher

cost for operating in New York versus other shale gas states. Therefore, one must anticipate that New York's imposition of additional costs resulting from more demanding mitigation and compliance requirements can only serve to weigh heavily on the profitability of shale gas prospects.



There can be little doubt that, in an effort to maintain profitability in the face of a challenging economic environment, operators must take into consideration where (geographically) their exploration budgets are best allocated. An additional consideration must be that some shale plays such as the Bakken (oil) in Montana and North Dakota, the Eagle Ford Shale (condensate) in Texas, and the Utica Shale (oil) in Ohio, are rich in liquid hydrocarbons. Liquid hydrocarbons serve to significantly improve the drilling economics for these plays in comparison to a dry gas play, such as is expected for the Marcellus in New York. It is interesting to note that, in spite of the shale gas boom, for the first time in 18 years there are more drilling rigs drilling oil wells than there are drilling natural gas wells.⁹ And many of these wells are using the same technologies as shale gas wells: horizontal drilling and HVHF.

Compounding these economic realities is the fact that the productivity of the shale resources in New York remains unproven. There are many factors that can affect future development of the shale resources in New York, not the least of which are depth, thickness, organic content, and thermal maturity of the formation. In fact, many operators anticipate that the intersection of these critical geologic factors will be less favorable in New York than they are in neighboring Pennsylvania based upon core data and other geologic indicators.

As noted above, the cost to drill and complete a typical Marcellus or Utica well will increase by at least \$1,000,000 per wellbore as a result of the prdSGEIS. Therefore, one must anticipate that there is now, and will be for some time, very stiff competition among exploration plays for equipment, qualified personnel and drilling budgets.

Without the opportunity for economically viable development there is a plethora of lost opportunity:

- To operators:
 - Leases lost at great cost to operators because wells could not be drilled in time to satisfy lease requirements because of delays in finalizing the SGEIS.
 - Leases lost at great cost to operators because of setbacks and prohibitions on drilling.
 - Leases that may no longer be developed because not enough contiguous acreage can be assembled to provide the necessary reserves for economically viable prospects.
- To mineral rights owners:
 - With no production from their mineral rights, owners are denied their royalties.
- To business owners:
 - Hotels, restaurants, etc., are unable to participate in the economic gains of increased business. Some of the development areas are already economically challenged and in desperate need of these revenues.
 - Companies providing direct services to the gas industry are reluctant to establish offices in New York to support an industry with uncertain local future, particularly when one considers that such business opportunities are much more attractive in neighboring states where drilling and production are already occurring in more favorable economic climates.
- To the local and state governments:
 - New York has already lost major economic opportunities as operators and service companies have already established permanent offices/facilities in the Northern Tier of Pennsylvania.

- Lease bonus and royalty payments for mineral rights on lands that will not be developed as a result of prohibitions and the corresponding loss of income tax revenue to the state.
- Tax revenues that result from the robust *ad valorem* tax system applicable to oil and gas development in New York State that will be lost at a time when it is most needed.
- Tax revenues from all associated businesses that will not be realized without development.
- To the citizens of New York:
 - The benefits of tax revenues from development reinvested in state and community infrastructure and services.
 - The benefits of participating in the potential economic growth that would come with gas development.

These are but a few of the examples of opportunities that have been and/or will be lost without an opportunity for timely and economically viable development of shale gas resources.

Summary

In summary, industry recognizes that there are numerous challenges to crafting a well informed regulatory framework for hydrocarbon development with the proven technologies of horizontal drilling and hydraulic fracturing that is simultaneously protective of the environment and the rights of the citizens and still encourages the investment of capital and creation of jobs and wealth. The prdSGEIS and the parallel rule-making process will not facilitate industry investment in New York's hydrocarbon resources. The already long and drawn-out process of developing the SGEIS and the anticipated highly restrictive regulatory framework for New York exploration has already destroyed real economic value for mineral owners, towns, the state as well as the investors and operators who have thus far had the courage to invest in New York.

Also the economic uncertainty of commodity prices compounded by the costs of SGEIS-imposed mitigation requirements weighs heavily on sensitive drilling economics. These uncertainties are further complicated by the fact that there has a yet to be a single horizontal well drilled and stimulated using HVHF in New York; consequently, there is still no in-state local benchmark with which to better predict production.

The limitations imposed by the prdSGEIS and, we expect, the regulations likely to emerge from the rule making process will make the exploration and development of unconventional natural gas in New York non-economic and unattractive. IOGA of NY anticipates that there will be every incentive for industry to spend their exploration and production budgets in states with more pragmatic regulations. Furthermore, shale plays that are rich in liquid hydrocarbons, such as the nearby Utica Shale in Ohio, will sport more favorable economics. As noted herein, the prdSGEIS proposes to impose mitigation solutions with, in some cases, limited environmental benefit and little or no flexibility in how operators may implement them. New York's regulations and requirements, if finalized, will be viewed by industry as too challenging and restrictive to allow for cost-competitive development in the current and forecast natural gas market. Thus, New York is rapidly moving towards, and showing all signs of becoming, non-competitive with other states in its ability to attract industry's development dollars.

In the final analysis, the regulatory proposals being put forth by the DEC relative to shale gas development in New York State do not send the signal that New York State is "open for business." Not only does this conflict with statutory mandate of the DEC to promote the development of the resource and

protect the correlative rights of landowners, it is in direct conflict with recent efforts to promote that New York State is "open for business." Taken in total, these proposals do not provide necessary assurances to our members that they can be successful in exploration and development in New York. If the State fails with the biggest economic opportunity available to it through the development of its clean-burning, indigenous natural gas resources, New York policymakers must understand the message that this will send to all industries.

Sincerely,
Independent Oil and Gas Association of New York,

A handwritten signature in black ink, appearing to read "Brad Gill". The signature is fluid and cursive, with a large initial "B" and a long, sweeping underline.

Brad Gill
Executive Director.

xc: Andrew M. Cuomo, Governor
Marc Gerstman, Executive Deputy Commissioner
Eugene Leff, Deputy Commissioner, Remediation and Materials Management
Steven Russo, Esq., General Counsel
Bradley J. Field, Director, Division of Mineral Resources
Jennifer Maglienti, Esq.
Thomas S. West, Esq., The West Firm, PLLC
James J. Carr, Hinman Straub PC
J. Daniel Arthur, PE, SPEC, ALL Consulting

¹ EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf> (accessed August 26, 2011).

² EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf> (accessed August 26, 2011).

³ New Mexico Environment Department (NMED), *Four Corners Air Quality Task Force Report of Mitigation Options* (November 1, 2001), http://www.nmenv.state.nm.us/aqb/4C/Docs/4CAQTF_Report_FINAL_OilandGas.pdf (accessed August 19, 2011).

⁴ Newfield Exploration Company, Anadarko Petroleum Corporation, Utah Petroleum Association, Interstate Oil & Gas Compact Commission, and Independent Petroleum Association of Mountain States, "Reducing Methane Emission with Vapor Recovery on Storage Tanks: Lessons Learned from the Natural Gas STAR Program," Presentation for the Producers Technology Transfer Workshop, Vernal, UT, March 23, 2010, Slide 38, http://www.epa.gov/gasstar/documents/workshops/vernal-2010/06_vrus.pdf (accessed August 19, 2011).

⁵ Albert Hendler, Jim Nunn, Joe Lundeen, and Ray McKaskle, *VOC Emissions From Oil and Condensate Storage Tanks*, Final Report (October 31, 2006, revised April 2, 2009), Table 4-2, <http://files.harc.edu/Projects/AirQuality/Projects/H051C/H051CFinalReport.pdf> (accessed August 19, 2011).

⁶ Richard Newell, "Annual Energy Outlook 2011 Reference Case," U.S. Energy Information Administration, presented December 16, 2010, http://www.eia.gov/neic/speeches/newell_12162010.pdf (accessed August 18, 2011).

⁷ Energy Information Administration (EIA), "Short-Term Energy Outlook" (August 9, 2011), <http://www.eia.gov/emeu/steo/pub/contents.html> (accessed August 18, 2011).

⁸ Richard Newell, "Annual Energy Outlook 2011 Reference Case," U.S. Energy Information Administration, presented December 16, 2010, http://www.eia.gov/neic/speeches/newell_12162010.pdf (accessed August 18, 2011).

⁹ Tom Fowler, "More Rigs Now Drill for Oil," *Houston Chronicle* (August 18, 2011), <http://www.chron.com/dispatch/story.mpl/business/energy/7702262.html> (accessed August 18, 2011).

Attachment A
Stormwater General Permit
Supporting Information

Federal Stormwater Permit Exemptions for the Oil & Gas Extraction Industry

Uncontaminated stormwater discharges associated with oil and gas extraction activities are exempt from the federal National Pollutant Discharge Elimination System (NPDES) program and therefore from the NY State Pollutant Discharge Elimination System (SPDES) program as well.

The 1987 Water Quality Act (WQA) added section 402(l)(2) to the Clean Water Act (CWA) specifying that the U.S. Environmental Protection Agency (EPA) and States shall not require NPDES permits for uncontaminated storm water discharges from oil and gas exploration, production, processing or treatment operations, or transmission facilities.

Section 323 of the Energy Policy Act of 2005 clarifies and strengthens the CWA NPDES exemption by defining the term "oil and gas exploration, production, processing, or treatment operations or transmission facilities" to mean "all field activities or operations associated with exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activity." See 33 U.S.C. §1362(24).

RQ Release as the Industrial Stormwater Permit Threshold for the Oil and Gas Extraction Sector

The current SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (GP-0-06-002) recognizes the federal exemption for uncontaminated stormwater discharges. The Multi-Sector GP states that the permit applies to "stormwater discharges associated with industrial activity from oil and gas extraction ... which have had a discharge of a reportable quantity (RQ) of oil or a hazardous substance for which notification is required under [federal regulations]." It also stipulates that operators must include information in the Stormwater Pollution Prevention Plan (SWPPP) that accompanies a Notice of Intent "about the RQ release which triggered the permit application requirements." The information in the SWPPP must include a thorough description of the nature and scope of the RQ release and its environmental impacts.

The proposed high volume hydraulic fracturing (HVHF) General Permit (GP) should mirror these provisions and provide relief from the permitting requirements until the operator reports a RQ release at the site.

SPDES General Permit for Construction Activity

Beginning in April 2010, the New York State Department of Environmental Conservation (DEC) started to require operators to obtain Construction Stormwater General Permit coverage for Article 23 drilling activities that are exempt from the Multi-Sector GP. The construction permit is now imposed whenever well activities requiring an Article 23 well drilling permit disturbs one or more acres of land. The proposed HVHF GP would continue and expand upon the current stormwater permitting requirements.

Until last April, the DEC acknowledged the federal exemption for construction activities by regulating well site development to avoid pollution via stormwater runoff through the Article 23 well permitting program. The DEC imposed the SPDES Construction Stormwater General Permit requirement after a federal court decision, in *Natural Resources Defense Council v. United States Environmental Protection Agency*, 526 F.3d 591 (9th Cir. 2008), which vacated EPA's 2006 oil and gas construction stormwater regulation.

The court decision vacating the EPA rule did not overturn the underlying federal law, however, so the NPDES permit exemption for uncontaminated stormwater discharges from oil and gas activities and facilities remains in place.

In Pennsylvania, the Department of Environmental Protection (DEP) responded to the 2005 Energy Policy Act clarification of the CWA exemption and the court action vacating the associated EPA rule by

acknowledging the continuing exemption but imposing a streamlined state-specific permit regime that accomplishes the same objectives of the federal program. The DEP's ESCGP-1 provides an expedited permit process for earth disturbance activities associated with oil and gas exploration, production, processing or treatment operations or transmission facilities that disturb five or more acres.

ESCGP-1 requires the submission of a robust Erosion and Sediment Control Plan that must contain best management practices (BMPs) designed to minimize point source discharges to surface waters, preserve the integrity of stream channels and protect the physical, biological and chemical qualities of the receiving water. The plan must also address Special Protection requirements when earth disturbance activities occur in a High Quality or Exceptional Value watershed or Exceptional Value wetlands. The permit also requires operators to ensure that proposed construction activity will not adversely impact threatened and endangered plant and animal species and their critical habitats by requiring proof that a Project Planning Environmental Review was conducted and any possible impacts were reviewed and mitigated through work with the various state and federal agencies with jurisdictional responsibility for the listed species.

DEP has also established an expedited permit review procedure for the ESCGP-1 that can be utilized for oil and gas activities other than transmission facilities. Applicants that follow the expedited review process and qualify for permit coverage will be provided with an acknowledgement of coverage under ESCGP-1 within 14 business days from the submission of a complete and acceptable Notice of Intent (NOI).

Under the terms of a recent settlement of litigation initiated by the Chesapeake Bay Foundation, the ESCGP-1 will no longer be available for projects potentially affecting Special Protection water bodies or for those located in a floodplain or on contaminated land. Instead, the DEC plans to develop a new ESCGP-2 that will expand the period for public review of a proposed earth disturbance and require a more detailed technical review of the application.

DEC's decision to impose the full SPDES stormwater permit program on oil and gas extraction activities that continue to be exempt from the federal program was unnecessary and need not be expanded through the HVHF GP. Instead, the DEC should consider adopting a General Permit program that incorporates the advantages provided to both the DEC and to operators by the Pennsylvania ESCGP-1. Expedited permit review does not translate into reduced environmental protection.

The following paragraphs provide additional information:

- Transition from the Construction Phase of Permit Coverage – Final stabilization requirements in Part VI.D.2. and Part VIII.A.3. stipulate that the operator must provide written certification of the completion of all construction activities to the DEC before HVHF operations can begin. The HVHF Phase cannot begin until the Construction Phase is complete. These provisions appear to create artificial barriers to drilling multiple wells on a single pad.
- HVHF Fluid Evaluation – New HVHF SWPPP content provisions in Part IX.A.A.1. require operators to evaluate HVHF Phase fluid additives for each well stimulation project and use HVHF additives that exhibit the least aquatic toxicity and pose the least risk to water resources and the environment. In the alternative, the provisions require the operator to provide documentation to the DEC's satisfaction that some of the available alternative products are not equally effective or feasible.

The requirements assume that hydraulic fracturing (HF) additives are constantly changing, equally effective, universally available, and not subject to trade secret protections. It includes no standards for demonstrating the validity of a HF additive selection decision to the DEC, and no criteria for assessing DEC satisfaction. This requirement exists in no other state program should be deleted.

- Site Map Requirements – Part IX (Contents of the HVHF SWPPP) requires mapping of a variety of resources, facilities and activities that extend well beyond the scope of site map requirements imposed on all other industrial sectors in the Multi-Sector GP.

Current requirements in the Multi-Sector GP at Part III.C.2., together with the provisions in Sector I for Oil and Gas Extraction and Refining, provide thorough site mapping instruction without being overly prescriptive. The current Multi-Sector GP provisions are adequate to address the needs of the SGEIS.

- Required non-structural BMPs – The current Multi-Sector GP provides substantial flexibility to the operator to select structural and non-structural BMPs for use at the regulated facility. The proposed HVHF GP should mirror that flexibility in Part IX.B. by eliminating unnecessary requirements related to:
 1. Good housekeeping,
 2. Minimizing exposure,
 3. Preventative maintenance,
 4. SPCC requirement,
 5. Routine site inspections,
 6. Records of inspection, and
 - 7.a. and c. Employee training.
- BMPs and Benchmark Monitoring – The BMP provisions in Part X of the HVHF GP are far too numerous and prescriptive. The proposed HVHF GP should track the current Multi-Sector GP by providing as much flexibility in BMP selection to the owner or operator as possible.

The benchmarking requirements in Part X are excessive, given the purpose of stormwater outfall monitoring as stipulated in section 3.e. (Benchmark/Compliance Monitoring and Analysis):

The benchmark monitoring cut-off concentrations are intended as a guideline for the owner or operator to determine the overall effectiveness of the HVHF SWPPP in controlling the discharge of pollutants to receiving waters. The benchmark concentrations do not constitute direct numeric effluent limitations and, therefore, an exceedance is not a general permit violation. However, the owner or operator must evaluate potential sources of stormwater contaminants at the HVHF operation. Any sources of contamination that are identified must be remedied.

Unlike the proposed HVHF GP, the Multi-Sector GP only requires benchmark monitoring for Total Suspended Solids (TSS), chlorides and pH in the oil and gas extraction sector. These three parameters serve as surrogates for any potential pollution that may enter receiving waters from the facilities' outfalls. They provide reliable indicators that further analysis may be warranted to determine whether other potential pollutants may be discharging through a stormwater outfall.

The following sections of Part X of the HVHF GP contain unnecessarily prescriptive BMPs, impose excessive benchmark monitoring requirements, and in some cases are more appropriately regulated in other programs:

- B. Well-Drilling and High Volume Hydraulic Fracturing
- C. Vehicle and equipment storage/maintenance areas
- D. Vehicle equipment and cleaning areas
- E. Fueling areas

- F. Materials and chemical storage areas
- G. Chemical mixing, material handling and loading/unloading areas
- H. Chemical/fluid storage areas
- I. Employee housing and sanitary facilities
- J. Piping/conveyances
- K. Lumber storage or processing areas
- L. Cement mixing
- M. Freshwater surface impoundments and reserve pits
- N. Well production phase

All should be replaced with flexible narrative standards for BMP selection. Pennsylvania's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities (PAG-03) provides an appropriate model. In Appendix J (additional facilities), PAG-03 specifies the following BMPs for the oil and gas extraction sector:

1. Perform periodic inspections and maintenance on all transfer areas, piping, pumps, valves, compressors and other equipment where failure/leaks could cause petroleum releases.
2. Ensure secondary containment and leak detection for all petroleum product tanks and produced water tanks at exploration sites.
3. Develop and implement a detailed spill response plan, including immediate clean-up of petroleum residues and contaminated soils potentially exposed to stormwater.
4. Reclaim produced water pits and other disturbed areas at extraction sites immediately upon well closure.
5. Provide for oil-water separators to treat runoff from all areas where there is potential exposure to petroleum products.

In addition, the Benchmark Monitoring requirements in all of the foregoing sections should be eliminated and replaced with provisions that reflect the current Multi-Sector GP requirements for the oil and gas sector with targeted supplemental sampling and analysis if needed. The specific monitoring parameters listed for each type of facility or activity that could be associated with a well site would more appropriately serve as supplemental investigative tools if benchmark monitoring at an outfall indicates potential stormwater contamination.

- Annual Inspections in lieu of Benchmark Monitoring – Pennsylvania's PAG-03 allows oil and gas extraction industry permittees to conduct an Annual Inspection in lieu of benchmark monitoring. The facilities are only required to monitor annually due to the medium risk associated with stormwater discharges that they pose.

The Annual Inspection reports provide information on the overall quality of the discharges, focus on industry specific pollutants of concern, and are useful to help determine the effectiveness of pollution prevention plan controls. The Annual Inspection must include visual inspection of all outfalls and a Comprehensive Site Compliance Evaluation that applies to every outfall on the site. The visual inspection must identify any substances present in the sediment. The Annual Inspection/Certification must identify all areas that may be contributing pollutants to stormwater discharges and evaluate whether measures to reduce pollutant loadings identified in the Preparedness, Prevention, and Contingency (PPC) Plan are adequate and properly implemented in accordance with terms of the General Permit or whether additional control measures are necessary.

The DEC should incorporate a similar annual inspection option into the HVHF GP in addition to the streamlined benchmark monitoring suggested above to replace the requirements included in current HVHF GP proposal.

Documents referenced

New York documents

New York State Department of Environmental Conservation. *SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity*. Permit No. GP-0-06-002. December 2006. http://www.dec.ny.gov/docs/water_pdf/qp0601.pdf (accessed September 1, 2011).

New York State Department of Environmental Conservation. *SPDES Construction Stormwater General Permit for Stormwater Discharges from Construction Activity*, Permit No. GP-0-10-001. Effective January 29, 2010. http://www.dec.ny.gov/docs/water_pdf/qpsconspmt10.pdf (accessed September 1, 2011).

New York State Department of Environmental Conservation. "SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-10-001) – Requirements for Well Drilling Activities." April 1, 2010. http://www.dec.ny.gov/docs/water_pdf/welldrilling.pdf (accessed September 1, 2011).

Pennsylvania documents

Pennsylvania Department of Environmental Protection. "Erosion and Sediment Control General Permit (ESCGP-1)." 5500-PM-OG0005 and 5500-PM-OG0012. No date. <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10450> (accessed September 1, 2011).

Pennsylvania Department of Environmental Protection. "01 PAG-03 Discharges of Stormwater Associated with Industrial Activities." 3800-PM-WSFR0083. No date. <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10761> (accessed September 1, 2011).

**Attachment B
Air Emissions
Supporting Information**

Selected Air Quality Issues in the Preliminary Revised Draft SGEIS (prdSGEIS) dated July 2011

With the Preliminary Revised Draft Supplemental Generic Environmental Impact Statement (prdSGEIS) the New York State Department of Environmental Conservation (DEC) is seeking to establish statewide regulations and mitigation requirements that conflict with existing and/or proposed U.S. Environmental Protection Agency (EPA) air quality regulations pertaining to the same emission sources. Furthermore, the EPA regulations allow for a more flexible approach to satisfying the goals of reduced emissions than do the prescriptive mitigation requirements of the prdSGEIS.

On August 23, 2011, the EPA proposed new standards for the oil and gas sector (sector).¹ The rule proposes a cost-effective regulation based upon proven technologies that would reduce air pollution from the sector while enabling responsible growth in U.S. oil and natural gas production. For the upstream sector the rule primarily targets wells that are hydraulically fractured (both new wells and workover operations), emissions from storage tanks, pneumatic device fugitive emissions, and some glycol dehydrators.² A good example of mandated controls in the prdSGEIS conflicting with the EPA's recently passed regulations is the New Source Performance Standard (NSPS) OOOO. The new NSPS contains work practice standards for all new well completions. The standard requires reduced emissions completions (REC) for all completions where a sales pipeline is available and flaring of the vented gas if a good reason for not conducting a REC is documented. Therefore, the prdSGEIS does not need to address completions venting since a national standard has been proposed. The proposed NSPS is now in its 60-day public comment period after which the EPA must take final action by February 28, 2012.³ EPA's proposed rule is expected to cut volatile organic compound (VOC) emissions from the sector by nearly one-fourth nationwide (540,000 tons), methane emissions by 65 million tons of carbon dioxide equivalent, and air toxics by 38,000 tons every year. EPA estimates that industry's combined annual costs for complying with the new rule will be \$754 million by 2015.⁴

In the past few years, EPA has also passed multiple new rules targeting engines including those used in the oil and gas sector.

- On August 20, 2010, the EPA finalized a rule for reciprocating internal combustion engines (40 CFR Part 63, Subpart ZZZZ).⁵ This rule complemented an earlier rule by pulling into regulation engines located at smaller sources and engines less than 500 horsepower (hp).⁶ EPA estimated this rule would reduce hazardous air pollutant (HAP) emissions by 6,000 tons per year (tpy), carbon monoxide by 109,000 tpy, VOCs by 31,000, and nitrogen dioxides by 96,000 tpy at a cost of \$253 million (in 2013 dollars).⁷
- In 2008 EPA passed several new rules targeting new and reconstructed engines (estimated to affect over 433,000 stationary engines nationwide). This rule was expected to reduce nitrogen dioxides by 84,000 tpy, carbon monoxide by 49,000 tpy, VOCs by 2,400 tpy, and HAP emissions by 900 tpy at a cost of \$44 million initially and another \$20 million annually.⁸
- Diesel engines that are not classified as stationary engines (i.e., including diesel drill rig and completion engines) were also targeted by the EPA. Since 2004, the EPA has been passing comprehensive rules to reduce emissions from these engines by integrating engine and fuel controls as a system and mandating the use of ultra low sulfur diesel fuel. EPA estimated that the new rules would reduce levels of sulfur in the fuel by more than 99% and both nitrogen dioxides and particulate emissions by 90% by 2030.⁹

All of the above new and proposed regulations have been enacted following EPA's rigorous review process that considers nationwide applicability, cost effectiveness, and proven control technologies and all have been passed within the last seven years. The extent and magnitude of these rules is seen in the emissions reductions, compliance costs, and lengthy federal notices that describe each rule. These rules

target the very same emission sources for which the DEC has proposed their own prescriptive mitigation controls based largely on a worst-case dispersion modeling scenario. Setting inflexible emissions controls based upon such a scenario is not justified for all areas of the state, at all times of the year, and for every operator. The DEC is requiring specific air emissions controls that include or apply to reduced emissions completions, benzene and other glycol dehydrator emissions, storage tanks, engine add-on controls, and venting emissions during well completions. These are all well regulated by the recent EPA enactments. New York is dealing with very similar air quality issues as many other locations around the country and the EPA rules were designed to allow for responsible development of new energy sources while greatly reducing the levels of air pollution nationwide. It is inappropriate for the DEC to mandate additional, inflexible emissions controls on these proposed sources that are not proven, not cost-effective, and that may even be unsafe in some cases.

Remove SCR control requirements for the completion equipment engines

Several concerns arise when considering these add on controls. First, the prdSGEIS needs to clarify that only the large (>2,000 horsepower [hp]) fracturing pump engines are at issue. Second, the technical requirements and costs to add Selective Catalytic Reduction (SCR) control to existed fracturing pump engines that must meet weight, height, length and width requirements for transport on tractor trailers are immense, if not technically infeasible. Indeed, we are not aware of any successful demonstration of SCR control on completion equipment engines. Moreover, no other state has such a requirement. Third, the basis for this SCR requirement is modeled exceedance of the new 1-hr nitrogen dioxide (NO₂) National Ambient Air Quality Standards (NAAQS). The NO₂ standard has been very difficult to meet causing the EPA to acknowledge the specific problem of modeling potential emissions from intermittent sources. In a March 11, 2011, guidance document from EPA's Air Quality Modeling Group, EPA acknowledges the specific problem of modeling potential emissions from intermittent sources, such as emergency engines that operate less than 500 hours per year.¹⁰ In regard to "Treatment of Intermittent Emissions," EPA states in part:

TREATMENT OF INTERMITTENT EMISSIONS

Modeling of intermittent emission units, such as emergency generators, and/or intermittent emission scenarios, such as startup/shutdown operations, has proven to be one of the main challenges for permit applicants undertaking a demonstration of compliance with the 1-hour NO₂ NAAQS. Prior to promulgation of the new 1-hour NO₂ standard, the only NAAQS applicable for NO₂ was the annual standard and these intermittent emissions typically did not factor significantly into the modeled design value for the annual standard. Sources often take a 500 hour/year permit limit on operation of emergency generators for purposes of determining the potential to emit (PTE), but may actually operate far fewer hours than the permitted limit in many cases and generally have not been required to assume continuous operation of these intermittent emissions for purposes of demonstrating compliance with the annual NAAQS. *Due in part to the relatively low release heights typically associated with emergency generators, an assumption of continuous operation for these intermittent emissions would in many cases result in them becoming the controlling emission scenario for determining compliance with the 1-hour standard [emphasis added].*

EPA's guidance in Table 8-2 of Appendix W involves a degree of conservatism in the modeling assumptions for demonstrating compliance with the NAAQS by recommending the use of maximum allowable emissions, which represents emission levels that the facility could, and might reasonably be expected to, achieve if a PSD permit is granted. However, *the intermittent nature of the actual emissions associated with emergency generators and startup/shutdown in many cases, when coupled with the probabilistic form of the standard, could result in modeled impacts being significantly higher than actual impacts would realistically be expected to be for these*

emission scenarios. The potential overestimation in these cases results from the implicit assumption that worst-case emissions will coincide with worst-case meteorological conditions based on the specific hours on specific days of each of the years associated with the modeled design value based on the form of the hourly standard [emphasis added]. In fact, the probabilistic form of the standard is explicitly intended to provide a more stable metric for characterizing ambient air quality levels by mitigating the impact that outliers in the distribution might have on the design value. The February 9, 2010, preamble to the rule promulgating the new 1-hour NO₂ standard stated that "it is desirable from a public health perspective to have a form that is reasonably stable and insulated from the impacts of extreme meteorological events." 75 FR 6492. Also, the Clean Air Science Advisory Committee (CASAC) "recommended a 98th-percentile form averaged over 3 years for such a standard, given the potential for instability in the higher percentile concentrations around major roadways." 75 FR 6493.

To illustrate the importance of this point, consider the following example. Under a deterministic 1-hour standard, where the modeled design value would be based on the highest of the second-highest hourly impacts (allowing one exceedance per year), a single emission episode lasting 2 hours for an emergency generator or other intermittent emission scenario could determine the modeled design value if that episode coincided with worst-case meteorological conditions. While the probability of a particular 2-hour emission episode actually coinciding with the worst-case meteorological conditions is relatively low, there is nonetheless a clear linkage between a specific emission episode and the modeled design value. By contrast, under the form of the 1-hour NO₂ NAAQS only one hour from that emission episode could contribute to the modeled design value, i.e., the daily maximum 1-hour value. However, *by assuming continuous operation of intermittent emissions the modeled design value for the 1-hour NO₂ NAAQS effectively assumes that the intermittent emission scenario occurs on the specific hours of the specific days for each of the specific years of meteorological data included in the analysis which factor into the multiyear average of the 98th-percentile of the annual distribution of daily maximum 1-hour values. The probability of the controlling emission episode occurring on this particular temporal schedule to determine the design value under the probabilistic standard is significantly smaller than the probability of occurrence under the deterministic standard; thereby increasing the likelihood that impact estimates based on assuming continuous emissions would significantly overestimate actual impacts for these sources [emphasis added].*

Given the implications of the probabilistic form of the 1-hour NO₂ NAAQS discussed above, we are concerned that assuming continuous operations for intermittent emissions would effectively impose an additional level of stringency beyond that intended by the level of the standard itself. As a result, we feel that it would be inappropriate to implement the 1-hour NO₂ standard in such a manner and recommend that compliance demonstrations for the 1-hour NO₂ NAAQS be based on emission scenarios that can logically be assumed to be relatively continuous or which occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations. EPA believes that existing modeling guidelines provide sufficient discretion for reviewing authorities to exclude certain types of intermittent emissions from compliance demonstrations for the 1-hour NO₂ standard under these circumstances [emphasis added].

EPA's *Guideline on Air Quality Models* provides recommendations regarding air quality modeling techniques that should be applied in preparation or review of PSD permit applications and serves as a "common measure of acceptable technical analysis when supported by sound scientific judgment." 40 C.F.R. Part 51, Appendix W, section 1.0.a. While the guidance establishes principles that may be controlling in certain circumstances, the guideline is not "a strict modeling 'cookbook'" so that, as the guideline notes, "case-by-case analysis and judgment are frequently required." Section 1.0.c. In particular, with respect to emissions input data, section 8.0.a. of

Appendix W establishes the general principle that “the most appropriate data available should always be selected for use in modeling analyses,” and emphasizes the importance of “the exercise of professional judgement by the appropriate reviewing authority” in determining which nearby sources should be included in the model emission inventory. Section 8.2.3.b.

For the reasons discussed above, EPA believes the most appropriate data to use for compliance demonstrations for the 1-hour NO₂ NAAQS are those based on emissions scenarios that are continuous enough or frequent enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations [emphasis added]. Section 8.1.1.b of the guideline also provides that “[t]he appropriate reviewing authority should be consulted to determine appropriate 10 source definitions and for guidance concerning the determination of emissions from and techniques for modeling various source types.” *When EPA is the reviewing authority for a permit, for the reasons described above, we will consider it acceptable to limit the emission scenarios included in the modeling compliance demonstration for the 1-hour NO₂ NAAQS to those emissions that are continuous enough or frequent enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations [emphasis added].* Consistent with this rationale, the language in Section 8.2.3.d of Appendix W states that “[i]t is appropriate to model nearby sources only during those times when they, by their nature, operate at the same time as the primary source(s) being modeled” [emphasis in original]. While we recognize that these intermittent emission sources *could* [emphasis added] operate at the same time as the primary source(s), the discussion above highlights the additional level of conservatism in the modeled impacts inherent in an assumption that they do *in fact* [emphasis added] operate simultaneously and continuously with the primary source(s).

It is clear from this EPA memo that agencies should not require compliance with the 1-hour NO₂ NAAQS for intermittent stationary emissions. This would logically apply even more for temporary non-stationary intermittent sources such as completion engines. The fracturing pump engines only emit maximum emissions for a short time for each fracturing stage. Assuming 8 fracturing stages and 2 hours of maximum fracturing pump emissions, the maximum emissions would occur only 16 hours per well. For ten wells that is only 160 hours/year, much less than 500 hours for an emergency generator. Someone might argue that the average emissions from each fracturing job should be modeled to demonstrate compliance with the 1-hour NO₂ NAAQS. However, assuming 8 fracturing stages per well for 5 hours per fracturing stage, gives 40 hours per well. For ten wells that is only 400 hours per year.

Even if completion service companies could eventually overcome the technical mountain to retrofit existing fracturing pump engines with SCR, the cost would be very substantial. Retrofitting every engine with SCR (not even considering particulate traps) is expected to cost at least \$140,000 in capital expenditures, plus every year another \$145,000 in operating costs in addition to manpower and reductant costs.¹¹ Hydraulic fracturing a well is a massive operation and adding the additional operational burden of trying to maintain an SCR control system on fracturing pump engines that only run at maximum horsepower for a very limited time period would create additional safety hazards. An additional safety concern is the storage, transport, and handling of the reductant (e.g., ammonia or urea). Operating such a system involves precise exhaust temperature regulation, unplanned injection system cut-offs, and extensive operator attention. It is doubtful if operators could maintain the emissions reductions target given the large and sudden load swings these diesel engines experience. EPA's rules aimed at controlling air emissions from nonroad diesel equipment call for new engines with advanced emission control technologies that integrate the engine with the appropriate fuel control that results in reductions of more than 90% of nitrogen oxides (NO_x) and Particulate Matter (PM) emissions.¹²

The only rationale given in the prdSGEIS for requiring SCR on the completion engines was to demonstrate compliance with the 1-hour NAAQS. Based on the above, compliance with the 1-hour NO₂ NAAQS is not necessary and neither is the SCR control requirement. Combining the mandated use of

Ultra Low Sulfur Diesel fuel along with the appropriate diesel Tier standard provides safe, available (or soon will be), and appropriate emissions controls for this equipment. It is both counterproductive environmentally and cost inefficient to require the use of additional add-on control technologies, such as adding SCR control to the completion engines, which may not be readily available, effective, or safe to operate.

Remove particulate filter traps (CRDPF) control requirements for the completion equipment engines if air modeling based on a more appropriate PM emissions rate demonstrates compliance with the PM₁₀ and PM_{2.5} NAAQS

The DEC has assumed that particulate traps are feasible add-on controls regardless of the engine's size, purpose, or hours of operation and, based upon that assumption, DEC is mandating the use of this control measure. This approach fails to consider the potential issues that can arise when multiple add-on controls are used. For instance, the added fuel use to operate particulate traps raises NO₂ emissions, followed by higher NO_x to NO₂ conversions when traps are used, and the possibility of particulate contamination of the catalyst, etc. This is one of the reasons the EPA chose advanced emission control technologies that integrate with the engine.

While the guidance on modeling intermittent emissions above was for the 1-hour NO₂ NAAQS, the same rationale applies to the 24-hour PM₁₀ and PM_{2.5} NAAQS. At the very least, the DEC should accept the industry's previous comments that the average PM emissions rate of 1.9 pound per hour (lb/hr) should be used for modeling instead of the maximum PM emissions rate of 6.6 lb/hr. In fact, EPA guidance for intermittent emissions when modeling for the 1-hour NO₂ NAAQS recommends using an average emissions rate based on 8,760 hours. From the same EPA memo on Treatment of Intermittent Emissions for air modeling of the 1-hour NO₂ NAAQS:¹³

Another approach that may be considered in cases where there is more uncertainty regarding the applicability of this guidance would be to model impacts from intermittent emissions based on an average hourly rate, rather than the maximum hourly emission. For example, if a proposed permit includes a limit of 500 hours/year or less for an emergency generator, a modeling analysis could be based on assuming continuous operation at the average hourly rate, i.e., the maximum hourly rate times 500/8760. This approach would account for potential worst-case meteorological conditions associated with emergency generator emissions by assuming continuous operation, while use of the average hourly emission represents a simple approach to account for the probability of the emergency generator actually operating for a given hour. Also note that the contribution of intermittent emissions to annual impacts should continue to be addressed as in the past to demonstrate compliance with the annual NO₂ standard.

Following the above approach, a PM emissions rate of 0.38 lb/hr would be appropriate for the 24-hour PM₁₀ and PM_{2.5} NAAQS. (6.6 lb/hr x 500/8760 = 0.38 lb/hr).

The only rationale given in the prdSGEIS for requiring particulate filter traps (CRDPF) on the completion engines was to demonstrate compliance with the 1-hour PM₁₀ and PM_{2.5} NAAQS. Additional air modeling using one of the methods above may demonstrate compliance with these standards. No other states require particulate filter traps on these engines, nor do they require compliance with the NAAQS for non-road engines.

Remove the requirement for use of a VRU for every condensate storage tank

Mandating the use of vapor recovery units (VRUs) on all condensate tanks is inappropriate. This requirement is not technically feasible in most well sites that produce little condensate. EPA acknowledges this in the new NSPS Subpart OOOO and allows the use of a combustion device or a

vapor recovery system for condensate storage tanks that would emit more than 6 tpy of VOC (presently based on a condensate throughput threshold of only 1 barrel of oil equivalent per day of condensate or 20 barrels of oil per day).

A VRU requires a pressurized system to handle pressure surges during separator dumps; therefore, safety becomes an issue of concern. It takes a minimum amount of vent gas to technically and safely operate a VRU (around 10,000 to 12,000 standard cubic feet/day [SCFD]). In the absence of sufficient emissions to operate a VRU, a combustion system is typically the most appropriate mitigation device. In a Texas study of 22 tank batteries in the Dallas-Fort Worth and Houston-Galveston-Brazoria regions, only 3 of those tank batteries produced sufficient flow rates (i.e., above 12,000 SCFD) to operate a VRU.¹⁴ Since the Marcellus Shale in New York is expected to produce dry gas, there will be little if any condensate or crude to potentially produce flashing emissions. Therefore, requiring their use in this area for every tank battery is expected to be unsafe and inappropriate. Implementing each VRU system can cost upwards of \$80,000 in capital costs per tank battery (plus fuel, operations, and maintenance costs),¹⁵ while a combustion device can be installed at roughly \$22,000 plus another \$1,000 each year in operating costs.¹⁶ The combustor typically achieves a destruction efficiency of 98% or greater, requires no electricity, is low maintenance, and is more appropriate for sites where insufficient VOC emissions exist to operate the VRU. The prdSGEIS does not need to address controls on condensate storage tanks since a national standard has been proposed

Remove the limit of 5 million standard cubic feet (MMSCF) of gas that may be vented from completions from one well pad in any 12-month period

The EPA's proposed new NSPS Subpart OOOO for the oil and gas industry contains work practice standards for all new well completions. The standard requires RECs for all completions where a sales pipeline is available and flaring of the vented gas if a good reason for not conducting a REC is documented. Therefore, the prdSGEIS does not need to address completions venting since a national standard has been proposed.

¹ EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf> (accessed August 26, 2011).

² EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf> (accessed August 26, 2011).

³ EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf> (accessed August 26, 2011).

⁴ EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf> (accessed August 26, 2011).

⁵ EPA, 40 CFR Part 63, EPA-HQ-OAR-2008-0708, National Emission Standards for Reciprocating Internal Combustion Engines, <http://www.epa.gov/ttn/atw/rice/fr20au10.pdf> (accessed August 26, 2011).

⁶ EPA, 40 CFR Part 63, EPA-HQ-OAR-2008-0708, National Emission Standards for Reciprocating Internal Combustion Engines, <http://www.epa.gov/ttn/atw/rice/fr20au10.pdf> (accessed August 26, 2011).

⁷ EPA, 40 CFR Part 63, EPA-HQ-OAR-2008-0708, National Emission Standards for Reciprocating Internal Combustion Engines, <http://www.epa.gov/ttn/atw/rice/fr20au10.pdf> (accessed August 26, 2011).

⁸ EPA, 40 CFR Parts 60, 63, 85, 90, 1048, 1065, and 1068, EPA-HQ-OAR-2005-0030, FRL-8512-4, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, <http://www.epa.gov/ttn/atw/area/fr18ja08.pdf> (accessed September 1, 2011).

⁹ EPA, "Nonroad Diesel Technical Amendments and Tier 3 Technical Relief Provision" (January 11, 2011), <http://www.epa.gov/nonroaddiesel/420f07055.htm> (accessed August 26, 2011).

¹⁰ Tyler Fox, EPA Memorandum to Regional Air Division Directors, Subject: Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard, March 1, 2011, http://www.epa.gov/ttn/scram/Additional_Clarifications_AppendixW_Hourly-NO2-NAAQS_FINAL_03-01-2011.pdf (accessed September 1, 2011).

¹¹ New Mexico Environment Department (NMED), *Four Corners Air Quality Task Force Report of Mitigation Options* (November 1, 2001), http://www.nmenv.state.nm.us/aqb/4C/Docs/4CAQTF_Report_FINAL_OilandGas.pdf (accessed August 19, 2011).

¹² EPA, "Clean Air Nonroad Diesel – Tier 4 Final Rule" (updated June 30, 2011), <http://www.epa.gov/nonroaddiesel/2004fr.htm> (accessed August 19, 2011).

¹³ Tyler Fox, EPA Memorandum to Regional Air Division Directors, Subject: Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard, March 1, 2011, http://www.epa.gov/ttn/scram/Additional_Clarifications_AppendixW_Hourly-NO2-NAAQS_FINAL_03-01-2011.pdf (accessed September 1, 2011).

¹⁴ Albert Hendler, Jim Nunn, Joe Lundeen, and Ray McKaskle, *VOC Emissions From Oil and Condensate Storage Tanks*, Final Report (October 31, 2006, revised April 2, 2009), Table 4-2, <http://files.harc.edu/Projects/AirQuality/Projects/H051C/H051CFinalReport.pdf> (accessed August 19, 2011).

¹⁵ Newfield Exploration Company, Anadarko Petroleum Corporation, Utah Petroleum Association, Interstate Oil & Gas Compact Commission, and Independent Petroleum Association of Mountain States, "Reducing Methane Emission with Vapor Recovery on Storage Tanks: Lessons Learned from the Natural Gas STAR Program," Presentation for the Producers Technology Transfer Workshop, Vernal, UT, March 23, 2010, Slide 38, http://www.epa.gov/gasstar/documents/workshops/vernal-2010/06_vrus.pdf (accessed August 19, 2011).

¹⁶ Albert Hendler, Jim Nunn, Joe Lundeen, and Ray McKaskle, *VOC Emissions From Oil and Condensate Storage Tanks*, Final Report (October 31, 2006, revised April 2, 2009), Table 4-2, <http://files.harc.edu/Projects/AirQuality/Projects/H051C/H051CFinalReport.pdf> (accessed August 19, 2011).

From: Thomas West <twest@westfirmlaw.com>
To: Gerstman, Marc; Russo, Steven
CC: Maglienti, Jennifer; Crocker, Alison; Hennessey, Yvonne
Date: 9/14/2011 4:15:04 PM
Subject: SGEIS

Marc and Steve, thanks again for the recent meetings. As a follow-up to our discussions yesterday, it would be good if we could get clarification concerning how the "contiguous... patches" of grassland and forest land language will be interpreted. The severity of the restriction will depend upon how that language is interpreted or modified.

Also, we would like to take you up on the offer to have technical meetings concerning the draft stormwater general permit and the air issues. We envision small working groups relative to each of those issues. If possible, would like to have the working group meeting concerning the draft stormwater general permit prior to finalization of that document for publication. The air meeting can be scheduled later.

Please let us know what works for the Department and call if you have any questions.



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From: Thomas West <twest@westfirmlaw.com>
To: Maglienti, Jennifer; Russo, Steven; Crocker, Alison
CC: Gerstman, Marc; Gill-IOGANY', 'Brad; Hennessey, Yvonne
Date: 9/20/2011 9:39:09 AM
Subject: Stormwater Meeting

In preparation for our meeting this afternoon, we are transmitting the results of our research concerning whether the hydraulic fracturing process constitutes a discharge to the waters of New York State. As you will see, we do not believe that hydraulic fracturing is jurisdictional under the SPDES program because of the fact that the injection process is a carefully engineered process that occurs well below the groundwater zone in New York State. That fact together with the extensive casing and cementing requirements in New York State, preclude the release of hydraulic fracturing fluids to the waters of New York State, which is consistent with the experience in New York State and elsewhere.

The following persons will be attending the meeting in person today. We will also have several people participating by telephone.

1. Jim Carr
2. David Cornue
3. Mara Ginsberg
4. Dan Griffiths
5. Yvonne Hennessey
6. Tom West

Thanks for the ongoing dialogue concerning these issues.



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Attachments: 20110919 White Paper Re_Discharges to the Waters of New York O & G Industry_SGEIS.pdf

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HYDRAULIC FRACTURING BELOW THE GROUNDWATER TABLE IS NOT WITHIN THE JURISDICTION OF ECL ARTICLE 17

In the course of the ongoing preparation of the Supplemental Generic Environmental Impact Statement relative to high-volume hydraulic fracturing, an issue has arisen regarding the scope of the Department of Environmental Conservation's (the "Department") jurisdiction over hydraulic fracturing at depths well below groundwater bearing zones in New York State. Specifically, the issue is whether hydraulic fracturing in formations well below groundwater bearing zones is a "discharge into waters of the state" and, hence, subject to the Department's jurisdiction under Article 17 of the Environmental Conservation Law ("ECL").

This White Paper addresses this issue, answering this question in the negative. Given that there is no contact with, or direct introduction of any pollutants into, state "waters," this activity is not within the Department's Article 17 jurisdiction.

ANALYSIS

A. ECL Article 17

ECL Article 17 prohibits "discharges" of pollutants into "waters of the state" without a permit (*see* ECL §§ 17-0701, 17-0803, 17-0807[4]), or if such discharges will result in contravening water quality standards (*see* ECL §§ 17-0501, 17-0301).

The ECL does not define the term "discharge." However, it does define "waters of the state," and such include groundwater as well as surface water. ECL § 17-0105(2) ("waters of the state" shall be construed to include ... all other bodies of surface or underground water, natural or artificial ... which are wholly or partially within or bordering the state or within its jurisdiction").

B. Hydraulic Fracturing Below Ground Water Bearing Zones Is Not A Discharge to Waters of the State

Under a plain language reading of the statute, hydraulic fracturing well below any groundwater bearing zones cannot be jurisdictional under Article 17. As noted, the express jurisdictional trigger of Article 17 is a "discharge into waters of the state," and hydraulic fracturing below groundwater bearing zones cannot qualify. *See* ECL § 17-0501 ("discharge into such waters"); ECL § 17-0701 ("discharge ... into the waters of this state"); ECL § 17-0803

(“discharge pollutants to the waters of the state from any outlet or point source”); ECL § 17-0807 (“discharges into waters of the state”).

Because the hydraulic fracturing is occurring in formations that are well *below* the groundwater table, there is and can be no direct contact with any state “waters” and, thus, there is no possibility of direct introduction of contaminants (i.e., “discharge”) to such waters. Any doubt concerning whether hydraulic fracturing occurs below the groundwater table is confirmed by the current revised draft Supplemental Generic Environmental Impact Statement (“rdSGEIS”), which requires a supplemental environmental assessment where the top of the target fracture zone is less than 1000 feet from the known freshwater supply. *See, e.g.*, rdSGEIS § 3.2.5. Moreover, the extensive casing, cementing, inspection and testing requirements currently in effect, as enhanced in the rdSGEIS, prevent any fracturing fluids from contaminating the groundwater bearing zone. *See, e.g.*, rdSGEIS §§ 7.1.4.2-3. Accordingly, the carefully controlled injection of water, sand and limited chemical additives as part of the hydraulic fracturing process is not a discharge to the waters of New York.

Importantly, this conclusion is supported by judicial precedent involving “passive migration” cases, wherein the courts rejected application of ECL Article 17 to claims of groundwater contamination resulting from seepage of pollutants through soil. *See, e.g., State v Schenectady Chemicals, Inc.*, 117 Misc. 2d 960 (N.Y. Sup. Ct., Rensselaer Cty, 1983), *aff’d*, 103 A.D.2d 33 (3d Dep’t 1984).¹ In *Schenectady Chemicals*, the trial court found that passive migration of chemicals from soil into groundwater was not a “discharge” under ECL §§ 17-0501, 17-0803 or 17-0807. The Third Department affirmed, stating that (1) “discharge” under ECL § 17-0501 requires active human conduct and does not apply to mere seepage over time; and (2) “discharge into such waters’ [] indicates a *direct introduction of pollutants into the waters*, rather than migration of pollutants from the soil.” *Schenectady Chemicals*, 103 A.D.2d at 36 (emphasis added); *see also State v. Fermenta ASC Corp.*, 160 Misc. 2d 187, 197 (Sup. Ct., Suffolk Cty, 1994) (also quoting this language in rejecting passive contamination claim), *appeal dismissed*, 238 A.D.2d 400 (2d Dep’t), *lv. denied*, 90 N.Y.2d 810 (1997).

Accordingly, given that hydraulic fracturing in formations well below groundwater bearing zones does not touch upon any state waters or directly introduce pollutants into state waters, this activity is not regulated under ECL Article 17.

¹ *See also State v General Electric Co.*, 103 A.D. 2d 985 (3d Dep’t 1984) (finding passive migration of chemicals from inactive dump site into water to not be a “discharge” under ECL § 17-0501); *State v. Fermenta ASC Corp.*, 160 Misc. 2d 187 (N.Y. Sup. Ct., Suffolk Cty, 1994) (finding groundwater contamination resulting from herbicide application to soil to not be a discharge under state water pollution control laws), *appeal dismissed*, 238 A.D.2d 400 (2d Dep’t), *lv. denied*, 90 N.Y.2d 810 (1997).

From: Thomas West <twest@westfirmlaw.com>
To: Kosinski, Kenneth; Gerstman, Marc; Russo, Steven; Cornue, Dave
CC: Arthur', 'Dan; Veale', 'Jason; Gill-IOGANY', 'Brad; Grey-Triana', 'Eddy
Date: 9/22/2011 11:41:59 AM
Subject: RE: GIS Analytical Constraints Request

Steve, I thought that we were going to get this information long-ago, which is necessary to evaluate the cumulative impact of these setbacks and prohibitions. Please let us know if the Department will be sharing this information.

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*This transmittal is subject to our standard e-mail legend.

From: Dave Cornue [mailto:dcornue@all-llc.com]
Sent: Thursday, September 22, 2011 10:59 AM
To: 'Kenneth Kosinski'
Cc: 'Brad Gill-IOGANY'; Thomas West; 'Eddy Grey-Triana'; 'Jason Veale'; Dave Cornue; 'Dan Arthur'
Subject: GIS Analytical Constraints Request

Hi Ken:

It was nice to meet you in person on Tuesday, thank you for taking time to meet with us. As a Follow up, I would like to reiterate our request for an electronic copy of DEC's GIS analysis.

On behalf of IOGA we have requested an electronic copy of DEC's GIS analysis of Marcellus acreage available for development after accounting for state-owned acreage that will not be open to development, setbacks, etc. pursuant to the revised draft SGEIS. Via email, we previously received links to the data sources used, which we are already aware of. What we really need is to get a copy of DEC's GIS analytical constraints and resulting map.

It is our understanding that Steve Russo of the OGC had approved of DEC providing this information to IOGA.

Please let me know when we can call you and your staff to discuss. I will need to have our GIS guy (Jason Veale, copied on this note) on the phone with me.

Thank you,
Dave

David B. Cornue, PG, CHMM
Sr. Geologist

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From: Thomas West <twest@westfirmlaw.com>
To: Gerstman, Marc
CC: Russo, Steven; Hennessey, Yvonne
Date: 9/26/2011 1:30:59 PM
Subject: FW: Discussion of HVHF GP Analytical Parameters

Marc and Steve, consider this one last pitch before the stormwater permit is released to the public to encourage the Department to reduce or eliminate radionuclide testing. As per previous e-mails, there are no circumstances involving the release of water from a well that will not contain chlorides. As such, testing for chlorides continues to be the single best benchmark available for monitoring drilling, stimulation and production.

If the Department is going to consider any type of benchmark testing for radionuclides, we would recommend gross alpha and beta testing only. We also refer you to the technical comments below, which note that any testing for radionuclides should be done unfiltered samples to avoid false positives from NORM associated with on-site soils without any impact from drilling, stimulation or production.

Thank you for your continuing attention to these issues.

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From: Ted Rahon [mailto:ted@cophysics.com]
Sent: Saturday, September 24, 2011 11:33 AM
To: Dave Cornue
Cc: 'Brad Gill-IOGANY'; 'Eddy Grey-Triana'; Tom West; Yvonne Hennessey; 'Dan Arthur-ALL'; 'Dave Cornue'
Subject: Re: HVHF GP Analytical Parameters

Dave,

After review of the proposed DEC regulations, I see your concern regarding the DEC's proposed requirement for quarterly radionuclide analysis for storm water runoff from both under-construction and operating gas wells. I see that the DEC is requiring this sampling for all sites regardless of whether any produced/flowback water is in an impoundment, in tanks, or not on site at all.

Certainly, there is no source of radionuclide discharge to storm water from an operating well with no produced water being on site. Concerning an active drilling site, I can see that produced/flowback water in an impoundment could be a source of release to storm water if the storm were severe. Produced/flowback water in tanks would not be much of a risk for discharge except in the event of a pipe break or other accident.

Therefore, I recommend that you suggest to the DEC that the requirements be tailored to the risk of radionuclide release depending on the status of the site.

You might also suggest only performing quarterly gross alpha and beta analysis as a screening test. If either one showed an elevated gross radionuclide concentration (for example, > 30 pCi/l), then specific radioisotope analysis would be performed. This would help economically.

In addition, any radioactivity analysis of water should be performed after the water sample is filtered because the natural background concentration of radionuclides in normal soil, if suspended in agitated storm water, would cause erroneously-elevated apparent radionuclide concentrations. Non-dissolved suspended solids due to agitation is not a human health risk as eventual settling would occur before entering anyone's water supply and, of course, no one would drink cloudy, dirty water.

The real objective is to prevent higher concentrations of dissolved radionuclides from being released from produced/flowback water.

Call me anytime to discuss.

Regards,
Ted Rahon

Theodore E. Rahon, Ph.D., CHP
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From: Dave Cornue [mailto:dcornue@all-llc.com]
Sent: Monday, September 26, 2011 12:22 PM
To: 'Brad Gill-IOGANY'; 'Eddy Grey'; Thomas West
Cc: Yvonne Hennessey; 'Ted Rahon'; 'Dan Arthur'; 'Dave Cornue'
Subject: Discussion of HVHF GP Analytical Parameters

Brad/Tom:

The email below provides comments on NORM analytical testing received from Ted Rahon of CoPhysics. Ted makes some good points. We have also outlined a few more general comments in the following.

1. NORM:
 - a. The analytical methods specified are EPA drinking water methods:
 - i. Storm water samples are not drinking water – that is storm water samples will typically have elevated (above that of drinking water) TDS levels
 - ii. TDS can cause significant interference with the drinking water analytical methods
 - b. Lab testing as specified by DEC in their draft:
 - i. According to one lab, the thorium and uranium tests specified are no longer used and have been replaced by other methods
 - ii. The combined lab cost for all five tests will run approximately \$500 per sample
 - c. There are no field methods currently available for screening if the objective is to generate pCi/L data at detection limits similar to those of EPA's drinking water MCLs:
 - i. Alpha and beta are self absorbed-by the water matrix
 - ii. Water samples must be evaporated to solids prior to analyses
 - iii. DEC has not specified detection limits, EPA's drinking water standards are:
 1. Alpha = 15 pCi/L
 2. Beta = 4mR/yr – note this is in exposure-type parameter rather than a concentration
 3. Radium = 5 pCi/L
 4. Uranium 30 ug/L
 - iv. According to Thermo Scientific, any field screening at such levels, if even at all possible, would require lead-shielding for both the instrument and sample in order to eliminate background radiation.
 - v. People build homes with residential water wells in the Marcellus outcrop area of New York:
 1. Any NORM present in the Marcellus would be natural background in the outcrop area
 2. Any turbidity in either runoff or well water in the area may contain minute particles of Marcellus Shale which may test positive for NORM
 3. The entire Middle and Upper Devonian geologic section is made up largely of shale – the Marcellus is simply the lowermost (oldest) and most organic rich of these shales
 - d. Water samples should be field-filtered prior to analyses to remove any “background” shale solids that may increase apparent NORM levels in drinking water samples
 - e. Recommended alternative:
 - i. Screen for gross alpha and gross beta through laboratory analyses of field-filtered water samples
 - ii. If detections exceeding (whatever standard DEC decides to use) are

present, then test specifically for Radium, Thorium, and Uranium

2. GC/MS Hazardous Substance Library Search:

- a. This is testing beyond the range of compounds normally analyzed for in EPA test methods for VOC and SVOC
- b. This testing provides Tentatively Identified Compounds (TICs) – the ID of the compound is considered only tentative because it is not being compared to a laboratory standard
- c. TICs typically do not have regulatory standards associated with them, so it is not possible to evaluate results relative to promulgated environmental risk-based regulatory standards
- d. Testing will cost approximately \$415 per sample for VOC and SVOC combined.
- e. Recommended alternative:
 - i. Screen for TDS, chlorides, and pH
 - ii. If detections exceeding standards established by DEC are exceeded then more extensive testing could be considered based on the specific likely constituents present at the specific site
 - iii. Only if a release of an HVHF chemical to the surface of the drill pad occurs should subsequent stormwater screening samples be required to analyze for additional analytes as part of the testing required during initial screening testing (“i” above), such testing could include:
 1. Standard analytical parameters that test for known constituents of the HVHF fluids used on site
 2. Only if the released HVHF product includes chemical constituents not normally included in standard analytical tests should specific testing be performed to screen for such a constituent – and then the additional testing should be based on analysis against a known laboratory standard for that constituent, rather than the blind TIC testing approach
 3. Such an approach will:
 1. Save on the cost of routine sample analyses
 2. Expedite the testing and evaluation procedure, over that of a routine and broad-based TICs approach

3. Toxicity Testing:

- a. DEC provides no indication of what they expect to see for toxicity testing
- b. It could involve biological studies to evaluate toxicological properties and impacts to key species (e.g., Daphnia, fat-head minnows, etc.)
- c. This could be costly and time consuming – actual costing for this is impossible to anticipate accurately as there are too many unknowns (including the compound that might require testing and the tests that would be most appropriate), but we are told that something in the range of \$1,000 per compound per species would not be unrealistic
- d. Recommended alternative:
 - i. As mentioned in 2(f)(iii) above, if a known release of an HVHF chemical has occurred, and only when that chemical does not have any environmental-based regulatory standard in New York, should

toxicological testing be considered

ii. Toxicological evaluation could include the following:

1. Search for existing regulatory standards for the specific chemical compound in other jurisdictions (i.e., other states or federal EPA)
2. Literature search for already established toxicological properties for the specific chemical compound in question
3. Only if no risk-based regulatory standards or toxicological information is obtainable should any toxicological testing be considered
4. Such an approach will:
 1. Save on the cost of toxicological testing relative to routine sample analyses
 2. Prevent redundant testing and toxicological evaluation should such specific chemical be a concern at multiple well pads (and also under multiple operators)
 3. Expedite the toxicological evaluation procedure – independent toxicological testing and evaluation could be both costly and time consuming
4. What other industry is held to a similar level of routine testing requirements (e.g. including TICs) for their storm water discharges in NY??? By requiring such a level of testing for every stormwater outfall, on every well pad, and on a quarterly basis, this can only be interpreted as a routine testing expectation by DEC. A review of the existing DEC Multi-Sector GP indicates that no other industry is required to routinely sample and test for such a comprehensive range of constituents as part of a stormwater permit. The key word here is “routine” – if a known release event has occurred at specific well pad then additional testing may be warranted. However, to routinely require such testing is excessive and not in keeping with the requirements imposed on other industries in New York.

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From: Yvonne Hennessey <yeh@westfirmlaw.com>
To: Russo, Steven
CC: Maglienti, Jennifer; Gerstman, Marc; Crocker, Alison; Gill-IOGANY', 'Brad; West, Thomas
Date: 9/26/2011 3:13:55 PM
Subject: rdSGEIS - Air Issues

Steve,

Attached is our White Paper on preemption under the Clean Air Act that we previously indicated would be forthcoming. As you will see, several of the air quality mitigation measures proposed in the rdSGEIS are preempted under the Clean Air Act.

We look forward to an ongoing dialogue regarding these issues.

Thank you,
Yvonne

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Attachments: 20110926 FINAL White Paper Re_CAA PreemptionO & G Industry_SGEIS.PDF

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PREEMPTION OF AIR QUALITY IMPACT MITIGATION MEASURES UNDER THE CLEAN AIR ACT

The New York State Department of Environmental Conservation (“DEC”), in its Revised Draft Supplemental Generic Environmental Impact Statement (“rdSGEIS”), is proposing a number of mitigation measures aimed at avoiding or mitigating potential adverse environmental impacts from High-Volume Hydraulic Fracturing. This White Paper addresses the rdSGEIS’s mitigation measures related to air quality impacts, and explains that several of the proposed restrictions are simply preempted under the federal Clean Air Act (“CAA”).

ANALYSIS

A. The Proposed Air Quality Mitigation Measures/Restrictions

The rdSGEIS proposes the following requirements as mitigation measures to protect air quality:

- No uncertified (i.e. U.S. Environmental Protection Agency [“EPA”] Tier 0) drilling or completion equipment engines will be used for any activity at the well sites.
- Drilling Engines:
 - Drilling engines and drilling air compressors will be limited to EPA Tier 2 or newer equipment.
 - If Tier 1 drilling equipment is to be used, these will be equipped with both particulate traps (“CRDPF”) and Selective Catalytic Reduction (“SCR”) controls.
- Completion Engines:
 - Completion equipment engines will be limited to EPA Tier 2 or newer equipment.
 - Particulate traps will be required for all Tier 2 engines.
 - SCR control will be required on all completion engines regardless of emissions Tier.

See rdSGEIS, at 7-109. See also rdSGEIS, Appendix 10, Supplementary Permit Conditions for High-Volume Hydraulic Fracturing, at 14-15.

B. The Clean Air Act

The Clean Air Act Amendments of 1990 created a scheme for the regulation of emissions from nonroad sources such as lawnmowers, bulldozers, locomotives, and marine vessels. The 1990 amendments regarding nonroad sources “reflect the basic structure of the Clean Air Act, which makes the States and the Federal Government partners in the struggle against air pollution, but sought to avoid an anarchic patchwork of federal and state regulatory programs.” *Pacific Merchant Shipping Ass’n v. Goldstene*, 517 F.3d 1108, 1110 (9th Cir. 2008) (internal quotations omitted). Accordingly, the 1990 amendments gave the federal government the authority to establish “standards applicable to emissions from . . . new nonroad engines and new nonroad vehicles.” Clean Air Act § 213(a)(3), 42 U.S.C. § 7547(a)(3). At the same time, the statute expressly preempts all states from regulating emissions from new engines smaller than 175 horsepower that are used in construction or farm equipment or vehicles, and new locomotive engines. Clean Air Act § 209(e)(1), 42 U.S.C. § 7543(e)(1).

For other nonroad engines and vehicles beyond those expressly reserved to the federal government, § 209(e)(2) allows California—consistent with its longstanding role as a national leader in the regulation of mobile source air pollution—to seek authorization from the EPA to adopt “standards and other requirements relating to the control of emissions.” Clean Air Act § 209(e)(2)(A), 42 U.S.C. § 7543(e)(2)(A). States other than California may adopt and enforce, “standards relating to control of emissions from nonroad vehicles or engines [other than those expressly preempted under § 209(e)(1)],” only upon certain requirements. That is, (1) the State must provide notice to EPA; (2) the “standards and implementation and enforcement [must be] identical, for the period concerned, to the [EPA authorized] California standards”; and (3) California and the regulating State must adopt such standards “at least 2 years before commencement of the period for which the standards take effect.” § 209(e)(2)(B).

C. Implied Preemption

Both the federal courts and EPA itself have construed the obvious intent of CAA § 209(e)(2) to provide for implied preemption of state regulations purporting to establish standards or requirements applicable to nonroad engines and vehicles. This is because the CAA permits only California to seek authorization to adopt such regulations, and other states are merely allowed to opt in to the California rules.¹ As one court put it, “[t]he California authorization provision assumes the existence of a category of sources that are subject to preemption. . . . states must be preempted from adopting any regulation for which California could receive authorization.” *Engine Mfrs. Ass’n v. EPA*, 88 F.3d 1075, 1087-1088 (D.C. Cir. 1996) (citations omitted). Importantly, the United States Supreme Court has held that “standards” within the purview of Title II of the CAA (applying to mobile sources, such as drilling and completion engines) include “numerical emissions levels with which vehicles or engines must comply, or emission-control technology with which they must be equipped.”²

¹ See *Pacific Merchant Shipping Ass’n v. Goldstene*, 517 F.3d at 1113; *Engine Mfrs. Ass’n v. EPA*, 88 F.3d 1075, 1087 (D.C. Cir. 1996); 40 C.F.R. Part 89, Appendix A to Subpart A.

² *Engine Mfrs Ass’n v. South Coast Air Quality Mgmt. Dist.*, 541 U.S. 246, 253 (2004) (“SCAQMD”) (citations omitted); *Pacific Merchant Shipping Ass’n v. Goldstene*, No. CIV. S-06-2791, 2007 WL 2492681 (E.D. Cal. Aug. 30, 2007) (quoting *SCAQMD*, 541 U.S., at 253), *aff’d*, 517 F.3d 1108 (9th Cir. 2008).

With respect to nonroad engines, EPA's regulations expressly state that agency's interpretation of § 209(e)(2), that "EPA believes that states are precluded from requiring retrofitting of used nonroad engines except that states are permitted to adopt and enforce any such retrofitting requirements identical to California requirements which have been authorized by EPA under section 209 of the Clean Air Act." 40 C.F.R. Part 89, Appendix A to Subpart A.

CONCLUSION

Based on the above, several of the rdSGEIS's proposed air quality mitigation measures are preempted under the Clean Air Act. Specifically, the proposed restrictions on the use of certain used nonroad engines based on the engine's "EPA Tier" are simply preempted. The proposals to require retrofitting specified used nonroad engines with SCR and/or CRDPF technology are also preempted, and the fact that such retrofitting requirements are prohibited is expressly stated in EPA's regulations. Importantly, nowhere does the rdSGEIS cite to any authority for these requirements, or otherwise suggest that they have been adopted in California, or that such "standards" have been in existence for the required two-year waiting period. All of these requirements seek to establish emissions standards or requirements for control technologies that are simply preempted under the Clean Air Act.

From: Julia Tighe
To: Briccetti, Heather; Moore, Rob; Bays, Jim; Lupardo, Donna; Gill, Brad; Boling, Mark
CC: Field, Bradley; Musella, Cathleen; Reynolds, Anne; Leff, Eugene; Russo, Steven; Hunter, Lisa; lois.hill@bcnys.org; Howard, Jessyca; mpostman@law.pace.edu; Tipton, Pam
Date: 9/28/2011 12:39:55 PM
Subject: HVHF Subcommittee on Revenue

Thank you for agreeing to participate in the High-Volume Hydraulic Fracturing subcommittee to develop revenue recommendations.
We would like to have a conference call on Monday October 3 at 430 PM to move the discussions forward.
Number: 866-394-2346
Code: 5394750548

We welcome folks in Albany to come to DEC's office. Please let me know by COB Friday if you can participate.

Please me know if there are any revenue ideas which you would like us to prepare any fiscal projections in advance of the meeting.

Thank you-
Julie

Julie Tighe
Director, State Legislative Affairs
Office of Legislative Affairs
New York State Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, New York 12233
518-402-2797
cell 518-813-1664
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Attachments: White paper Potential HVHF revenue streams.pdf



Advisory Panel on High-Volume Hydraulic Fracturing

Potential Funding Streams

September 26, 2011

There are a number of options for raising revenue necessary to support state resource needs in order to properly regulate High-Volume Hydraulic Fracturing (HVHF). A menu of options is provided in Section B of this paper. Prior to discussing these options is some information about DEC's existing funding streams.

A. Existing Revenue Streams in New York

Currently, there are two primary mechanisms in New York which provide funding to support State activities and oversight related to oil and gas drilling: a drilling permit fee and fees associated with the construction stormwater State Pollution Discharge Elimination System (SPDES) permit. Natural gas production is also subject to a local tax, the ad valorem property tax.

Drilling permit fees

Drilling permit fees are specified under Environmental Conservation Law (ECL) §23-1903(1)(b). These fees are one time, refundable permit fees, and are deposited in the state's General Fund. These permits are not renewable. The fee structure, last updated as part of the 2003-04 State Budget (Chapter 62 of the Laws of 2003), is based on the measured depth (including the horizontal length) of the well, as follows:

Depth	Fee	Depth	Fee
1-500	\$190	5501-6000	\$2,280
501-1000	\$380	6001-6500	\$2,470
1001-1500	\$570	6501-7000	\$2,660
1501-2000	\$760	7001-7500	\$2,850
2001-2500	\$950	7501-8000	\$3,040
2501-3000	\$1,140	8001-8500	\$3,230
3001-3500	\$1,330	8507-9000	\$3,420
3501-4000	\$1,520	9001-9500	\$3,610
4001-4500	\$1,710	9501-10000	\$3,800
4501-5000	\$1,900	10000+	\$3,800 + \$190 per additional 500 feet
5001-5500	\$2,090		

In addition to the depth fee, applicants are required to submit a flat \$100 fee with each permit application which is deposited into a Special Revenue Other account, the Oil and Gas Account, and is used to plug orphaned and abandoned wells.

SPDES Construction General Permit fees

In addition to the gas drilling permit, each well will require coverage under the High-Volume Hydraulic Fracturing (HVHF) General Permit, pursuant to the State Pollution Discharge Elimination System (SPDES) program. All construction activity under a SPDES General Permit is subject to a fee pursuant to ECL §72-0602(q). The law requires that a \$100 fee be imposed for every disturbed acre of land covered by the permit plus \$600 per acre of impervious surface that will remain post-construction. This is a one-time fee paid initially; an annual fee of \$100 is paid

while coverage under the permit continues. These funds are deposited into a Special Revenue Other account at DEC, the Environmental Regulatory Account, which supports DEC activities.

Ad valorem taxes

Local property taxes are imposed by counties in New York State on gas production within their jurisdictions with assessments by well based on unit of production value. These taxes are governed by Title 5 of Article 5 of the Real Property Tax Law. The unit of production value is calculated by the oil and gas unit within the Office of Real Property Tax Services (ORPTS), within the Department of Taxation and Finance. This topic will be discussed at greater length in future papers. The potential revenue generated by the ad valorem tax is discussed in the revised draft Supplemental Generic Environmental Impact Statement (dSGEIS) in section 6.8.4.2, and is presented in summary in Table 6.50 on page 6-259.

B. Potential Additional Program Fees

DEC has identified several potential additional fees that could be imposed associated HVHF. In developing recommendations, we suggest keeping these principles in mind:

- Revenue should offset state costs for regulation, monitoring and enforcement;
- Revenue should be predictable and recurring;
- Administrative burdens should be minimized; *i.e.*, administrative costs associated with collecting fees cannot be more than the fees themselves; and
- The approach should support policy goals.

HVHF Drilling Fee

A new permit fee could be established for HVHF natural gas extraction. This fee would be in addition to the existing depth fee and would support the increased oversight activity associated with HVHF as compared to conventional gas drilling. This could be a flat fee or a sliding scale fee based on some measureable parameter tied to the activity such as water usage. It could also be used when a well is re-fractured or a well is “plugged back” to explore a formation shallower than the target formation.

Operating Permit Fee

A new fee could be established that is based solely on the production phase of a well. The existing fee structure is based on the drilling phase, although regulation and oversight continue through the production phase. In the Mined Land Reclamation program, for example, mining operations are required to submit an annual fee for the amount of acres under development or otherwise un-reclaimed for that year (*see* ECL §72-1005). There are a variety of ways that such a fee could be assessed, including a flat fee per well, a sliding scale fee based on the number of wells or well pads that an operator controls, and a fee triggered by a minimum number of wells.

Increase In Permit Fees

Increasing permit fees could result in incremental increases in revenue through an existing mechanism. The fees currently are based on the measured depth and length of a well and do not consider the method of extraction. If fees are increased, wells drilled conventionally could also be impacted. New York currently has the highest drilling permit fees in the country. Pennsylvania amended its law in 2009 to increase permit fees from \$100 to a depth-based fee

(similar to New York's), which generally ranges from \$1,500 to \$3,000 for Marcellus Shale exploration.

Well Transfer Fee

A fee could be established for wells that are transferred from one party to another. When the plugging liability for a well is transferred from one operator to another, the operator is required to obtain approval from DEC. DEC must review the new owner's financial security, perform a field inspection to ensure that the well site is in compliance and require that the financial security is transferred to the new operator.

Compulsory Integration Fee

When operators do not control the entirety of a proposed spacing unit for an oil or gas well, DEC undertakes the process of bringing the remaining land into the unit through compulsory integration. This process ensures that all landowners from whose property oil or gas may be drained are compensated. Owners who are not controlled by the operator make elections to choose the type of investment and level of compensation they desire. Compulsory integration hearings are subsequently held to review the elections and issue an order. Sometimes adjudicatory hearings must also be held to resolve conflicts. Presently, there are no fees for this process.

Well Spacing Variance Fee

Variances are needed when a proposed spacing unit does not conform to the statutory uniform spacing requirements set forth in ECL §23-0501 or pursuant to 6 NYCRR Part 553. When variances are needed, DEC reviews the geological and engineering justification for a variance. This includes providing public notice and an opportunity for hearing if there are concerns. Presently, there are no fees for undertaking these activities.

Annual Report Fee

A fee could be required to accompany the annual report on oil and gas wells. Every operator with active wells in New York State is required to file a report with DEC which enumerates the number of wells under control and the production of each active oil and gas well. Among other things, DEC compiles the production data and, in turn, provides the data to the Department of Taxation and Finance. The Department of Taxation and Finance uses the data to determine the unit production value for determining ad valorem tax rates. The production data is also provided to county tax assessors to determine the total tax for that operator within their jurisdiction.

Leasing of state lands

The state presently has over 60,000 acres under lease for oil and gas exploration and development. The last time the state undertook an offering was in 2006 at the height of the Trenton-Black River formation development. Over \$32.3 million in state revenue was generated from state land leasing and production during the period 1999-2010. Future state land lease sales would require DEC to identify appropriate acres for lease, including working with other state agencies, and to develop new lease provisions to reflect the conditions set forth in the revised dSGEIS. Mineral rights would be put out for competitive bidding. This revenue stream is constrained by conditions proposed in the revised dSGEIS to preclude surface activity related to HVHF on certain state lands.

State land could also be leased for pipeline construction and a fee could be charge based on length of pipeline and/or amount of gas throughput annually.

Severance Taxes

The majority of states with significant natural gas production impose a severance tax, including Alaska, Arkansas, Louisiana, Ohio, Oklahoma, Texas, West Virginia and Wyoming. In all, at least 34 states have a severance tax. The one major exception among large gas production states is neighboring Pennsylvania, where Marcellus Shale drilling is active but no severance tax is imposed. Severance taxes are excise taxes on natural resources severed or extracted from the earth or water within a political jurisdiction (e.g., a state). They are usually paid by the producer or severer. The primary policy rationale for a severance tax is that the state (the public) is being compensated for the depletion of a non-renewable and finite resource from within its borders. Private landowners are generally compensated by lease payments and royalties paid by producers. Severance taxes have been in existence in the U.S. since the early 1900's (the first state to impose them was Texas in 1905), and they are commonly applied to oil, natural gas, coal and precious metals.

There are several structural elements to a severance tax. These include the measure of the tax (by volume, by value, or some combination), the tax base (type of wells taxed, exemptions for small production wells), the tax rate, whether rate preferences are included, and how the tax revenue is used.

Type of tax

States with gas severance taxes impose one of two basic types of taxes: 1) A per unit tax based on the unit volumes of gas produced (e.g., thousand cubic feet, or mcf); 2) a value-based tax where the rate is imposed on the market value of the gas produced/sold. Most states opt for the latter with 20 of the 27 states using this approach and 7 states using the per unit method. The major producing states use the market value method. Two states, including West Virginia where Marcellus shale drilling is now underway, have taxes with both per unit and value components. Proponents argue that using market value better captures the economic value of the resource and the producer's ability to pay.

Tax Base

Most states tax all the gas produced and do so at the same tax rate. A number of states provide a number of exemptions. For example, some states exempt gas from small "stripper wells" – wells which produce less than 22,000 mcf per year.

Tax Rates

Tax rates in market value tax states range from under 1 percent to 22.5 percent of production value. Alaska has the highest rate at 22.5% while Montana has the lowest at 0.76%. West Virginia's tax has both a market value rate at 5% and a per unit rate of 4.7 cents per mcf. Severance tax proposals for Pennsylvania, advanced by former Governor Rendell in Executive Budgets in 2009 and 2010, used the West Virginia tax rates as a model. Tax rates in per unit states range from a low of 1.063 cents per mcf (in California) to a high of 28.5 cents per mcf (in Florida).

Arkansas and Texas have lower preferential rates for high cost gas (e.g., shale gas) during an initial production period. These reduced rates for the first three years or so apply to roughly 45% of the yield of a shale gas well over its 20+ year lifespan as most production is in the first three years. Oklahoma recently enacted legislation (effective for production commencing on or after July 1, 2011) that provides for a 1% tax rate on gas from horizontal wells for the first 48 months of production. These and other states' severance taxes are as follows:

Table 2¹		
State	Tax Measure	Tax Rate
Alaska	Net Value	22.5%
Arkansas	Gross Value less treatment and transportation costs	5% except 1.5% for 'high cost' wells for up to 4 years and 1.5% for other wells for first 2 years; 1.25% for 'stripper' wells.
Colorado	Gross income	2-5%
Louisiana	Volume	16.4 cents per MCF
Ohio	Gross Value	2.5 cents per MCF
Oklahoma	Gross Value	7%
Texas	Market Value	7.5%
West Virginia	Gross Value & Volume	5%; 4.7 cents per MCF
Wyoming	Gross Value	6.00%

*Gross value is the value of natural gas produced at the point of production. Value is the sale price at the mouth of the well. Market value means the producer's actual cash receipts from the sale of natural gas to the first purchaser less the actual costs to the producer of dehydrating, treating, compressing, and delivering the gas to the purchaser.

The burden of severance taxes is not generally borne by consumers in the imposing state.² This is because prices are set in markets that extend beyond the borders of the State. New York gas producers would be "price takers;" that is, the price at which they are able to sell their gas is set by the market, not the producers themselves. As price takers, they would likely be unable to increase their price to "pass the tax through" to purchasers.

C. Other States Permit Fees

Most states that have severance taxes do not impose significant permitting fees. The approaches used vary widely from state to state. Most states charge a modest fee, some flat, others based on depth. Some require additional permits in certain circumstances. For example, Ohio requires an additional \$1,000 urban drilling fee to be paid if activity will take place in a city, town or other local government with a population of 5,000 or more. In Table 3 below is a list of permit fees charged by various gas producing states.

¹ Ozpehriz, Niyazi, 2010 "The State Taxation of Natural Gas Severance in the United States: A Comparative Analysis of Tax Base, rate, and Fiscal Importance."

² See, e.g., Mitch Kunce, Shelby Gerking, William Morgan, Ryan Maddox, 2003 "State Taxation, Exploration and Production in the U.S. Oil Industry," *Journal of Regional Science* 43, no 4 pp. 749-770; Bernard Weinstein, 1984 "Who Pays the Severance Tax?," *Policy Studies Journal* 12(3): 537-545.

Table 3			
State	Type of Fee	Fee	Additional Fees/Permits
Alaska	No permit fee		
Arkansas	Flat fee	\$300	
Colorado	No permit fee		
Louisiana	Varies based on depth <ul style="list-style-type: none"> • 0-3,000 feet • 3,100-10,000 feet • 10,100+ feet 	\$126-\$1,264	
Ohio	Flat fee	\$500	<ul style="list-style-type: none"> • Urban Well Drilling - \$1,000 • Re-Issue Fee - \$250 per year in operation • Expedited Service Fee - \$250
Oklahoma	Flat fee	\$175	<ul style="list-style-type: none"> • Expedited Service Fee - \$500
Pennsylvania	Varies based on depth <ul style="list-style-type: none"> • 0-1,500 • 500 foot increments to 12,000 feet 	\$900-\$3,000	<ul style="list-style-type: none"> • Orphan well surcharge - \$200 • Abandoned Well surcharge - \$50
Texas	Varies based on depth <ul style="list-style-type: none"> • 0-2,000 feet • 2,100-4,000 feet • 4,100-9,000 feet • 9,100+ feet 	\$200-\$300	<ul style="list-style-type: none"> • Expedited Service Fee - \$150 • Spacing fee - \$200 • Online filing fee - \$1,350
West Virginia	Varies based on depth <ul style="list-style-type: none"> • <20 feet • 20+ feet 	\$650-\$900	
Wyoming	Flat fee	\$50	

Several states provide for an expedited service fee. In Texas, if the fee is paid a permit application is processed in one to two days, compared to normal processing of three to four days. In Ohio, permits are processed in five days if the expedited service fee is paid. Other states, such as Colorado do not charge a permit fee. Conversely, in Alaska although permit fees are not assessed, the Alaska Oil and Gas Conservation Commission charges the industry its entire operational cost.

From: Thomas West <twest@westfirmlaw.com>
To: Hogan, Chris; Little, William; Crocker, Alison
CC: Gerstman, Marc; Russo, Steven; robert.rosenthal@exec.ny.gov; thomas.congdon@exec.ny.gov
Date: 10/18/2011 10:17:44 AM
Subject: American Natural Gas

Attached is a copy of the letter that was mailed to the Commissioner yesterday. We look forward to discussing a way to resolve this issue in a manner that allows New York State to move forward with competitively priced natural gas fueling stations based upon LNG storage in small quantities. One thought that occurred to me after the letter was sent is that the Department could amend the chemical bulk storage regulations to eliminate the exemption for LNG in small quantities to facilitate natural gas fueling. The chemical bulk storage regulations and the statutory program upon which they are based more than adequately cover any of the putative safety issues and would provide the basis for a DEC permit.



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Attachments: 20111017 FINAL letter to MartensRe_Natural Gas Fueling in NYAmerican Natural Gas_General.PDF

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Thomas F. Puchner
Sita Legac*
Cindy M. Monaco
Francis X. O'Connor, *Of Counsel**

October 17, 2011

VIA FIRST CLASS MAIL

Mr. Joe Martens, Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Re: American Natural Gas, LLC -- LNG Fueling in New York State

Dear Commissioner Martens:

We represent American Natural Gas, LLC ("ANG"), a New York limited liability company that has been formed for the purpose of developing natural gas fueling stations in New York and other states. As you are aware, there are considerable cost and environmental benefits to fueling fleets and passenger vehicles with natural gas. Unfortunately, however, New York State has a regulatory obstacle that you control that currently precludes the development of this safe and reliable fuel and puts New York State at a competitive disadvantage compared to other states as other states ramp up support for the conversion to this clean burning, indigenous fuel.

The current trend in the natural gas fueling industry is to rely heavily on liquefied natural gas ("LNG") as a fuel source. LNG can then be easily converted to compressed natural gas ("CNG") or it can be used directly in larger vehicles. Large tractor trailer sized trucks use LNG directly, which provides the necessary range for that sector of the industry. Smaller trucks and automobiles use CNG. Without LNG, in order to create CNG stations, it is necessary to purchase and operate expensive compressors to compress natural gas from distribution pressures in the 5 to 10 pound range to fueling pressures approximating up to 4,000 pounds. With LNG, in contrast, a station can be designed based upon one or two small, 15,000 gallon LNG tanks, which can then provide fuel directly to the large tractor trailers or have the LNG converted into CNG through a simple heat exchanger and a small CNG storage tank. ANG estimates that the cost to construct and operate a fueling station based on LNG is approximately 30% less than a pure CNG station that requires compression.

Mr. Joe Martens, Commissioner
October 17, 2011
Page 2

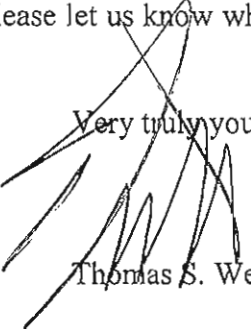
Pennsylvania just recently announced that it is moving forward with a program to promote natural gas fueling across the state. Pennsylvania, like other states, recognizes the environmental benefits and the cost savings to industry and consumers through natural gas fueling. At today's prices, there are many places across the country where natural gas fueling saves approximately \$2.00 per gasoline gallon equivalent over gasoline or diesel fuel. And, as you may be aware, the Honda NGV is rated as the cleanest vehicle available in the United States. Many New York industries recognize the cost and environmental benefits of natural gas fueling. As such, the demand is high for this fuel.

Unfortunately, New York enacted a statute in 1979 that is found in Article 23, Title 17 of the Environmental Conservation Law. This statute, entitled Liquefied Natural and Petroleum Gas, requires permits from the DEC for LNG and liquefied petroleum gas ("LPG") facilities. Moreover, ECL § 23-1709 requires the Department to adopt regulations within one year from the effective date of the statute prescribing the form and content of applications for environmental safety permits to construct LNG or LPG facilities. Unfortunately, although the law has been on the books since 1979, those regulations have never been enacted.

Recently, we contacted the Department to determine if permits would be available without the regulations and were told that they would not. As such, we are compelled to write you to request that you immediately move forward with adopting emergency regulations to correct this inequity. In one of our conversations with Department personnel, it was mentioned that any regulations adopted by the Department would include small quantity exemptions. We believe that such an approach is prudent. As mentioned above, we believe that most facilities can be designed with several small LNG tanks. In addition, we are prepared to show that LNG storage, particularly in small quantities, is safe. In fact, it is much safer than LPG or propane storage, the latter of which is commonly undertaken throughout New York State at volumes equal to or greater than what we are proposing.

We would be pleased to have the opportunity to meet with you and Department Staff to discuss potential solutions to this situation. Please let us know when it would be convenient for such a meeting.

Very truly yours,



Thomas S. West

TSW/rsb

cc: The Honorable Andrew Cuomo
Robert Rosenthal, Esq.
Marc S. Gerstman, DEC Executive Deputy Commissioner
Alison Crocker, Esq.

From: Lisa Schwartz
To: Martens, Joe
CC: mkrusen@co.chemung.ny.us; Abraham, Gary A.; Hull, Ronald G.; West, Thomas; yeh@westfirmiaw.com
BC: Russo, Steven
Date: 10/19/2011 2:13:02 PM
Subject: Chemung County Landfill, DEC #8-0728-00004/00013

Dear Commissioner:

Please find attached pdfs of the Department Staff Response to Direction in the Commissioner's Decision dated August 4, 2011. This includes a copy of the Department initiated permit modification, including a draft permit, being sent today; a copy of recent revisions to the landfill Operations and Maintenance Manual and Environmental Monitoring Plan; copies of two Department staff correspondences approving of these recent O&M Manual and EMP revisions; and correspondence of today's date containing staff's further elaboration in response to the specific questions asked by the August 4, 2011 decision. Hard copy of all these documents also are being sent by US Mail.

Thank you.

Respectfully,
Lisa P. Schwartz
New York State Department of Environmental Conservation
Region 8, Office of General Counsel
6274 East Avon-Lima Road
Avon, New York 14414
Phone (585) 226-5364
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Email lpschwar@gw.dec.state.ny.us

Attachments: Chemung EMP_E_ approvalt2011-10-18-141125_1.pdf, Chemung O&M_approval2011-10-18-141150_1.pdf, Chemung O&M - with Rad Mon Description 10-18-11 FINAL_2.pdf, Chemung LF_EMP_apxE_20110928.pdf, 8-0728-00004-00013_modification_DRAFT20111017.pdf, 072800004 DIM Cover Letter Scanned_1.pdf, DEC Staff Response to Commissioner Aug 4 2011 Direction.pdf

New York State Department of Environmental Conservation

Division of Materials Management, Region 8

6274 East Avon-Lima Road, Avon NY 14414-9516

Phone: (585) 226-5411 • Fax: (585) 226-2909

Website: www.dec.ny.gov



Joe Martens
Commissioner

October 18, 2011

Ms. Carla Jordan
Environmental Manager
Chemung Landfill, LLC
P.O. Box 2178
Elmira, NY 14903

Dear Ms. Jordan:

**RE: Chemung County Landfill MSW and C&D Landfill Environmental
Monitoring Plan (EMP) APPENDIX E -- Additional Considerations
for Radionuclide Sampling Chemung (T) Chemung (C)**

The above referenced document was received by this office via e-mail on September 28, 2011. The document describes the sampling procedures and radiological analysis that will be used to monitor landfill leachate and leachate lagoon sediment. The information contained in the document is acceptable and the revision is hereby approved.

Be advised "Appendix E" is an addition to the existing approved Environmental Monitoring Plan and it replaces no existing section; as such, all sections of the currently approved EMP manual remain in effect.

If you have any questions or concerns regarding this letter, please contact me at (585) 226-5414, or Mark Domagala at (585) 226-5426.

Sincerely,

Gary M. Maslanka
Environmental Engineer

cc: Michael Krusen Chemung County
Thomas Kump Chemung County
Scott Foti NYSDEC
Mark Domagala NYSDEC
Jennifer Bostaph NYSDEC

New York State Department of Environmental Conservation

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Joe Martens
Commissioner

October 18, 2011

Ms. Carla Jordan
Environmental Manager
Chemung Landfill, LLC
P.O. Box 2178
Elmira, NY 14903

Dear Ms. Jordan.

RE: Chemung County Landfill MSW and C&D Landfill Operations and Maintenance (O&M) Manual Chemung (T) Chemung (C)

The above referenced document entitled "Chemung Landfill LLC, Chemung County Landfill, Operations and Maintenance Manual" revised October 2011, was received by this office via e-mail on October 18, 2011. The information contained in the document is acceptable and the revision is hereby approved.

Please note the document described above contains replacements for Sections one (1) through seventeen (17) of the previously approved O&M manual, and one new section, appendix D; as such, the remaining sections of the currently approved O&M manual remain in effect.

If you have any questions or concerns regarding this letter, please contact me at (585) 226-5414.

Sincerely,

Gary M. Maslanka
Environmental Engineer

cc: Michael Krusen Chemung County
Thomas Kump Chemung County
Scott Foti NYSDEC
Jennifer Bostaph NYSDEC

Chemung Landfill, LLC

Chemung County Landfill

Operations and Maintenance Manual

**August 2006
(Revised June 2008)
(Revised April 2009)
(Revised July 2010)
(Revised October 2011)**



Engineers · Environmental Scientists · Planners · Landscape Designers

**290 Elwood Davis Road
Box 3107
Syracuse, New York 13220**

Chemung Landfill, LLC
Chemung County Landfill

Operations and Maintenance Manual

August 2006
(Revised June 2008)
(Revised April 2009)
(Revised July 2010)
(Revised October 2011)

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Table of Contents

<u>Section</u>		<u>Page</u>
1.0	General Description of Operation	1
1.1	Responsible Operating Entity	1
1.2	Budgetary Responsibility	1
2.0	Personnel Requirements	2
2.1	Management Level	2
2.2	Field Level	2
2.3	Training	3
2.4	Recruitment and Replacement	3
3.0	Equipment and Machinery	4
3.1	Mobile Equipment	4
3.2	Stationary Machines and Equipment	7
3.3	Spare Parts Inventory	8
4.0	Operational Controls	9
4.1	Hours of Access and Operation	9
4.2	Sign	9
4.3	Landfill Usage Rules	10
4.4	Traffic Flow and Waste Verification Procedures	10
	4.4.1 Radiation Monitoring	
	4.4.2 Randomly Selected Waste Verification	
5.0	Solid Waste Handling	12
5.1	Tonnages Expected, Including Fluctuations	12
5.2	Receiving and Inspection	12
	5.2.1 Select Materials	12
	5.5.2 Prohibited Materials	13
5.3	Special Handling of Waste	13
	5.3.1 Regulated Medical Waste/Treated and Destroyed Medical Waste	13 14
	5.3.2 Exploration & Production Materials	

Table of Contents
- Continued -

<u>Section</u>	<u>Page</u>	
5.4	Fill Progression, Placement and Compaction	15
5.4.1	First Lift Over Liner – Special Procedures	16
5.4.1.1	Placement Procedures	16
5.4.2	Achieving Optimum Density	17
6.0	Cover Material Management	18
6.1	Alternate Daily Cover Materials	18
6.2	Placing Daily and Intermediate Cover	18
6.3	Segregation of Topsoil	19
6.4	Final Cover System – Landfill Closure	19
7.0	Environmental Monitoring Program	20
8.0	Leachate Management System	21
8.1	MSW Landfill	21
8.1.1	Gravity Leachate Removal System (LRS)	22
8.1.1.1	Gravit LRS Inspection	22
8.1.1.2	Gravity LRS Secondary Flow Monitoring	23
8.1.1.3	Gravity LRS Primary Flow Monitoring	25
8.1.2	Sideriser LRS	25
8.1.2.1	Sideriser Inspection	26
8.1.2.2	Sideriser Secondary Flow Monitoring	27
8.1.2.3	Sideriser Primary Flow Monitoring	27
8.2	Construction and Demolition (C&D) Landfill	27
8.2.1	C&D Landfill LRS Inspection	28
8.2.2	C&D Landfill LRS Flow Monitoring	28

Table of Contents
- Continued -

<u>Section</u>	<u>Page</u>
8.3 Leachate Collection and Conveyance Pipe Cleaning	28
8.3.2 Interstitial Space Monitoring	29
8.4 Leachate Lagoon Management	30
8.5 Leachate Lagoon Inspection and Maintenance	31
8.6 Leachate Loadout and Transportation	31
8.7 Leachate Disposal and Treatment	31
8.8 Leachate System Report	32
9.0 C&D Landfill Settlement Monitoring	33
10.0 Inclement Weather Operations	34
10.1 Wet Weather Traffic Management	34
10.2 Wet Weather Operation	34
10.3 Windy Day Operation (Litter Control)	34
10.4 Winter Operations – Machinery Considerations	35
10.5 Winter Cover Procedures	35
11.0 Surface Water Management	37
11.1 Within Landfill Area	37
11.1.1 Surface Water Pumping	37
11.2 Outside Landfill Area	38
11.3 New Cell Surface Water Collection	38
12.0 Groundwater Suppression System	39
13.0 Landfill Gas Management Program	40
13.1 Vertical Wells, Horizontal Collectors and Piping	40
14.0 Erosion and Sediment Control System	42
15.0 Post Closure Monitoring Program	43
15.1 Site Maintenance	43

**Table of Contents
- Continued -**

<u>Section</u>	<u>Page</u>
15.1.1 Visual Inspection	43
15.1.2 Cap System	44
15.1.3 Drainage System	44
15.1.4 Leachate Outbreaks	45
15.1.5 Gas Management System	45
15.1.6 Vectors	46
15.1.7 Structures	46
16.0 Reports	47
17.0 Operation and Maintenance Reporting Forms	48

Tables

Table 5-1 - Prohibited Materials	13
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Figures

- Figure 1 – Leachate Collection System Plan
- Figure 2 – Groundwater Suppression System Plan

Appendices

- Appendix A – Part 360 Operating Permits
- Appendix B – Landfill Inspection Forms
- Appendix C – Odor Control Plan
- Appendix D – Radiation Monitoring System Forms

1.0 General Description of Operation

1.1 Responsible Operating Entity

Chemung Landfill LLC is responsible for the operation of the Chemung County Landfill in the Town of Chemung, Chemung County, New York. Chemung Landfill LLC commenced operation of the landfill facility in September 2005 as part of a 25 year lease agreement with Chemung County. Occasionally, it is necessary to supplement the staff with services contracted from outside, such as maintenance of the scales, major repairs of heavy equipment, and similar tasks requiring additional manpower or specialized training. Major additions such as extending the landfill liner system and closure may be accomplished by employing outside contractors.

1.2 Budgetary Responsibility

The responsibility to prepare annual operating budgets lies with Chemung Landfill LLC staff. The process involves predicting annual expenses and income based on past experience, the experience of others in landfill operations, and waste tonnage & income projections developed by Chemung Landfill LLC representatives. Tipping fees will be sufficient to defray the annual debt repayments for borrowed money, the operating expenses and reserves for replacement of equipment, cell extensions, closure, post closure activities and insurance.

A significant portion of the landfill operating costs are fixed. The operating budgets may vary slightly from year to year in response to recycling, changes in the character of the waste stream and age of equipment and facilities. Certain costs are not in direct proportion to the amount of waste handled. It may be necessary to adjust the tipping fee to reflect the changes in quantity of waste handled in the landfill.

2.0 Personnel Requirements

2.1 Management Level

Chemung Landfill LLC is a subsidiary of Casella Waste Systems, Inc. of Rutland, Vermont. The management and technical staff of Casella is available to supplement Chemung Landfill LLC's on-site staff. Chemung Landfill LLC is responsible to Chemung County for the appropriate operation of the site according to the terms of the lease.

2.2 Field Level

Chemung Landfill LLC's Engineer will be present in the field as required. The Landfill General Manager, or Operations Manager will be on site each day and will be responsible for reporting to Chemung Landfill LLC.

The Landfill General Manager's primary responsibility is to oversee the daily operation and maintenance of the landfill and all associated equipment and appurtenances. This individual is also responsible for directing the operators to carry out the operating plans in accordance with this manual. In addition, the General Manager will schedule the working time for field employees and evaluate personnel performance.

The Landfill Operations Manager is responsible for overseeing the day to day operations at the landfill, including waste placement and maintenance. This individual is supported by a staff of equipment operators and maintenance technicians. A scale attendant and staff accountant/secretary will also be required. The number of staff positions and their responsibilities will vary as site conditions require them to. A table staff positions and responsibilities will be maintained at the landfill office.

2.3 Training

The Landfill Engineer and the Landfill General Manager will be experienced in landfill construction practices and basic surveying and engineering procedures, and will be kept up-to-date with solid waste management technology by attending seminars, conferences and training courses as appropriate.

The Operations Manager must attend and successfully complete within 12 months from their date of employment a course of instruction in solid waste management procedures relevant to the facility at which the operator is employed as provided or approved by the New York State Department of Environmental Conservation. Selected members of the field staff will also attend operator training courses sponsored by the Department and other organizations. Special safety training will be conducted by the management staff as needed, and at least once annually.

2.4 Recruitment and Replacement

From time to time, it may be necessary to replace staff who have retired or left for other reasons. Recruitment will be conducted through various means, including advertising in local and regional publications. The most qualified available individuals will be hired. Chemung Landfill LLC will keep a list of interested job seekers in the event that it needs to temporarily fill a position to maintain full staff while recruitment is in process.

3.0 Equipment and Machinery

3.1 Mobile Equipment

A wide variety of mobile equipment is necessary to operate the landfill. The equipment must be adequate to operate the landfill on a daily basis with any one unit down for service or repairs. All equipment will be required to meet Public Employee Safety and Health & Occupational Safety & Health Administration (PESH)/(OSHA) standards.

For the purpose of this manual, only the main equipment typically found at the facility has been listed. A comprehensive list of the equipment make, model, attachments and quantity is maintained at the landfill office and will be updated periodically as equipment upgrades are made at the site.

- *Rubber Tired Loader with Attachments*

Tasks: Loading materials, unloading incoming supplies plowing snow, loading snow, and towing trailer mounted equipment.

Backup: Rental.

- *Landfill Compactors*

Tasks: Spreading/compacting waste and hauler vehicle retrieval. The compactor operates at the working face where a minimum of five feet of selected and carefully compacted (with a low ground pressure dozer) refuse has been placed over the liner system. Generally one compactor is required on the working face.

Backup: Second Machine

- *Bulldozer*

Tasks: Assist the compactor when required to handle solid waste, retrieve any impermissible refuse lying on completed portions of the landfill liner system (i.e., large, bulky items which may inadvertently roll away from the operating face and onto the protective soil liner), apply daily, intermediate, and final cover materials, cleaning detention ponds, shaping slopes and placing waste for initial lift in new cells. Clearing and grubbing, road construction, soil stripping (topsoil etc.), construction of run-off diversion berms and snow removal in landfill areas.

Backup: Second machine or rental.

- *Articulated Dump Trucks*

Tasks: Haul materials (daily/intermediate cover/alternate cover, road building etc.) from excavated/stockpiled locations to their final location. Haul snow from loading points to dump areas. Hauling silt from detention pond cleaning operation, haul cleared materials from construction areas to final location. Access by these units will be restricted to portions of the landfill liner system, which has a minimum of five feet of selected and carefully compacted refuse in place.

Backup: Second machine or rental.

- *Hydraulic Excavator*

Tasks: Excavate and load cover material, excavate trenches for special waste, assist in clearing and grubbing by pulling stumps, building swales and berms, cleaning swales and ditches, culvert installation, removing waste from frozen or stuck load vehicles, cleaning detention pond.

Backup: Second machine or rental.

- *Smooth Drum Vibratory Roller*
Tasks: Sealing landfill cover materials to reduce water infiltration, sealing berms during construction and rolling unpaved roads.
Backup: Rental.
- *Water Truck*
Tasks: Controlling dust on unpaved roads during dry periods, washing pavements, washing vehicles and equipment on-site, supplying water to sewer jet during leachate line cleaning, fire fighting (initial response) and hauling water for other operational activities.
Backup: Rental.
- *Fuel Truck*
Tasks: Fueling mobile equipment at the working face and other site locations.
Backup: Rental or contract service.
- *Pickup Trucks*
Tasks Include: Transport staff and materials/equipment about the site, fueling mobile equipment, one assigned to operations and one assigned to Technical Services sections; Used for snow plowing during winter months.
Backup: Other pickup, utility vehicles.
- *Mobile Service Truck*
Tasks: Field service and repair of all vehicles/equipment, transporting staff and equipment to job site for facility maintenance (including cleaning and repairs).
Backup: Pickup trucks.

The mobile equipment is equipped with two-way radios in order to maintain on-site communication. All equipment is provided with safety features such as back-up alarms and fire extinguishers.

3.2 Stationary Equipment and Machines

The maintenance building is equipped with the necessary tools and machines to facilitate maintenance of the heavy equipment. Also included in this section are emergency generators required for continued facility operation during loss of commercial power. A general list of major items is shown below. A complete list of stationary equipment and machines is maintained at the landfill office and will be kept up to date as the site equipment list changes.

- Air Compressor - Provide compressed air for use with air powered tools and to inflate tires.
- Welders - Electric Arc and Acetylene welding equipment.
- High Pressure Washers - For external wash down of heavy equipment prior to maintenance.
- Gasoline Powered Generators - For portable power required during operation and maintenance activities.
- Gasoline Powered Pumps - For pumping of water or leachate required during emergencies or operation and maintenance activities.

3.3 Spare Parts Inventory

The maintenance section has the necessary belts, coolant hoses, air filters, oil filters, etc. for all pieces of mobile equipment in stock. Supplies of lubricating oil and fluids are on hand to avoid unnecessary downtime.

4.0 Operational Controls

4.1 Hours of Access and Operation

The permitted hours of landfill operation are 7:00 a.m. to 6:00 p.m., Monday through Saturday. During construction, construction related activities will be allowed to take place outside of these hours with the following stipulations:

- No construction activity will be conducted prior to 7:00 a.m.
- All heavy equipment will be shut down by 8:00 p.m.
- No work related to construction activities will take place on Sundays.

The actual hours worked by the staff are normally 7:00 a.m. to 6:00 p.m. Monday through Friday, and 7:00 a.m. to 12:30 p.m. Saturday. Actual hours may vary due to landfill requirements. The staff schedule may need to be modified as tonnage or other factors change. It may be appropriate to stagger the work schedule for a portion of the staff as experience dictates. It will be necessary to allocate sufficient time to achieve daily cover, which may vary depending on waste volumes and weather conditions.

4.2 Signs

Signs are posted on the entrance (access) road to the site. These signs clearly indicate prohibited waste materials, access requirements, hours of operation, and visitor access procedures. Additional signs located on site roads indicate speed limits and landfill access routes.

4.3 Landfill Usage Rules

The general usage rules for the landfill consist of restrictions on types of materials and conditions on the vehicles delivering the waste.

All vehicles are weighed upon entering of the facility at the landfill scale. All waste hauling vehicles are required to have a Part 364 permit when hauling regulated waste.

All loads must be in a fully enclosed vehicle, or covered with a tarpaulin or net, which covers the entire load and is properly secured to prevent loss of material from the load. Waste will arrive in tractor-trailer combination trucks, roll off trucks, dump trucks, or in tow-behind trailers for non-commercial vehicles.

4.4 Traffic Flow and Verification Procedures

Vehicles turn on to the site access road from County Route 60 and proceed up the site access road to the landfill scale where vehicles will be weighed and recorded. Vehicles will be checked for waste type and a Part 364 hauler permit in the case of ash, sludge, or waste requiring special handling. Traffic will then move past the scale to the perimeter road where signs will direct the vehicle to the MSW landfill or C&D Landfill.

4.4.1 Radiation Monitoring

For the purpose of ensuring that regulated radioactive waste potentially associated with Exploration and Production (E&P) Waste is not accepted at the landfill for disposal, radiation detectors shall be installed, operated and maintained in accordance with the following procedure for as long as the Facility is accepting E&P Materials. Upon arrival at the Facility, each inbound load entering the landfill shall be screened for radioactivity using a Ludlum Model 375

Waste Monitor, or equivalent, located at the scale/weigh station. This monitor is a "drive through" system that scans the waste hauling vehicles as they pass between 2 radiation detectors at slow speed or stopped on the scale. A log of daily background readings will be maintained at the Facility. The system shall be calibrated at least annually. Field checks utilizing a source sample will be performed on a weekly basis. These documented field checks will ensure that the alarm is functioning within the calibration standards.

In order to demonstrate a correlation between kcps and pCi/g, the Facility will obtain six (6) samples from waste entering the landfill. Three (3) samples will represent loads that have no elevated radiation levels associated with them. The remaining samples will be taken from loads that trigger an investigation level condition. Radiation monitoring information will be obtained for each sample at the time of sampling. The samples will then be sent for radiological analysis by an appropriately certified laboratory. The sample results will be compared to the data collected on-site to further calibrate the monitors.

As a truck passes the detectors at the scale, the radiation monitoring system measures the radiation level emitted by the truck in kilo counts per second (kcps). The number of kcps over the normal "background" radiation level of the area is compared to the alarm setpoint indicated on the digital read-out in the scale house. The alarm set point is determined during annual calibration to warn of possible radioactive materials in the truck that may exceed certain limits. Backlit indicators and a beeper warn of an investigation alarm level. A green status light is an indication of normal instrument operation.

In the event that the alarm sounds, the scale house attendant shall immediately notify the truck driver to stop and shall contact onsite landfill management. The scale house attendant shall record the reading on the

Radiation Monitor Alarm Record and instruct the driver to pull off of the scale and park in the designated area away from the detectors.

It is possible that the driver may be the source of the radiation, and in an effort to determine what has activated the detector, the driver will be asked to walk near one of the detectors to rule out that possibility. If the alarm sounds due to the driver, he/she shall be asked to pull the truck back on the scale and park it and then walk at least 75 feet away so that the monitor reading of the truck alone can be determined (or use an alternate driver). If the truck alone does not cause an alarm, it may pass through. There is no restriction on the driver if he is the source of the alarm due to a medical procedure. The scale house attendant shall complete the Radiation Monitor Alarm Record and file it.

If the alarm is due to the load, the truck will again be driven through the detectors and stopped so that the detectors are centered on the load. A stabilized reading will be obtained. If only the Sigma alarm was triggered initially and the stabilized reading is less than the investigation level, the load will be considered acceptable and the load will be accepted at the landfill. If the initial alarm reading exceeded the investigation level and if after the stabilized reading is obtained the result still exceeds the investigation level, a trained management representative will determine the type of radioactivity in the load in compliance with the Facility's "Calculation of Radiation Monitor Alarm Setpoint and Procedures to Reject or Accept NORM" using hand-held radiation detector readings, visual observation, gamma spectrometer readings, and discussion with the generator. The trained representative shall follow the "Calculation of Radiation Monitor Alarm Setpoint and Procedures to Reject or Accept NORM" and shall complete the Radiation Monitor Alarm Record started by the Scale House Attendant. These forms are located in Appendix D of this Manual.

Possible types of materials with elevated levels of radioactivity include:

- NORM – Naturally-Occurring Radioactive Materials that have not been concentrated or enhanced such as rock, drilling cuttings, brick, non-commercial use of gypsum (plaster or fertilizer), sand blast media, ceramics (firebrick or pottery), colored glass, etc. Such materials may be accepted into the landfill if the concentration of radium-226, uranium-238, and thorium-232 are all less than 25 pCi/g when averaged over all such loads received during the calendar year. Any individual truckload may be accepted if concentrations of radium-226, uranium-238, and thorium-232 are all less than 50 pCi/g. To keep the average concentration of all of these radionuclides in the landfill to less than 25 pCi/g, the landfill may accept up to 5 loads per week with concentrations between 25 and 50 pCi/g. The investigative alarm setpoint is to be set at five (5) times background radiation levels.
- Processed and Concentrated Naturally-Occurring Radioactive Materials such as filter or evaporator sludges, furnace slag, titanium or fertilizer purification wastes, etc. in which the concentration of radionuclides has been increased over the natural material's concentration in the environment by the application of heat, filtration or chemical extraction. Such materials may NOT be accepted into the landfill.
- Medical Use Radionuclides such as iodine-131, iodine-125, technicium-99m, thallium-204, and other short-half-life nuclides may be accepted into the landfill if they had been excreted from a medical patient (such as into a diaper). Such materials in vials, syringes, etc. improperly disposed of by a radiopharmacy or hospital directly into trash may NOT be accepted.
- Industrial, military or commercial use radionuclides may NOT be accepted into the landfill. Examples are luminous dials or markers (radium), static eliminators or thickness gauges (strontium-90, krypton-85, etc.), non-destructive testing or medical sources (cesium-137, cobalt-60, iridium-192,

etc.), uranium counterweights, exit signs, commercial smoke detectors, thoriated aircraft engines, welding rods, etc. Inadvertent or purposeful disposal of such materials must be reported to the NYSDEC and NYSDOT.

- Liquids containing elevated concentrations of radioactivity such as gas well brine are NOT acceptable for disposal.

Immediately after the investigation, the staff member will notify the NYSDEC Regional (585.226.5414) and Central Office (518.402.8579) as well as the County via telephone. A written record detailing the incident will be included in the facility's monthly operational report to the State. The site staff will work cooperatively with the regulatory agencies to determine the best course of action at the time of the alarm notification.

If a situation arises where the drive through radiation detectors become inoperable, the facility will use the hand-held meters to perform the initial scan on the inbound vehicles.

If a driver drives away after an alarm and before the load has been investigated, the staff member or scale house operator shall immediately call the NYSDEC Region 8 and Central Office, Chemung County Department of Health, and the New York State Police.

If a load containing regulated radioactive materials is to be released for return to the generator or for transport to a different facility, then the transporter must obtain a DOT-authorization form from the NYSDEC. A load shown to contain a medical isotope that had passed through a patient does not need a DOT authorization form – according to State regulation the load does not contain a regulated radioactive material.

Landfill staff will receive training on an annual basis related to the radiation system site operational procedures. Radiation system training will also include manufacturer provided training or the equivalent in system operation and trouble shooting.

4.4.2 Randomly Selected Waste Verification

At least once weekly, a randomly selected load is spot-checked by unloading the truck and spreading the waste to yield a thinner covering of waste which can be visually inspected by the landfill staff. Any illegal or improper items will be returned to the truck driver and, in the event illegal activity was involved, NYSDEC will be notified. Repeated offenses will be cause for barring access to the site. A record of this inspection, which documents all findings, will be kept at the landfill and made available for NYSDEC review. Refer to appendix B for a sample of the inspection form. Refer to section 6.2 for a description of the receiving and inspection procedures.

Records will be kept as to daily, weekly, monthly, and yearly tonnage totals with waste type recorded for each load. The data will be summarized and included in the annual report to the NYSDEC.

5.0 Solid Waste Handling

5.1 Tonnages Expected, Including Fluctuations

The landfill's most recent 6 NYCRR Part 360 Permit states the yearly tonnage limit, with a maximum quarterly limit as well. Tonnage fluctuations may occur during the different seasons of the year.

5.2 Receiving and Inspection

Waste will be weighed in and inspected as described under section 4.0. Spot-checks of loads will be carried out as described once weekly and more

frequently at the discretion of the landfill staff. All spot-checks will be documented on designated form(s) (appendix B). Photographs and/or videos may be used to document unusual circumstances(weather permitting). All loads will be visually inspected for unauthorized waste by the landfill staff during unloading.

All operating personnel on the working face are trained to identify those wastes that may be potentially hazardous. Such wastes would include all granular materials, containerized materials and other wastes not visually identified as non-hazardous. Upon delivery, such materials will be set aside for identification and appropriate disposal as outlined in the Contingency Plan.

5.2.1 Select Material

The material to be placed in the initial five feet of the first lift will be visually inspected to ensure that potentially damaging material such as pipe, timbers, large metal items and anything of similar potential to pierce the liner is removed. Loads should be spread out at the top of the advancing first lift and visually inspected prior to placement. No construction and demolition material will be included in the initial 5 feet of the first lift.

5.2.2 Prohibited Materials

Table 5-1 below lists the prohibited materials at the Chemung Landfill.

**Table 5-1
Prohibited Materials**

Septic Tank Pumpings	Regulated Radioactive Wastes
Pesticides and Chemicals	Liquid Waste (< 20% Solids)

Explosives	Junked Vehicles
Sealed Containers	Hot Ashes
Scrap Metal	Regulated Hazardous Waste
Waste Oils	Recyclables
Vehicular Batteries	Large Dead Animals
Untreated Regulated Medical Waste	Friable Asbestos Waste
Green Waste (including leaves, grass, garden and lawn cuttings, wood brush, (except as may be beneficially chips, tree limbs up to 3 inches wide)	Whole Tires

5.3 Special Handling of Waste

Certain wastes require special handling. The special procedures for handling these wastes will be decided in advance at the time the Part 364 permits are signed for that particular waste. As an example, certain dusty wastes may be bagged. The bags should be unloaded near the sloped part of the cell and covered immediately with other waste to minimize airborne dust. Other dusty waste such as ash should also be handled by covering as soon as possible. Wastes of high moisture content such as some sludge and certain food wastes will not support traffic. They will be pushed over the sloped operating face rather than incorporated into the top of a daily cell.

5.3.1 Regulated Medical Waste/Treated and Destroyed Medical Waste

When treated Regulated Medical Waste (RMW) or Treated and Destroyed Medical Waste (TDMW), as defined in subdivision 360-17.2, is received at the landfill each load must be accompanied by a Regulated Medical Waste Treatment Certificate completed by the treatment facility and signed by an authorized individual of the facility. Prior to disposal,

trucks carrying treated RMW and/or TDMW must notify the scale operator that the load contains treated RMW and/or TDMW and present a copy of the Regulated Medical Waste Treatment Certificate to the scale operator. This copy will be kept on file for a minimum of three years at the Landfill. The scale operator then notifies the operators at the working face that a truck containing treated RMW and/or TDMW has arrived alerting the operators to the fact that this waste has been accompanied by a treatment certificate and, therefore, is acceptable for disposal.

Authority personnel shall receive training which includes use of personal protective clothing, discussion of potential hazards associated with the waste, and a review of the OSHA Exposure to Blood born Pathogens regulations. Should inadvertent disposal of untreated RMW be discovered at the Regional Landfill, the incident shall be reported to the DEC's spill hotline (1-800-457-7362) or the appropriate DEC Regional Materials Management Engineer within 48 hours. The transporter will be required to develop a report of the incident, identifying the measures used to clean up and dispose of the RMW, and retain the report for three years. All RMW materials must be packaged, labeled, and transported according to NYSDEC and NYSDOT regulations.

A list of approved generators of treated *Regulated Medical Waste (RMW)* or *Treated and Destroyed Medical Waste (TDMW)* that currently use this facility shall be kept in a file at the Landfill. New generators shall be notified of their requirement to obtain a copy of a Regulated Medical Waste Treatment Certificate with each load.

5.3.2 Exploration & Production Material Handling

For the purpose of this Manual, Exploration and Production Materials is defined as; "wastes associated with the oil and gas industry's development of energy resources, not to include wellfield site preparation materials such as office trash, liner material, and pallets". These exempt materials are more properly defined as municipal solid and industrial waste.

Receipt of exploration and production materials require additional consideration regarding placement within the lined landfill. No material will be placed within six feet of the lined collection system or 10 feet from any final cap.

Waste that originates from an exploration and production site will require special waste approval prior to acceptance. After the analytical has been reviewed and the material is determined to be acceptable, the waste stream will be issued a profile number that ties it to the generator and point of origin. Air and water based drill cuttings are acceptable for disposal within the C&D Landfill as well as the MSW Landfill. Oil based drill cuttings are only acceptable within the MSW Landfill.

All employees will be trained on the Facility's exploration and production material acceptance and handling policy as well as the radiation alarm response procedures on an annual basis.

The Facility's Environmental Monitoring Plan has been revised to include the expansion of procedures related to leachate analytical testing to include radiological analytes.

5.4 Fill Progression, Placement and Compaction

The landfill will be operated by disposing of wastes in a series of daily operating cells which will vary in size and location depending on the daily quantity of waste, but are not to exceed ten feet in height. These daily operating cells are actually sub-units within the much larger landfill cells. In general, waste placement will progress in a manner to keep the active area as small a possible while maintaining safe and efficient operations. This will allow the greatest amount of intermediate cover to remain in place and reduce leachate generation resulting from infiltration of precipitation.

Prior to unloading the first load of refuse for the day, the daily cover soil from the previous day should be stripped from the area that is to accept waste for the day. This will promote leachate drainage through the waste mass to the leachate collection system and will allow the daily cover to be reused and save airspace.

When possible, waste will be unloaded at the top of the daily cell and pushed downslope by the compactor. This results in less wear on the compactor as compared to unloading at the bottom of the slope and pushing upslope. There is also less tendency for the compactor to tear up previously compacted waste since upslope movement is in the "empty" position, not pushing waste. The working face slope should be a maximum of 5 horizontal to 1 vertical to achieve maximum compaction. This slope should be increased to 3 to 1 at the end of the day to decrease the amount of cover soil required. Layers of waste to be compacted should be spread to a maximum layer thickness of two feet. If possible, the waste should be spread in thinner lifts before compaction to achieve greater densities. Three to five passes (minimum) with the steel wheel compactor are required to achieve compaction. Compactor operation should be continuous whenever possible, as additional passes will increase compaction. Passes should be staggered so that all areas receive uniform coverage by the compactor wheels.

5.4.1 First Lift Over Liner - Special Procedures

Proper placement of the first lift of refuse overlying the landfill liner system is critical and requires that strict precautionary refuse selection and inspection procedures are followed to eliminate the potential of damaging the underlying landfill liner system. The Operations Manager, Equipment Operators or other designated landfill employee will be present at the working face during the placement of the first lift.

5.4.1.1 Placement Procedures

The completed first lift should be a full eight to ten feet thick with compaction only at the top of the lift. The initial 5 feet (in place depth) shall be spread and placed with a bulldozer to allow maximum protection of the underlying liner system. The steel wheel compactor shall be used to spread and compact the rest of the first lift above the initial 5 feet. The objective with the first lift is to have a very loose cell with only the top compacted to be able to take traffic for subsequent lifts.

5.4.2 Achieving Optimum Density

The steel wheel compactor is a very consistent tool for achieving good densities. To ensure good compaction of the waste mass, the landfill staff shall:

- Make sure that compactor teeth are within manufacturer's recommendations. The source of compaction is to have the weight of the compactor ride on the teeth. If the teeth are worn, the weight

of the machine rides on the drum to which the teeth are mounted. The result will be flotation over the waste rather than compaction.

- Avoid use of dozers to handle waste whenever possible.
- Compact a loose layer not to exceed 2 feet thick other than the first lift. The thinner the lift, the higher degree of compaction can be expected. A 1-foot lift would be better than a 2-foot lift.

Sludge, meeting the requirements of a Beneficial Use Determination (BUD) by DEC, shall be set aside for use as daily cover. Other non BUD sludge shall be mixed with ordinary refuse in layers to achieve a stable fill. Sludge must be a minimum of 20 percent solids and exhibit no free moisture. Large quantities of sludge shall not be placed in adjacent locations in the daily operating cell.

6.0 Cover Material Management

Proper installation of daily and intermediate cover materials is an important component in controlling odors and vectors at the active face of the landfill.

6.1 Alternate Daily Cover Materials

When approved by NYSDEC, alternate daily cover methods (ADC) and materials may be used. These include: tarps, paper mill sludge, petroleum contaminated soils, commercial slurries and other materials approved for use by NYSDEC. The approval process for alternate daily cover materials will include some or all of the following: requests for field testing, requests for use of a material as an approved cover material, field testing, data collection, data reporting and summarization, request for final approval to use, and formal notification by letter for approval to use the alternate daily cover. A file of NYSDEC approved ADC is maintained at the landfill.

6.2 Placing Daily and Intermediate Cover

If alternate daily/intermediate cover materials (ADC/AIC) are not used, a soil cover of 6-inch minimum thickness is applied to all exposed surfaces of solid waste at the close of each operating day. This daily cover is used to control vectors, fires, and odors, blowing litter and scavenging at the operating face. A minimum of 12 inches of compacted cover material or approved AIC material (interior slopes only) will be applied and maintained on all landfill areas where no additional solid waste has been or will be deposited within 30 calendar days. Weather permitting, the intermediate cover should be shaped with a dozer and

rolled smooth with a smooth drum roller. Preparation of the intermediate cover in this manner will maximize runoff. This procedure is not required in areas which are receiving traffic.

Daily and intermediate cover soil ideally will be glacial till mined from the designated borrow areas. However, any on-site soil sources, with the exception of topsoil, may be used. The cover soils will be mined from designated on-site borrow areas as well as permitted future liner expansion areas.

Where daily cells have progressed over the entire area of the developed landfill liner system, it will be necessary to begin placing an additional lift. Prior to this refuse placement, the operator shall strip the intermediate cover placed on the completed lift. Thorough removal to the landfill side slope is essential and will be inspected by the Operations Manager to ensure positive hydraulic connection is maintained between the upper and lower lifts of refuse. This procedure will reduce the likelihood of developing perched leachate saturation zones and any subsequent horizontal flow. All intermediate cover soil, which has been removed and was in contact with refuse, must be used as daily cover so as not to contaminate runoff.

6.3 Segregation of Topsoil

Top soil is separated and stockpiled for future use in final capping or other uses on site. Stockpile areas have been established in designated locations for future use.

6.4 Final Cover System - Landfill Closure

The final cover design will be completed by an engineering firm and will comply with the Part 360 regulations and operating permit in effect at that time.

7.0 Environmental Monitoring Program

The Environmental Monitoring Program consists of surface water, groundwater, and landfill gas system monitoring. This program is discussed in detail in the most current version of the separately bound Environmental Monitoring Plan.

8.0 Leachate Management System

8.1 MSW Landfill

Cells I, II, III-A and III-B were constructed with double liner systems, while Cell IV has a double composite liner system. Because of this, each cell has both a primary and secondary leachate collection system. The primary system is above the primary liner system and is designed to collect all of the leachate produced in the landfill. The secondary system is located between the primary and secondary liner systems and collects any leachate that has migrated through the primary liner system.

The primary and secondary leachate collection systems for the Cell I, II, III-A, III-B areas each drain via a series of three perforated pipes that run parallel across the landfill footprint. These transition into solid pipes, which penetrate the liner system at the eastern landfill berm. Each primary and secondary lateral drains to a dedicated concrete leachate manhole located at the east end of each pipe. The leachate in each primary and secondary manhole then discharges to the primary and secondary leachate conveyance headers, which flow via gravity to a combined leachate collection manhole and then to the leachate storage lagoon.

Cell IV is designed with a sideriser leachate removal system. Submersibles pumps are located in the bottom of primary and secondary sideslope riser pipes which begin in a leachate sump in the lowest point of the subgrade and terminate in a sideriser building at the top of the landfill slope. Leachate is conveyed to the submersible pumps through perforated leachate collection pipes which run down the valley of the subgrade. Once the leachate reaches the sideriser building it is discharged to the leachate storage lagoon via a dual-contained gravity leachate header.

8.1.1 Gravity Leachate Removal System (LRS)

At the low point of each collection pipe in Cells I, II, III-A, and III-B the primary and secondary perforated leachate collection piping transitions to solid pipe, penetrates the liner system, and enters the primary and secondary leachate manholes. The series of leachate manholes are connected together by the primary and secondary leachate conveyance headers, which convey leachate to MH-1 where both leachate streams are combined. The leachate then flows to the leachate storage lagoon via a gravity conveyance pipe.

Cleanout pipes are located along the leachate conveyance lines to permit access for leachate line jetting. Each manhole must be entered, following confined space entry procedures, in order access the conveyance lines for jetting.

8.1.1.1 Gravity LRS Inspection

The entire gravity LRS will be visually inspected on a weekly basis. This inspection will include visual inspection of all manholes and components. This inspection is recorded on the form(s) in appendix B and shall be performed from the top of the structures with no entry required.

Annual cleaning of the leachate conveyance lines and other routine maintenance may require entry into the leachate collection manholes. Where leachate manhole entry is required, the landfill and its contractors shall follow all proper confined space entry procedures as outlined in 29 CFR 1910.146. A list of equipment that may be required for manhole entry is included below.

Manhole and Valve Pit Entrance Equipment:

- portable manhole blower;
- oxygen level indicator;
- full body harness;
- tripod with extraction winch; and
- SCBA (as necessary).

Monitoring and Inspection Equipment:

- flashlight (where necessary);
- rope;
- rubber boots;
- disposable coveralls (Tyvek and Saranac); and
- sampling and flow rate vessels and containers.

Gas Monitoring and Air Quality Monitoring Equipment:

- organic vapor analyzer (OVA); and
- explosimeter.

8.1.1.2 Gravity LRS Secondary Flow Monitoring

The secondary flows for Cells I, II, III-A, and III-B are combined in a specially designed monitoring manhole (MH-1A) before the secondary leachate is combined with the primary leachate in MH-1. The combined secondary flow is measured through the following process:

1. Shut off the leachate flow valve and note the exact time in the daily inspection form included in appendix B.
2. After a measurable volume of leachate has accumulated in the flow monitoring manhole, measure the exact depth of

leachate volume using a measuring rod and the exact amount of time elapsed since the valve was closed.

3. Open the valve to drain the leachate to MH-1, and eventually to the leachate storage lagoon.
4. Determine the volume of leachate which corresponds to the depth observed in the manhole prior to opening the valve by multiplying the total number of inches of leachate in the manhole by 7.52. This gives the volume of leachate in the manhole in gallons.
5. Divide the leachate volume in gallons by the area of the landfill contributing flow and by the fraction of the day that the valve was closed. This will determine the leakage rate in gallons per acre per day.

This number is compared to the allowable leakage rate of 20 GPAPD. If the rate is above 20 GPAPD based on a 30 day average, the NYSDEC will be notified in accordance with 360-2.9(j)(4) and the contingencies outlined in 360-2.10(b)(2) will be initiated.

Based on the flow rate in the secondary LRS, a determination will be made as to whether a sample of the primary and secondary LRS needs to be collected. The criterion to be met for sample collection are outlined in the Environmental Monitoring Plan and the Contingency Plan. These two plans describe a procedure that determines whether the flow rate of the secondary LCRS exceeds the leakage rate established for the landfill facility.

If a sample is required, the procedures outlined in the Confined Space Procedure Manual are to be followed and the sample may be drawn from the primary and secondary LCRS.

8.1.1.3 Gravity LRS Primary Flow Monitoring

For Cells I, II, III-A and III-B, primary flow rate monitoring for will only be performed on a contingency basis such as elevated secondary flow rates.

8.1.2 Sideriser LRS

The perforated groundwater suppression, primary and secondary leachate/groundwater collection piping of Cell IV drains by gravity to a separate collection sump for the groundwater suppression, primary and secondary systems located at the bottom of the cell on the low end. A side slope riser type pump station with one (1) submersible groundwater suppression pump, one (1) submersible primary leachate pump and one(1) submersible secondary leachate pump removes the leachate/groundwater from the sumps and pumps the leachate/groundwater over the landfill containment berm.

The pump station structure is situated on top of the outer landfill containment berm at the downgradient end of the cell. Riser pipes connect the cell sumps (groundwater suppression, primary and secondary) to the pump station. The submersible pumps slide down the pipes on carriers. A pressure transducer for each pump is located in a separate pipe leading to the sump. The pressure transducers send level signals to the pump controllers, which in turn operate the pumps as required. These sensors are also connected to an alarm system in the

building, which will set off a visual alarm if the liquid level in the sump reaches a preset high level. Separate flow sensors relay flow data to the totalizing flow meters at the control panel.

Cleanouts are provided for the primary and secondary leachate/groundwater collection lines. The primary and secondary leachate pumps are connected to a common header inside the pump station structure. The common header then drains by gravity to the leachate storage lagoon prior to final disposal. The groundwater suppression pump feeds the groundwater to a header inside the pump station structure which conveys the groundwater to the stormwater collection system.

8.1.2.1 Sideriser Inspection

Each sideriser LRS shall be visually inspected on a weekly basis. Areas of inspection include:

- all valve positions
- all electrical switch positions
- piping and valves for cracks or leaks
- all locks and security devices
- high level alarm systems

This inspection is recorded on the form(s) included in appendix B and shall be a visual inspection with no disassembly of components.

8.1.2.2 Sideriser Secondary Flow Monitoring

Flow monitoring for Cell IV is via a sensor located in the piping leading from the secondary pump discharge to the common header pipe. This sensor sends a signal to the flow meter panel located on the sideriser pump station where it is displayed in gallons per minute and total gallons pumped. The secondary flow rates shall be recorded daily recording the readings at the sideriser pump station.

8.1.2.3 Sideriser Primary Flow Monitoring

Flow monitoring for Cell IV is via a sensor located in the piping leading from the primary pump discharge to the common header pipe. This sensor sends a signal to the flow meter panel located on the sideriser pump station where it is displayed in gallons per minute and total gallons pumped. The primary flow rates shall be recorded daily by recording the readings at the sideriser pump station.

8.2 Construction and Demolition (C&D) Landfill

The C&D landfill was constructed on top of the closed Area 3 MSW landfill with a 60 mil VLDPE liner system. The leachate collection sand above this liner acts as the sole leachate collection point. It consists of a six-inch diameter PVC pipe in a loop around the inside of the 3:1 containment berm. This pipe drains to an eight-inch diameter HDPE leachate conveyance header. This drains to a leachate pump station wet well, where it is combined with the leachate from the closed Area 3 MSW landfill and is pumped to the leachate storage lagoon.

8.2.1 C&D Landfill LRS Inspection

The entire gravity LRS will be visually inspected on a weekly basis. This inspection will include visual inspection the leachate pump station. This inspection is recorded on the form(s) in appendix B and shall be performed from the top of the structure with no entry required.

If annual cleaning or routine maintenance in the pump station requires entry, the confined space entry procedures outlined in section 8.4.1 will be followed.

8.2.2 C&D Landfill LRS Flow Monitoring

The combined leachate flow from the C&D landfill pump station can be determined using the pump run time multiplied by the pump flow rate in the leachate pump station. Flow monitoring shall be performed on a weekly basis and recorded on the forms included in appendix B.

8.3 Leachate Collection and Conveyance Pipe Cleaning

If evidence of flow restriction in the leachate collection or conveyance piping is encountered (perforated collection pipe or dual contained conveyance pipe), it will be necessary to schedule a thorough flushing and cleaning with a sewer jet. Cleaning will be complete when water injected into the system readily passes through the collection or conveyance piping.

An annual leachate collection and conveyance pipe cleaning and inspection will be scheduled for each primary leachate collection and conveyance system. More frequent cleaning may be necessary based on the rate of biological and/or chemical growth or formations within the pipelines. Cleaning of the leak detection system piping will be performed on an as needed basis. This cleaning will be performed using a sewer jet and will ensure that clear passage through the pipes is maintained. The sewer jet will access the leachate collection

lines from the leachate collection manholes and cleanouts for Cells I, II, III-A and III-B, at cleanouts provided at the north and south sides of Cell IV, and at the cleanout at the south end of the C&D Landfill. Cleanouts are also provided on the east side of Cells III-A and III-B. The leachate conveyance lines will also be accessed by cleanout ports located at designated locations along the leachate conveyance system. While cleaning the leachate collection or conveyance piping with a sewer jet, a responsible party will ensure that all water used is contained and ultimately disposed of through the leachate storage lagoon.

8.3.2 Interstitial Space Monitoring

On a monthly basis, the interstitial spaces of the double-contained leachate conveyance piping from the Cell IV sideriser building will be monitored to locate any leaks in the carrier piping. The containment pipe will be left unsealed at the downstream end, where it daylight to the leachate storage lagoon. As part of the weekly inspection, a check for the presence of liquid flowing from the containment pipe will be performed. A small amount of liquid may be present due to condensation forming on the outside of the carrier pipe. Any unusually large flows or liquid that is positively identified as leachate will lead to a further investigation for possible leaks in either pipe. The upstream end of the conveyance line will be sealed to prevent any possible standing liquid within the leachate transfer structure from entering the interstitial space.

Upon discovery of leachate conveyance pipe leakage, the source of the leak will be located and repaired. With the pipe segment determined, visual or remote efforts of the exact leak location may be utilized followed by excavation and repair. Prior to repair, the interstitial space and any contained leakage will be evacuated.

A sample of the interstitial space monitoring form is included in appendix B.

8.4 Leachate Lagoon Management

The level in the leachate storage lagoon will be monitored daily. The minimum free board in the lagoon should be two foot from the top of the liner system in the storage lagoon or one week of capacity, whichever is larger. Leachate tank levels will be decreased prior to winter to allow the maximum amount of leachate to be collected in the spring. Hauling during dangerous road conditions will be minimized unless an emergency exists.

To monitor the leachate lagoon level, a level transducer has been installed as part of the Cell IV construction. The transducer measures the lagoon leachate level and will turn off the primary leachate pump of the Cell IV sideriser at a predetermined level below the required freeboard. Once this level is reached, an alarm will be activated to notify the landfill staff of the high level situation.

8.5 Leachate Lagoon Inspection and Maintenance

The leachate storage lagoon will be inspected daily and recorded on the form(s) included in appendix B.

Visual inspection of leachate in the secondary containment sump will be performed on a daily basis. In the event that a significant amount of leachate is present, an inspection of the lagoon liner system will be performed to identify any possible causes of the increase.

If a leakage rate greater than 5 gallons per acre per day is measured, the appropriate actions will be taken as outlined in the Contingency Plan.

8.6 Leachate Loadout and Transportation

Leachate is gravity drained from the leachate storage lagoon into tank trailer units and transported to one of the two Chemung County Wastewater Treatment Plants. This is performed with both site-owned and third party transfer trailers.

As a preventative measure, an additional valve is installed on the pipe that allows the leachate to gravity drain into the tankers for transport and disposal. In order to load out leachate, the tanker driver has to open two valves. In the event of a valve failure, the additional valve is meant to function as a fail-safe device.

The leachate loading system shall be inspected weekly as per the applicable form in appendix B. This inspection will ensure that all piping, valves, controls, and safety devices are working properly.

8.7 Leachate Disposal and Treatment

Disposal and treatment monitoring and inspection will consist of the tanker operator checking the tanker to ensure all valves, hatches, etc., are closed and that the tanker is ready for hauling. In addition, the outbound tanker is weighed to determine the weight of the leachate being hauled, and the weight is converted to gallons.

8.8 Leachate System Report

Malfunctions, spills, leaks, discharges, or system failures will be reported to the DEC immediately and followed in writing within one (1) week.

9.0 C&D Landfill Settlement Monitoring

As part of the C&D landfill construction, gas vents installed in the Area 3 MSW landfill, which the C&D landfill overlays, were extended through the liner system of the C&D landfill. These vents serve two purposes. One is to vent the gases produced by the decaying waste in the Area 3 MSW landfill, and the other is to act as a settlement monitoring location for the Area 3 landfill. These gas vents must be extended upward as the waste is placed around them. This is done by placing a steel well casing around the existing PVC gas vent, making sure that the PVC vent extends beyond the top of the steel casing. Once the waste progresses so that it is almost at the top of the steel casing, the void between the casing and the PVC vent must be backfilled with drainage stone, and the steel casing removed. The process is then started all over again and repeated.

Settlement monitoring is conducted on a biannual basis. This is done by comparing the initial elevation of the PVC gas vents, which was recorded when the vents were installed with the most current elevations of the gas vents, taking into account how many additional lengths of PVC were added since the previous monitoring. This provides a running total of the settlement in the Area 3 Landfill. The cleanouts for the leachate collection line in the C&D landfill are also monitored for settlement to ensure that positive drainage is maintained in the collection line.

10.0 Inclement Weather Operations

10.1 Wet Weather Traffic Management

It may be necessary to tow vehicles when they lose traction in wet weather; therefore, all waste hauling vehicles must be properly equipped with tow hooks. During wet weather conditions, towing may be required after vehicles have unloaded when they have less weight on drive axles. The landfill compactors and dozers are equipped with tow cables for retrieving stuck hauler vehicles. A stockpile of coarse stone or other suitable materials are available on-site to stabilize site roads during extreme conditions.

10.2 Wet Weather Operation

Compaction requirements during wet weather will be the same as under normal conditions. However, since cover soil is more difficult to handle and spread in wet weather, it may be necessary to use additional material to achieve coverage of the working face. Generally, access over a thick daily soil cover becomes rutted and results in a reduction in traction and a greater frequency of dozer towing. Where ruts in cover soils have cut down to the refuse, it will be necessary to refill the tracks with cover material after the traffic has left. Approved ADC materials will be used whenever possible, depending on weather conditions.

10.3 Windy Day Operation (Litter Control)

On windy days, there is a tendency for loose papers to blow when they are unloaded at the site. Portable litter fences shall be positioned to reduce stray litter from leaving the fill area. This situation can be improved by placing waste in the lower lifts within the cells when conditions are extremely windy.

It is necessary as part of routine maintenance to pick up windblown papers from time-to-time throughout the site. A thorough removal shall be done as soon as practical in all site areas that have collected windblown waste material. After final snow melt in the spring, there will also be litter picked up as necessary.

Permanent litter control fences are erected around the perimeter road to the east of the landfill as a litter control measure. These fences shall be cleaned regularly as required to control stray litter and prevent overloading. As new cells are constructed, permanent litter fences shall be constructed around the perimeter as needed.

10.4 Winter Operations - Machinery Considerations

Winter operations include special provisions to ensure that all heavy equipment will start and run in cold weather. This includes parking inside the maintenance bays when possible, using electrical coolant heaters, pre-lube starting systems and using blended diesel fuel during the winter season. Care must be taken to ensure that a large supply of blended diesel fuel is in the storage tanks prior to the onset of cold weather.

10.5 Winter Cover Procedures

Winter operation can cause more difficult excavation and movement of soil cover material when used for daily operations. It is usually more efficient to maintain a bank of soil in the borrow area or a short term stockpile which does not allow significant frost penetration. The bank or stockpile can be worked by peeling off thinner layers in a downward direction with the excavator bucket to break through soil that has frozen overnight.

Landfill operators will avoid incorporating snow with the burial of refuse or the placement of cover soil. Typically, if snow is incorporated in the landfill, the result will be soft spots in the landfill that will be difficult to bridge over with future lifts. Therefore, snow will be removed by use of the appropriate equipment prior to placement of the daily cell. Plowing of the operational face will be required after any significant snowfall accumulation and prior to the disposal of additional waste.

Stripping intermediate cover may also be difficult when frozen. The soil may come off in blocks, which must be broken down by running over them with heavy equipment. Extra operational time is required to maintain consistent daily cell construction and a uniformity between fair weather and inclement weather fill progression, placement and compaction.

11.0 Surface Water Management

11.1 Within Landfill Area

Intermediate berms may be constructed within the cell area to reduce the amount of surface water entering the leachate conveyance system. If the berms are to be constructed, the exact location, design, and operation shall be determined by landfill management and their consultants. The berms shall be constructed in such a fashion as to ensure that no leachate shall leave the lined landfill cell area by any means other than the leachate conveyance system. When berms are constructed and placed in operation, a means of removing collected surface water from the berm containment area, such as pumping or siphon shall be employed.

To further reduce the amount of leachate being generated, a 12" soil intermediate cover may be placed on areas of the active landfill that are graded in a manner which allows water to shed to the outer slopes.

11.1.1 Surface Water Pumping

Surface water that is collected within the landfill cell area that has **not** been contaminated with leachate, shall be removed by siphons or pumping. The specific removal system shall be designed to ensure that no leachate or leachate contaminated surface water is pumped out of the lined landfill cell area. The specific type of surface water removal system shall be determined by landfill management. All surface water pumping shall be performed in accordance with the general SPDES permit for stormwater discharges and routed through the existing stormwater management system at the site.

11.2 Outside Landfill Area

Precipitation falling outside the landfill is conveyed to stormwater ponds through a system of drainage ditches, piping, and swales. Vegetation should be established on exposed soil as soon as possible in accordance with the Stormwater Pollution Prevention Plan. Drainage control structures such as silt fences, hay bales, culverts and drop inlets must be designed, graded, and maintained to prevent erosion damage and excessive siltation.

11.3 New Cell Surface Water Collection

To reduce the amount of leachate treated unnecessarily generated from cells without waste, the primary leachate collection system will be utilized on a temporary basis to convey water from the unused cell to the surface water conveyance system. This can be accomplished through pumping operations or bypassing the leachate conveyance pipe within the sideriser building or manhole.

Prior to waste placement in the new cell, the temporary bypass piping will be removed and the primary collection pipe will be reconnected to the leachate collection system. The DEC will be notified prior to placement of waste so that the reconnection may be inspected if requested.

12.0 Groundwater Suppression System

A groundwater suppression system is constructed beneath the landfill liner to prevent groundwater from contacting the liner system. Any seepage into the system will flow laterally beneath the overlying liner system toward a low point of the subgrade within the landfill cell. The groundwater from Cells I through IIIB is gravity drained from the cell to the stormwater collection system via a berm penetration. The groundwater from Cell IV is pumped via submersible pump into the sideriser pump station where it is conveyed to the stormwater management system.

A monthly inspection of the pore water drainage system will be performed. The system pipelines will be visually inspected for any plugging or obstructions. Cleaning of the pore water piping will be on an as-needed basis. If there is evidence of plugging within the system, that pipe segment will be thoroughly flushed with a sewer jet. The pumps in the groundwater suppression system pump stations must be maintained in accordance with the manufacturer's recommendations. The pumps shall be checked daily to verify that they are operating.

For Cells I, II, IIIA and IIIB, sampling of the groundwater suppression system will be achieved by taking grab samples from the open end of the piping. Sampling of the Cell IV system will be achieved by valving inside the sideriser building.

Groundwater flow quantification for a particular landfill cell will be on an as-needed basis. The groundwater flow in the cells equipped with a sideriser pump station is measured by an in-line flow meter.

13.0 Landfill Gas Management Program

The monitoring and inspection of various landfill gas collection system components and related facilities will be essential to insure proper operation and maintenance of the landfill as well as an essential part of controlling odors at the site. The landfill gas management program describes the landfill gas collection system operations which must be carefully monitored and inspected.

13.1 Vertical Wells, Horizontal Collectors and Piping

The following activities and corresponding frequencies are necessary for proper operation of landfill gas collection points and header piping. Strict compliance with all Title V permit conditions must be maintained. Once the Title V permit progresses, additional monitoring and reporting will be required.

Horizontal and vertical landfill gas collection system wellheads should be monitored daily during the first week of operation or after significant modifications to the wellfield and monthly once the system has been balanced. At each horizontal and vertical gas extraction point, the following shall be recorded:

- wellhead vacuum (inches of wc);
- CH₄, CO₂, O₂ and balance gas concentrations (%);
- gas temperature (°F);
- flow rate before adjustment;
- throttle valve position before adjustment;
- flow rate after adjustment (if applicable); and
- throttle valve position after adjustment (if applicable).
- At a minimum, a monthly inspection of the wellfield components and header piping performance, physical condition and needed maintenance shall be performed; and

- Landfill gas monitoring equipment shall calibrated on a regular basis in accordance with manufacturer's recommendations.

14.0 Erosion and Sediment Control System

A variety of soil erosion and sediment control structures will be monitored routinely and maintained as necessary as outlined in the Stormwater Pollution Prevention Plan. On a monthly basis, or after each significant rainfall, the operating staff will inspect all completed drainage control structures (i.e., ditches, swales, hay bales, silt fences, downchutes, etc.) for evidence of erosion damage or excessive siltation. Where damage has been rendered, the structure shall be repaired prior to the next storm event. Where siltation has breached a siltation control structure or filled a ditch, the sediment may have to be removed prior to the next storm event.

In addition to the drainage conveyance structures, the stormwater ponds are monitored for sedimentation volumes. In accordance with the landfill's Part 360 Landfill Operating Permit, the sediment in the ponds will be dredged on an annual basis.

Forms for erosion and sediment control monitoring are included in the Stormwater Pollution Prevention Plan.

15.0 Post Closure Monitoring Program

The environmental monitoring program, upon closure and post closure of the landfill facility, will be in accordance with the Environmental Monitoring Plan. The monitoring program will be implemented for a duration required by the NYSDEC. In addition, the Leachate Management Plan as described in section 9.0 will continue for a NYSDEC determined post closure monitoring period.

15.1 Site Maintenance

Routine maintenance will be performed as part of the post closure operations. The primary maintenance concern is deterioration of the final cover system due to settlement, erosion, and penetration by vegetation.

15.1.1 Visual Inspection

A visual inspection should be performed periodically on the landfill site to identify any problems that might have developed with the cap system, drainage system, and gas collection/venting system. This inspection should also identify the presence of any vectors on the site. Unscheduled visual inspections should be performed after unusually heavy rainfall. As a guideline, inspections should be performed for rainfall exceeding the two year storm (2.50 inches/24 hours) or intense short duration rainfall.

15.1.2 Cap System

Problems with the landfill cap would include settlement, erosion, penetration of the cap by vegetation or loss of vegetative cover. If the cap has settled such that a major pounding of water occurs, it may be necessary to repair the landfill cap. The repair will require the removal of the landfill cover soil and possibly the geomembrane liner over the entire settlement area. Upon removal, the settlement area must be brought back to pre-settlement drainage grades. The area should then be patched, covered, and re-seeded. Any erosion in the cover soil should be repaired by replacing the eroded soil and compacting it prior to reestablishment of the vegetative cover. Any loss in the vegetative cover should be repaired by seeding, fertilizing, and mulching the unprotected area. The vegetative cover should be maintained by mowing at least once each year to prevent growth of deep rooted vegetation which could penetrate the soil cap.

15.1.3 Drainage System

The drainage system inspection should identify any erosion, siltation and restriction to the flow of water in the ditches, swales, culverts, downchutes, etc. All eroded areas should be repaired and additional stone added or reseeded to prevent further erosion. Siltation and other items that restrict the flow of measurable water in the ditches should be removed. Silt fences or hay bales will be installed as needed. The mined borrow areas of the landfill must be reclaimed in accordance with the 6 NYCRR Part 360 Operating Permit. This will greatly reduce the sediment load entering the surface water drainage system and, therefore, reduce long-term maintenance costs.

15.1.4 Leachate Outbreaks

Leachate outbreaks will not develop if proper operations are executed. This includes proper intermediate cover stripping and end of lift berm construction. In addition, upon closure, the installation of the gas venting layer and the impervious cap will provide further protection from leachate seeps. If a leachate seep does develop, despite the above protective operational methods and closure containment layers, the area of the seep will be excavated and a means of positive hydraulic conveyance will be installed to ensure that the leachate enters the primary leachate collection system. The repaired seep area will be routinely inspected to ensure that future seepage does not develop.

15.1.5 Gas Management System

Inspection of the gas management system should include checking the pipes and risers for any physical damage or plugging and checking the cap system adjacent to the risers for any settlement. All plugs or clogs in the risers should be cleared, and any damaged vents should be repaired or, if necessary, replaced. If there are any settlements, these should be repaired. Operation and maintenance of the gas blowers and landfill gas to energy plant is the responsibility of an independent contractor at the site.

In the event that the collection or operation system is inoperable, the gas mover system and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one (1) hour.

Reporting of the following must be maintained and submitted in the semi-annual monitoring reports:

1. Measurements of the gas flow rate every 15 minutes.
2. Notation that the bypass valve lock or car lock seal has been inspected monthly.
3. Description and duration of all periods when gas is diverted from the control device.
4. Description and duration of all periods in excess of 5 days where the collection system is not in operation.
5. Description and duration of all periods in excess of 1 hour when the control device is not in operation.

15.1.6 Vectors

The presence of any vectors on the site should be identified. If vectors are present, treatment should be rendered to remove them from the site.

15.1.7 Structures

All monitoring wells, site access structures and any other on-site structures should be checked to ensure that they are undamaged and have been secured. Any damaged structures should be repaired using suitable methods based on the nature of the damage. All structures should be re-secured immediately. Access by vehicular traffic to the landfill should be restricted at all times.

16.0 Reports

Quarterly Reports will be submitted no later than 60 days after the last day of each calendar quarter or within 90 days of the conclusion of sample collection if site analytical plan requirements must be met. The NYSDEC Annual/Quarterly Report form will be used to report the results.

An annual report must be furnished no later than 60 days after the first of January each year. The report will have components derived from the normal record keeping of the landfills and will be submitted in accordance with subdivisions 360-1.4(c), 360-2.17(t), the Permit, Beneficial Use Determination and the NYSDEC Division of Solid Waste Quarterly/Annual Report form. A report will also be provided when there is an exceedance of ALRs, or if there are any malfunctions, spills, leaks, discharges, or system failures.

17.0 Operation and Maintenance Reporting Forms

The forms presented in appendix B are samples of the report forms to be used at the Chemung County Landfill. They reflect the basic format and items to be inspected based on initial construction. Chemung Landfill LLC may chose to use different forms or formats or keep the data in digital form. Forms related to stormwater inspection are included in the separately bound Stormwater Pollution Prevention Plan (SWPPP). Completed forms and data shall be kept on file at the landfill office for review and inspection, if required.

Figures

Appendix A

Part 360 Operating Permits

Appendix B

Landfill Inspection Forms

Appendix C
Odor Control Plan

Appendix D

Radiation Monitoring System Forms

APPENDIX E – Additional Considerations for Radionuclide Sampling

In order to assess existing leachate radiological conditions, leachate samples will be collected and analyzed over the course of the next three years on a semi-annual basis for radioactivity, following the normal collection procedure for the type of water being sampled with the following provisions:

1. The first six sampling events will be conducted at the locations listed below according to the following schedule;

January 2012 – Cells I/II/III, Cell IV, Leachate Lagoon

June 2012 – Cell IV

January 2013 – Cells I/II/III, Cell IV, Leachate Lagoon

June 2013 – Cell IV

January 2014 – Cells I/II/III, Cell IV, Leachate Lagoon

June 2014 – Cell IV

Once the initial twelve (12) samples are obtained, the leachate sampling frequency will be reduced to an annual basis. The samples will then be obtained only from the leachate lagoon location during the month of June.

2. For a normal round of sampling, radionuclide analytes will include:
 - a. Radium-226 per EPA 903.1
 - b. Radium-228 per EPA 904.0
 - c. Total Uranium per EPA 908.0
 - d. Gamma Spectrum per EPA 901.1

If special investigation is necessary, isotopic thorium and/or isotopic uranium may be specified.

3. Before sampling, the laboratory will be contacted to determine:
 - a. how much water is necessary for analysis of each analyte; and
 - b. if acid (type and how much) should be added to the water to keep the radionuclides from absorbing to the wall of the container.

After this information is obtained, field technicians will ensure that the proper containers and reagents are available for use in the field

4. Two sets of samples will be collected: one to be filtered and one sent as unfiltered.
5. "Filtered" samples will be filtered using a 0.45 micron filter via the standard technique specified in this Plan. (Note: The presence of sediment or suspended solids in a sample can greatly affect the apparent radionuclide concentration and thus care should be used to ensure filtering is effective.)
6. Once the samples are appropriately obtained, the samples will be sent to the laboratory via ground shipping.

In addition to the leachate sampling outlined above, the Facility will also conduct radiological analysis on the leachate lagoon sludge on an annual basis. The sludge will be obtained from the lagoon during the month of June and sampled for the radionuclides referenced above under bullet number two.

The results of these analyses will be submitted to the NYSDEC Region 8 and Central Office as required.

DEC PERMIT NUMBER 8-0728-00004/00013
FACILITY/PROGRAM NUMBER(S) 08S02



**DRAFT
PERMIT**
Under the Environmental
Conservation Law (ECL)

EFFECTIVE DATE February 21, 2006
MODIFIED November 3, 2011
EXPIRATION DATE(S) February 21, 2016

- TYPE OF PERMIT NEW RENEWAL MODIFICATION PERMIT TO CONSTRUCT PERMIT TO OPERATE
- | | | |
|--|--|--|
| <input type="checkbox"/> Article 15, Title 5:
Protection of Waters | <input type="checkbox"/> 6NYCRR 608: Water Quality Certification | <input checked="" type="checkbox"/> Article 27, Title 7;
6NYCRR 360: Solid Waste Management |
| <input type="checkbox"/> Article 15, Title 15:
Water Supply | <input type="checkbox"/> Article 17, Titles 7, 8:
SPDES | <input type="checkbox"/> Article 27, Title 9;
6NYCRR 373: Hazardous Waste Management |
| <input type="checkbox"/> Article 15, Title 15:
Water Transport | <input type="checkbox"/> Article 19: Air Pollution Control | <input type="checkbox"/> Article 34: Coastal Erosion Management |
| <input type="checkbox"/> Article 15, Title 15: Long Island Wells | <input type="checkbox"/> Article 23, Title 27:
Mined Land Reclamation | <input type="checkbox"/> Articles 1, 3, 17, 19, 27, 37; NYCRR 380: Radiation Control |
| <input type="checkbox"/> Article 15, Title 27:
Wild, Scenic and Recreational Rivers | <input type="checkbox"/> Article 24: Freshwater Wetlands | <input type="checkbox"/> Other: |
| | <input type="checkbox"/> Article 25: Tidal Wetlands | |

PERMIT ISSUED TO Chemung County		TELEPHONE NUMBER (607)733-2887	
ADDRESS OF PERMITTEE 1690 Lake Street, P.O. Box 588, Elmira, N.Y. 14902-0588			
CONTACT PERSON FOR PERMITTED WORK Michael Krusen, Chemung County Deputy County Executive		TELEPHONE NUMBER (607)737-2031	
NAME AND ADDRESS OF PROJECT/FACILITY Chemung County Sanitary Landfill			
LOCATION OF PROJECT/FACILITY Chemung County, 1488 County Route 60			
COUNTY Chemung	TOWN Chemung	WATERCOURSE Water Body:	NYTM COORDINATES E:473750 N:74800
DESCRIPTION OF AUTHORIZED ACTIVITY Construct and operate a sanitary landfill			

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified (see page 2) and any Special Conditions included as part of this permit.

PERMIT ADMINISTRATOR: Scott E. Sheeley	ADDRESS 6274 E. Avon-Lima Rd, Avon, NY 14414	
AUTHORIZED SIGNATURE DRAFT	DATE	Page <u>1</u> of <u>16</u>

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

GENERAL CONDITIONS**General Condition 1: Facility Inspection by the Department**

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

General Condition 2: Relationship of this Permit to Other Department Orders and Determinations

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

General Condition 3: Applications for Permit Renewals or Modifications

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

The permittee must submit a renewal application at least:

- a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC) and Solid Waste Management Facilities (SWMF); and
- b) 30 days before expiration of all other permit types.

Submission of applications for permit renewal or modification are to be submitted to:

NYSDEC Regional Permit Administrator, Region 8,
6274 E Avon-Lima Rd, Avon, NY 14414 (585) 226-2466

General Condition 4: Permit Modifications, Suspensions and Revocations by the Department

The Department reserves the right to modify, suspend or revoke this permit in accordance with 6 NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

General condition 5.

All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application. Such approved plans were prepared by Fagan Engineers on January 1988, revised May 1988, March 1993, May 1994, May 1995, April 1998, January 1999.



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

I GENERAL APPLICABILITY

1. The disposal area covered by this permit shall be limited to the areas as shown on the approved plans submitted to this Department dated January 1988, revised May 1988, March 1993 and May 1995, by Fagan Engineers.

No solid waste shall be deposited outside of Cells I, II, and III (IIIA and III B) without written approval from this Department. The expansion of landfill operations outside of the areas shown on the approved plans submitted to the Department is prohibited unless prior written approval is obtained from the Department. No verbal authorizations will be given.

2. This approval does not relieve the applicant of the responsibility of complying with any applicable Federal, State or local ordinances, regulations, or laws. Land ownership and operational responsibility for this facility may not be assigned or transferred except pursuant to 6NYCRR Part 360-1.11(b)(1) to any other party during the duration of the permit period.
3. The Permittee shall comply with all conditions of this permit and 6 NYCRR Part 360. Non-compliance constitutes a violation of ECL Article 27, Title 7 and is grounds for enforcement action, permit suspension, revocation, or modification, or denial of a permit renewal or modification application.
4. The Permittee must maintain a copy of all application materials, plans, reports, permits, and the Final Environmental Impact Statement at the site and make these documents available to any representative of the Department. The Permittee must also maintain a copy of all written approvals and directives in a like manner, together with a copy of the effective Part 360.
5. In the event a Department representative makes a determination that the Permittee is in non-compliance with any provision of the Environmental Conservation Law, or with any regulation promulgated there under or any provision of this permit or any judicial or administrative order applicable to the facility, the Permittee must, upon receipt of written or oral Notice of Non-Compliance from the Department, immediately take such steps as are necessary to correct, abate, or remediate the non-complying condition.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	3 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

When oral notice is given, the Department will provide a confirming written Notice of Non-Compliance. To the extent feasible, the Permittee must consult with the Department regarding the selection and implementation of such remedial measures. Any instance of non-compliance, together with the responsive measures and results of such remedial measures, must be recorded in writing by the Permittee, and submitted to the Department. Failure to do so shall constitute non-compliance with this permit.

6. The Permittee shall take all steps to minimize or correct any adverse impact on human health or the environment resulting from facility operations. The Permittee shall report any such activity which may endanger human health or the environment to the DEC Region 8 Regional Materials Management Engineer. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances and followed up in writing within seven days.
7. The provisions of this permit shall not be construed to limit the Department's authority as otherwise established by law or regulation.
8. No work shall take place within one-hundred feet of any wetland area until a permit is obtained from the Department as required under Article 24 of the Environmental Conservation Law.
9. Open burning at the site is prohibited except pursuant to a permit issued by the Department under Part 215 of this Title.
10. If the Permittee intends to operate the facility beyond the expiration date of this permit, Permittee shall submit the appropriate forms, engineering reports, plans and fee no later than 180-days prior to the expiration date. These materials shall be submitted to the Regional Permit Administrator, New York State Department of Environmental Conservation.
11. Amendments to the final engineering report and final plans must be approved in writing by the Department prior to their implementation.
12. Upon transfer of ownership of the landfill site, or any portion thereof, a provision shall be included in the property deed indicating the period of time during which the property has been used as a landfill, a description of the wastes contained within, and the fact that the records for the facility have been filed with the Department. Said deed shall also reference a map which shall be filed with the Chemung County Clerk, showing the limits of the landfilled areas within the property.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	4 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

13. All construction at the landfill shall be under the supervision of a person licensed to practice professional engineering in the State of New York. Upon completion of construction of each element of the project (berm, pond, zone, ditch, etc.), written certification will be made by said firm or person that the construction is in accordance with the provisions of this permit, 6NYCRR Part 360, and the final engineering report and final plans as approved by the Department. Such certification shall be submitted within 45-days following completion of construction of each element. In addition, the Permittee shall provide the Department as-built plans from his engineer within 60-days of completion of each phase. The Permittee shall provide to the Department written certification by his engineer that all repairs to structures (liner, collection system, cap, etc.) have been completed and are in accordance with the approved plans, 6NYCRR Part 360, and revised engineering plans and reports. Such certification shall be submitted to the Department within 30-days of the repair of any damage to the structures.

II FACILITY OPERATION

14. The facility shall be operated in strict compliance with:
- a). The current 6 NYCRR Part 360 Solid Waste Management Facilities regulations;
 - b). All plans, reports, and manuals and subsequent amendments approved in writing by the Department; and
 - c). The general and special conditions of this permit.
15. The landfill's operation and maintenance manual (O&M) shall address operation of the radiation detectors and the procedures landfill staff will use to assess a load causing a detector reading in excess of the investigation level, which shall be no greater than five times site background radioactivity. Specific items to address in the O&M include:
- a). Investigation procedures and waste rejection criteria and procedures for specific waste types;
 - b). Radiation detector alarm set points, calibration and field checks frequency, and the procedure used to correlate detector reading to load concentrations.
 - c). Staff training on detector operations and associated procedures.
16. Adequate numbers, types, and sizes of properly maintained equipment shall be available to the facility during all hours of operation to maintain waste disposal and leachate handling needs.
17. Solid waste shall be confined to an area which can be effectively maintained, operated, and controlled.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	5 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

18. Wind blown paper and other litter shall be confined to the area adjacent to the working face by snow fence, portable screens, natural screening, and any other necessary devices. The Permittee shall police wind-blown paper and litter along the landfill's perimeter as necessary and at least once a week.
19. All surface water control structures, berms, and ditches shall be vegetated and otherwise stabilized following construction. Silt shall be removed from the siltation ponds on an annual basis during the driest season of the year. Storage capacity shall, at a minimum, be capable of accommodating a 25-year storm at all times.
20. All wastes received at the disposal site must be spread and compacted in layers not more than two (2) feet thick upon deposition at the working face, excepting the first lift placed on the liner system. Treated regulated medical waste shall only be disposed of by placing into an excavated hole at the working face and covering with a minimum of one (1) foot of refuse prior to compaction. The working face shall be restricted to the smallest area practicable, and lift height shall not exceed ten (10) feet.
21. During the placement of the first lift of waste above the primary leachate collection and removal system, the following precautions and practices will be observed:
- (a) consideration for the approach and travel of haul trucks and other landfill operation vehicles relative to the location of the liner and leachate collection laterals.
 - (b) waste placement must be kept away from the top of the berms to allow for proper leachate control and effective future placement of final cover. Identification markers may be used along the berms with specific setback distances for waste placement.
 - (c) Placement of a select type refuse being free of demolition debris, large metal wastes, long items such as poles, piping and bulky wastes in general, and shall be placed in a minimum lift thickness of at least 5 feet above the leachate collection and removal system.
22. Dust must be effectively controlled so that it does not constitute a nuisance or hazard to health, safety, or property.
23. A compacted layer of at least six (6) inches of cover soil shall be placed on all exposed solid waste at the end of each day of operation. Regulated solid waste is not acceptable material for use as daily cover unless approved in writing by the Department. The following listed materials are hereby approved by the Department for use as daily cover:

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	6 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

- a. "Posi-shell" alternative daily cover product;
- b. Sewage sludge, when mixed with soil, foundry sand, and/or wood chips, to form a 1:1 mixture;
- c. Processed wood construction and demolition debris, obtained from the Area 3 C&DD landfill;
- d. Foundry sand;
- e. Contaminated soils, in compliance with previous Department approvals for usage;
- f. Crushed glass and crushed glass residue from the Chemung County Materials Recycling Facility.

No other solid waste may be utilized as daily cover without prior approval by the Department. Facility operations, daily, intermediate, and final cover shall be as defined in 6NYCRR Part 360, and shall be applied as required in 6NYCRR Part 360.

24. All structures, including the leachate collection and removal system, groundwater and gas monitoring wells, access roads, drainage structures, etc., shall be maintained in proper working order. In the event any structure becomes damaged or malfunctions in any way, the Permittee shall notify the Department verbally within 24-hours and follow up in writing within 7 days, and shall promptly replace or repair the structure. All monitoring wells (groundwater and gas) shall be fitted with locking caps and locked at all times other than during times of sampling.
25. On-site mining of soils and reclamation of mined areas shall take place in accordance with the Mined Land Use Plan for the Chemung County Soil Borrow Area revised April 1999, including the graphic portion of this plan revised January 25, 1999, and any Department-approved modifications thereof. Final contours of mined areas shall be those depicted in the approved site mining plans. If accumulations of groundwater occur within the soil borrow area, mining operations below that elevation shall be terminated.
26. On-site roads used to transport solid wastes shall be maintained passable and safe at all times. No penetrating or waste oils shall be used for dust control. The Permittee shall not use refuse, fly ash or other wastes for skid control or traction enhancement on landfill roads. All waste haulers entering the landfill shall use the entrance immediately off of County Route 60 only. Solid waste shall not be brought into the landfill from any other entrance. In addition, all construction vehicles shall use the County Route 60 entrance.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	7 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

- 27. The Permittee shall require that all vehicles delivering waste or cover material to the site be enclosed or covered or their contents secured.
- 28. The operating hours of the landfill shall be restricted to those hours between 7:00 a.m. and 6:00 p.m. The landfill shall not be operated on Sundays and major holidays, except in the event of an emergency. Major holidays include New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas.
- 29. A. The total quantity of municipal and industrial refuse accepted at the landfill shall not exceed 180,000 tons per calendar year without written approval from the Department. The total refuse received at the landfill shall not exceed 54,600 tons in any calendar quarter. Calendar quarters are defined as: January - March; April - June; July - September; October - December. The Permittee shall maintain daily weight records (in tons) of all incoming solid waste. The records shall be maintained at the landfill site for inspection by Department representatives.
 B. The approved design capacity of the landfill, as defined in 6NYCRR Part 360 paragraph 360-1.2(b)(8), is 700 tons per day.
- 30. The permitted site or facility, including relevant records, shall be subject to inspection at reasonable hours and intervals by an authorized representative of the Department to determine whether the Permittee is complying with this permit and the Environmental Conservation Law. Such representative may order suspension of activities if the public interest so requires.

III NON-MUNICIPAL WASTES

- 31. As used herein, the terms "hazardous waste" and "industrial waste" shall have the meanings as set forth in 6NYCRR Part 360-1.2.
- 32. The following wastes shall not be disposed of at this site under this permit:
 - a. Hazardous waste in any quantity;
 - b. Any free liquids, sludges, slurries, chemical or industrial wastes which are less than 20% solids;
 - c. Any empty drum or container which has held hazardous waste and is not empty according to 40CFR 261.7(a)(3); containers of 5 gallons capacity or larger shall not be disposed at this facility unless the ends have been cut off and the containers have been crushed.
 - d. Industrial wastes which are incompatible with municipal waste, as determined by the Department;

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	8 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

- e. Tires which have not been cut into at least two pieces. Tires must either be cut through its longest dimension or shredded;
- f. Untreated regulated medical waste.

Source separated yard waste shall not be disposed of in the landfill unless no other viable options exist. A determination as to whether or not viable options exist in a given circumstance shall be made by the Regional Materials Management Engineer at the request of and in consultation with the County. The County shall continue to support public education programs designed to reduce the generation of yard waste. Local yard waste collection and composting programs shall be encouraged and supported to the greatest extent possible by both the Department and the County.

- 33. No waste(s) regulated by 6NYCRR Part 364 may be accepted by the Permittee for disposal unless the waste hauler has a valid Part 364 permit which specifies the Permittee's landfill as the disposal site for such waste(s), and disposal of such waste has been approved by the Permittee in writing. Shipments of regulated medical waste shall not be accepted for disposal unless accompanied by a valid Medical Waste Tracking Form (MWTF) and properly treated in accordance with applicable New York State regulations.
- 34. The Permittee is responsible for monitoring the incoming solid waste so that the annual limitations are not exceeded. All incoming waste loads must be monitored by an attendant located at the entrance to the landfill. Landfill personnel and scale house attendants shall be trained to identify unpermitted/untreated regulated medical waste shipments.
- 35. All spills, including, but not limited to, petroleum, leachate either from the leak detection or leachate collection systems or pond, and industrial waste, shall be reported verbally within twenty-four (24) hours and in writing within seven (7) days to the Department - Region 8 Solid Waste office.
- 36. Disposal of Marcellus Shale wastes.
The following applies to wastes generated during any drilling and/or development of natural gas wells targeting the Marcellus Shale, and/or wastes generated from the production of natural gas from any wells completed in the Marcellus Shale.
 - a. Flowback water related filter sludge, production brine related filter sludge, and free-phase liquids of any origin, are prohibited from disposal.
 - b. Drill cuttings including those generated from operations using air, water and/or oil-based drilling fluids may be accepted for disposal.
 - c. Except as noted above, acceptance of all other waste streams requires prior written approval from the Department.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	9 of 166



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

- d. The amount and type of waste accepted at the landfill must be reported in the facility's annual report to the Department.

IV FUTURE DEVELOPMENT

37. No excavation or construction shall take place until Permittee receives written approval of the zone plan from the Department. No solid waste shall be deposited in any newly constructed area until written approval has been obtained from the Department.
38. No refuse may be deposited at any future location on this site until Permittee receives written authorization from the Department. Said written authorization will be made after receipt by the Department of the construction certification and following an inspection of the constructed zone by a representative of the Department.
39. Permanent benchmarks shall be established near each operational area.

V CONSTRUCTION

40. Not less than 30 working days prior to the commencement of the construction of future stages of the landfill, the Permittee must submit to the Department for its review and approval, detailed construction plans and technical specifications for that phase.
41. Written notice of the commencement of all major portions of on-site construction activities must be provided not less than five (5) business days in advance of the activity. These activities include, but are not limited to, clearing and grading,
42. Open burning of land clearing materials and debris (including trees, shrubs, and brush) is prohibited. Merchantable timber must be salvaged for commercial use. Toppings, brush, and slash must be chipped and beneficially used on or off-site. Tree stumps may be chipped or buried in the landfill.
43. Upon commencement of construction, the Permittee must submit by the fifteenth (15th) of each month, a written progress report to the Department which summarizes construction activities undertaken during the preceding month.
44. The Department must be notified immediately in case of any development during construction that warrants a request to modify the approved engineering plans. Deviation from the approved plans without the specific prior written approval of the Department will constitute a violation of this permit. All deviations must be noted in the engineer's daily reports and monthly summaries.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	10 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

45. All construction at the landfill site shall be under the supervision of a person licensed to practice professional engineering in the State of New York. This requires that a representative of your engineering consultant be present whenever construction is on-going. This representative must maintain a daily log indicating work done that day, weather conditions, testing performed, quality control, quality assurance practices, problems encountered, and remedial activities undertaken to correct these problems. A copy of this log must be submitted with the construction certification for each cell. One copy of the certification with original signatures and stamped by the licensed engineer must indicate whether all work performed was in compliance with this permit and the approved engineering plans and reports and must be submitted within three (3) months after completion of construction. Clear color photographs of major project aspects, day reports and results of all tests conducted to determine compliance shall also be included as part of the certification.

As-built engineering plans must also be certified containing at least the following:

- (a) notation of any deviations from the approved plans and reports;
- (b) completed sub-base elevations;
- (c) completed liner elevations; both primary liner and secondary liner; location and critical elevations of leachate collection lines, leak detection lines, the top and bottom of the groundwater drainage blanket, valve pits, tanks, pond, containment berm, manholes, etc.
- (d) final drainage features;
- (e) locations, both existing and proposed, of all monitoring devices;

Written approval by this Department of the construction certification report is necessary before any solid waste can be placed in the newly constructed areas.

46. Prior to and during any construction, adequate measures shall be taken to prevent siltation of surface waters both on and adjacent to the site.
47. Prior to excavation and construction of each cell, bench marks shall be located for determining elevations as filling progresses. Permanent bench marks shall be established for each stage. The location shall be noted on the "As-built" drawings. Elevations for permanent bench marks shall be taken from an existing U. S. Geological Survey benchmark. New York Transverse Mercator (NYTM) coordinates must be established for each permanent benchmark.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	11 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

- 48. Abandonment of wells. All soil borings, rock core holes, abandoned monitoring wells or piezometers and other abandoned wells must be fully sealed in a manner appropriate for the geologic conditions to prevent contaminant migration through the borehole according to Part 360-2.11(a)(8)(iv). Additionally, all casing and well material must be removed from below the proposed fill elevation at locations within the proposed fill area. The abandonment activity must be noted as accomplished in the construction certification report.
- 49. Should any leachate enter by migration, spill or other means any stage which has not yet received refuse, all fluid within that cell shall be removed and treated as leachate. When the leachate is first detected in any stage, all storm water drainage or pumping shall cease immediately.

VI LEACHATE COLLECTION AND DISPOSAL

- 50. As used herein, the term leachate shall include:
 - a. The definition provided in Part 360-1.2(b)(98);
 - b. A liquid which accumulates in the leachate collection system and leak detection system;
 - c. Any liquid which accumulates within the active working areas of the landfill;
 - d. Any liquid which has been in contact with or passed through solid waste or which has been contaminated by liquid which has been in contact with or passed through solid waste.
- 51. Under no circumstances shall leachate be discharged directly or indirectly from the site to surface and/or groundwaters.
- 52. The leachate holding pond shall be operated to maintain a minimum of two (2) feet of freeboard or one (1) week storage capacity, whichever proves larger, at all times.
- 53. Permittee shall allow all liquids in the leachate collection system to flow freely to the leachate holding pond. The leachate flow valve in the secondary leachate collection system may be closed temporarily to allow measurement of leachate flow rates and/or cleaning of the leachate transmission line.
- 54. Any leachate on the ground surface shall immediately be contained and removed either by pumping or utilizing spill cleanup procedures such as absorbent pads. Material collected by pumping must be disposed at a municipal sewage treatment plant. Leachate spill debris residuals may be placed in the landfill.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	12 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

55. Leachate removed from the facility shall be by a hauler in possession of a valid Part 364 permit, authorizing such hauler to haul leachate from the facility to a specified disposal site approved by the Department. There shall be no leachate recirculation.
56. The leachate holding pond shall be emptied and inspected for leaks at least once per year or as required by 6NYCRR Part 360, whichever is more frequent. An inspection report(s) documenting the inspection shall be included in the Annual Report. Solids in the bottom of the leachate holding pond shall be removed on an as-needed basis. These solids shall be removed, analyzed and stored until a disposal alternative acceptable to the Department is approved. The Department shall be notified at least fourteen (14) days prior to sampling these solids.
57. The leak detection system of the leachate holding pond shall be monitored and logged daily. If the flow rate equals or exceeds five (5) gallons per acre per day, the permittee shall notify the Region 8 Solid Waste Engineer verbally within 24-hours and in writing within seven (7) days. The records of such measurement shall be maintained at the landfill for inspection by Department representatives.
58. To insure leachate collection and leak detection lines remain functional, they must be inspected/evaluated immediately after the first lift of refuse has been placed and cleaned out as necessary. Should any damaged lines be discovered, they shall be remediated immediately.
59. The primary leachate collection and removal system shall be flushed at least annually to maintain an unobstructed and free draining collection system. Should the leachate collection and removal system's efficiency be found to be impaired, then remedial cleaning operations shall be conducted with written notification of such activity given to the Department prior to the commencement of cleaning. The department shall be notified a minimum of five (5) working days prior to commencing cleaning of the leachate collection system.
60. Adequate leachate storage must be available to meet the leachate collection needs of the facility throughout the operational and post-closure maintenance periods. A log of all visual inspections of facility structures must be maintained at the site. At a minimum, the log must detail the date, time, inspector, visual observations, problems, and any corrective actions taken. The leachate management and collection system shall be maintained to prevent leachate bypass of such system.

VII ENVIRONMENTAL MONITORING PLAN (EMP)/SITE ANALYTICAL PLAN (SAP)

61. All monitoring of the facility shall be in compliance with the approved EMP/SAP and Part 360.
62. Residential water supply wells as discussed in the Engineering Plan and EMP shall be monitored per the existing schedule previously established. No modification to this schedule may occur without written approval from the Department.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	13 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

63. Whenever operations occur in Cell 4B within 800 feet of Roberts Hollow Road, or such other distance as the Department may determine based upon the operation of the noise monitoring system contemplated by this condition, real time noise monitoring shall be implemented to ensure compliance with 6 NYCRR Part 360-1.14(p). The real time monitoring of operational noise will be active and continuous so that landfill operations can be immediately adjusted if noise levels begin to approach the regulatory limits set forth in 6 NYCRR Part 360-1.14(p). An amendment to the approved Environmental Monitoring Plan that details the real time continuous monitoring system for Cell 4B operations shall be submitted for Department approval within thirty (30) days from permit issuance and be operational no later than thirty (30) days after the Department's approval of the amendment. Thereafter, all noise monitoring shall be in conformance with the Department approved amendment.

VIII FINAL CLOSURE/POST-CLOSURE

64. Twelve months before the date at which the landfill will cease accepting waste, the Permittee shall submit a Scope of Work which shall include: 1) a site investigation plan and 2) a schedule of all tasks required to implement a closure in conformance with the regulations expected to be effective at the time of closure. The schedule shall be in agreement with the final closure date set forth in the permit. The facility shall be maintained for a period of no less than thirty years beyond the placement of final cover.
65. Permittee shall amend the final closure and post-closure plan whenever changes in operating plans, waste deposition rates, facility design, or events occurring during the active life of the landfill change the projected final closure date or affect the Permittee's post-closure activities. All such amendments shall be submitted in writing to the Department within sixty (60) days of any changes in the Permittee's plans, deposition rates, design, or events at the landfill. All amendments shall be subject to the Department's approval.
66. A permanent grass or ground cover crop shall be established and maintained on all exposed final cover soil within sixty (60) days after placement, or season not permitting, as otherwise prescribed in writing by this Department.
67. Cover soil and drainage control structures shall be designed, graded, and maintained to prevent ponding and erosion and minimize infiltration of water into the solid waste cells. Side slopes on the site shall not be steeper than one (vertical) on three (horizontal).
68. The final contours of the site shall not exceed those shown on the approved final plans and report.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	14 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

IX RECYCLING

69. The Permittee shall assure that the recyclable recovery program is implemented in accordance with the time frames indicated within the Chemung County's Comprehensive Recycling Analysis (CRA). Any revisions made to the program and or the schedule, shall be submitted to the Department for review and approval.
70. The Permittee shall ensure that the recyclable recovery program is implemented in accordance with the time frames indicated in the Department approved Chemung County Comprehensive Recycling Analysis and any Department approved revisions or updates to this document. Any significant revisions made to the program and/or the schedule shall be submitted to the Department for review and approval.
71. Annual reports shall be submitted on the effectiveness of the recycling program. This report should provide the total solid waste produced by the County, a breakdown of the solid waste by percentages, and the actual percentages/tonnages of recyclables removed. These numbers should be compared to those estimates found in the CRA. If the CRA estimates are not met, an explanation should be provided along with a plan of action to correct this shortfall.

X ON-SITE ENVIRONMENTAL MONITOR (OEM)

72. A. The Permittee shall fund environmental monitoring services to be performed by the Department. These monitoring services will include, but not be limited to, the following:
1. inspections
 2. compliance monitoring
 3. pollution prevention assurance
- B. Funds necessary to support the monitoring services and requirements for the coming year shall be provided to the Department by the Permittee on an annual basis. The sum to be provided is based on annual environmental monitoring service costs of the Department and is subject to annual revision. Subsequent annual payments shall be made for the duration of this Permit or until the monitoring requirement no longer exists, whichever comes first.
- C. The Permittee shall be billed annually for each fiscal year beginning on April 1. If this Permit is to first become effective subsequent to April 1, the initial payment may be for an amount sufficient to meet the anticipated cost of the monitoring through the end of the current fiscal year.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	15 of 16



SPECIAL CONDITIONS For Article 27, Title 7. (Chemung Co. Landfill)

D. The Department may revise the required payment on an annual basis to include all of the Department's costs associated with the monitoring services. The annual revision may take into account such factors as inflation, salary increases, changes in operating hours and procedures, increase or decrease in the amount of monitoring necessary, and increase or decrease in the number of OEM and/or OEM supervisors necessary. Upon written request by the Permittee the Department shall provide the Permittee with a written explanation of the basis for any revision or modification. If such a revision is required, the Department will notify the Permittee of such a revision no later than 60 days in advance of such revision.

E. Prior to making its annual payment, the Permittee will receive, and have an opportunity to review, an annual work plan that the Department will undertake during the year.

F. Payments are to be in advance of the period in which they will be expended.

XI Solid Waste Reporting Requirements

- 73. During the term of this permit, the Permittee shall submit reports as follows:
 - a. Quarterly reports in compliance with Part 360-1.4(c) and Part 360-2.11 (c)
 - b. Annual reports in compliance with Part 360-2.17 (t)

XII FUTURE SUBMISSIONS

- 74. The following documents must be updated to accurately reflect current landfill operation and/or solid waste management practices. These documents shall be submitted by the Permittee no later than August 31, 2006.
 - a. Operation and Maintenance manual in accordance with 6NYCRR Part 360-2.9.
 - b. Contingency plan in accordance with 6NYCRR Part 360-2.10.
 - c. Local Solid Waste Management Plan (LSWMP).

XIII REGULATORY CHANGES

75. The above conditions shall be subject to change in the event that they become inconsistent with future modifications of the rules and regulations of the New York State Department of Environmental Conservation.

DEC PERMIT NUMBER 8-0728-00004/00013	FACILITY ID NUMBER 08S02
PROGRAM NUMBER	16 of 16

New York State Department of Environmental Conservation

Environmental Permits, Region 8

6274 East Avon-Lima Rd, Avon NY 14414-9516

Phone: (585) 226-5400 • Fax: (585) 226-2830

Website: www.dec.ny.gov



Joe Martens
Commissioner

October 19, 2011

Certified Mail RRR # 7010 1870 0000 0206 1195

Michael Krusen, Deputy County Executive
County of Chemung
203 Lake Street
P.O. Box 588
Elmira, New York 14902-0588

RE: DEC Permit #8-0728-00004/00013
Chemung County Sanitary Landfill
Town of Chemung, Chemung County

NOTICE OF INTENT TO MODIFY PERMIT

Dear Mr. Krusen:

The New York State Department of Environmental Conservation (DEC) has reviewed the Chemung County Sanitary Landfill, Part 360 Solid Waste Management permit issued August 18, 2011, and the questions identified for DEC staff response in the DEC Commissioner's decision dated August 4, 2011. These questions related to the landfill's operating procedures associated with the acceptance of materials generated from Marcellus Shale drilling activities. DEC staff were charged with evaluating the questions and determining whether there was a need to revise the landfill's operating procedures or the above-referenced permit.

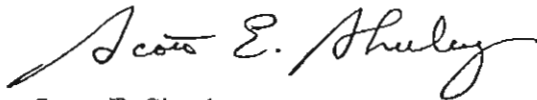
Based on Department staff review, we have determined that a modification of the Chemung County Sanitary Landfill Part 360 Solid Waste Management permit is necessary based on new, material information pertaining to the operation of radiation detectors at the site, including new, DEC-approved revisions to the landfill Operations and Maintenance Manual (O&M) and Environmental Monitoring Plan (EMP). Pursuant to the Uniform Procedures Act regulations (6 NYCRR Part 621.13), a draft of the permit modification is enclosed for your review. This permit modification would incorporate one additional special condition not included in the permit issued August 18, 2011, Special Condition No. 15, and amend special condition number 14.

In addition, certain ministerial matters will be corrected through this permit modification. Special Condition No. 75 in the August 18, 2011 permit has been removed since an equivalent notification is provided on page 2 of the permit under Item C. Also, the title of the Regional Materials Management Engineer has been updated in special conditions 6 and 32; punctuation in the heading for the special conditions has been corrected; and the blank signature line on the last page has been removed, since the permit signature line is on the front page.

You may submit a written statement addressed to my attention on or before November 3, 2011, which is within 15 calendar days of the mailing date of this notice, giving reasons why the permit should not be modified or to request a hearing, or both, as specified under the Uniform Procedures Act regulations (6 NYCRR Part 621.13 (d)). If I receive no response from you within 15 days of the mailing date of this notice, the permit will be modified as explained above and the modified permit will be mailed to you.

If there are any questions, you may contact me at (585) 226-5382.

Sincerely,



Scott E. Sheeley
Regional Permit Administrator

Enclosure – Draft Permit

Cc (w/enclosure): Frank Ricotta, Regional Engineer, DEC Region 8
Lisa Schwartz, DEC Region 8
Scott Foti, DEC Region 8
Gary Maslanka, DEC Region 8
Robert Phaneuf, DEC Albany
Michael Caruso, DEC Albany
Richard Clarkson, DEC Albany
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Joe Martens
Acting Commissioner

October 19, 2011

Honorable Joseph J. Martens,
Commissioner
New York State Department
Of Environmental Conservation
625 Broadway
Albany, New York 12233

By Email and U.S. Mail

**Re: Decision of the Commissioner dated August 4, 2011 in
Chemung County, DEC No. 8-0728-00004/ 00013**

Dear Commissioner:

This correspondence constitutes Department staff's response to the direction in the above-referenced decision to review whether additional or revised permit conditions or revisions to the landfill's operating procedures are necessary with respect to questions about the disposal of Marcellus Shale drill cuttings. Staff maintains, as set forth in your August 4, 2011 decision, that Marcellus Shale drill cuttings do not present a radiological problem for placement in a 6 NYCRR Part 360 permitted landfill. I have enclosed:

- Copies of recent revisions to the landfill Operations and Maintenance Manual (O&M Manual) and Environmental Monitoring Plan (EMP) which were approved by Staff letters dated October 18, 2011, and copies of those approval letters; and
- A copy of the Department initiated permit modification, including the cover letter dated October 19, 2011, and a draft permit.

Additionally, the following is Staff's further elaboration in response to the specific questions asked and considerations requested by the decision. (The language in italics is from the decision, with numbers inserted for ease of reference.)

Accordingly, [the Commissioner is] directing that Department staff review the alarm levels that NEWSNY has selected for its radiation detection system. Department staff is to consider whether the alarm levels are adequate to:

a. monitor the loads of Marcellus Shale drill cuttings received at the landfill to ensure that such loads do not contain non-drill cutting wastes of higher radioactivity that are prohibited from disposal at the landfill; and

b. Determine whether a load should be investigated or rejected.

Staff's evaluation shall address:

- 1. the level or levels at which the detection system alarms should be set; [and] the level above which the landfill would reject waste for disposal;*

Department staff has evaluated the options for establishing alarm set points for the landfill site radiation portal monitor (monitor) and has determined appropriate investigation and rejection levels. Data collected to date only show radium-226 concentrations in Marcellus Shale drill cuttings (drill cuttings) in the single digit picocuries per gram (pCi/g) range. Modeling done by Argonne National Lab (ANL) shows that an average waste concentration of 50 pCi/g of radium-226 is protective of public health and the environment for non-intrusive future uses of a properly designed, operated, and closed landfill. NEWSNY has agreed to set the maximum average concentration of radium-226 accepted into the landfill at the calculated monitor equivalent of 25 pCi/g, and has established a rejection level equivalent of 50 pCi/g. Only a limited number of truckloads of drill cuttings will be allowed to be accepted per week with concentrations between 25 and 50 pCi/g. Further, NEWSNY has agreed to set their investigation level at a more conservative level of no greater than five times local background, which is below the 15 pCi/g equivalent they had originally proposed. This setting is consistent with recommendations for radiation monitors at solid waste facilities to monitor for a variety of radioactive materials that could potentially be present in various solid waste streams. The sensitivity of the monitor was recently demonstrated by the system's detection of low levels of radioactive iodine (I-131, from a nuclear medicine patient) in a residential waste load and a separate incident of detecting radioactive iodine in the thyroid of a truck driver who recently underwent a medical radionuclide procedure.

This approach is in keeping with the underlying regulatory principle of maintaining potential impacts from the use and handling of radioactive materials "As Low As Reasonably Achievable" (ALARA). Setting a limit at half of the ANL modeled value (i.e., setting the mean acceptance concentration limit at 25 versus 50 pCi/g) is a prudent step, and is adequate to address uncertainties in the concentration levels of naturally occurring radioactive material (NORM) in incoming loads of drill cuttings that might be introduced by slight variations in truck body construction, waste load size, or other related factors.

Use of a 5 pCi/g limit as recommended by Residents for the Preservation of Lowman and Chemung is overly conservative. The 5 pCi/g value was set by the EPA for remediating radium-contaminated surface soils for unrestricted use. Unrestricted means there are no limitations to property use, including residential use, gardening, or farming. It is not

necessary to limit disposal of NORM to this level at a landfill permitted pursuant to the State solid waste management regulations at 6 NYCRR Part 360.

2. *and how often the calibration of the radiation detection system should be checked to ensure that the system performs its intended function.*

Annual calibration is the standard frequency for radiation detection and monitoring equipment, including equipment utilized by the Department. Accordingly, the monitor will be calibrated annually in accordance with the O&M Manual. Further, NEWSNY performs daily background checks to verify the monitor is operating properly, and to ensure that no sources of additional radiation (from other sources of NORM, operator nuclear medicine treatments, etc.) have been introduced into the vicinity. Finally, at the request of the Department, NEWSNY will perform weekly system challenge tests by introduction of a sealed radiation source within the detection volume of the monitor to verify continued proper operation of the system.

3. *Department staff shall consider whether the comparison of radiation portal monitor readings to waste load concentrations represents an appropriate approach in setting the site specific exclusion or alarm limits on the detector.*

The approach of making direct comparisons between actual concentration values of NORM in incoming waste loads to actual monitor readings was not proposed by NEWSNY but rather mandated by the Department as a means of verifying the calculations performed by NEWSNY's health physics consultant. Making a direct comparison is a conservative means of validating the calculated correlation between waste load concentrations and monitor readings.

It should be noted that the consistently low levels of NORM concentration in incoming loads of drill cuttings, as evidenced by the lack of noticeable increases in monitor readings, has not yet allowed comparisons over a wide range of waste load concentrations as originally requested by the Department. At the Department's request, NEWSNY has agreed to collect several composite samples from loads of incoming drill cuttings at these low levels to establish comparison data at the low monitor readings that have been seen to date.

In its review of the radiation monitoring/detection system, Department staff review shall also consider:

4. *whether any adjustments to the detection system may be necessary to account for disposal truck body thickness or other truck body characteristics;*

Department staff has reviewed this issue and finds that concerns expressed regarding a possible need to adjust alarm set points due to truck body thickness or other characteristics is addressed by the comparison of the readings to the sample concentrations and the conservative investigation and average concentration limits (as discussed in item 1 above) set in the O&M Manual.

5. *the range of accuracy of the detection system where materials of higher radioactivity may be shielded or otherwise contained within the rest of the waste load;*

Department staff has evaluated this issue and concluded that it reinforces the need for the investigative set point to be no greater than five times local background. This set point is consistent with recommendations to detect radiation sources in incoming loads of solid waste established by the Council of Radiation Control Program Directors (CRCPD). The CRCPD consists of the heads of government radiation control programs (including New York). The CRCPD publication 98-3, "Detection and Prevention of Radioactive Contamination in Solid Waste Facilities" recommends a solid waste facility radiation detector setting of from two to five times the local background. By setting the investigation level at less than 25% of the maximum allowable concentration in a load of drill cuttings, the monitoring system would be able to detect the presence of any significant amount of higher concentration waste *.

*Local Background (monitor reading) = 4.2 kcps (kilocounts per second).
Investigation alarm set at 5 x local background = 21.0 kcps.
Maximum allowable concentration set at 50 pCi/g = 101 kcps.
(21 kcps/101 kcps) x 100 = 21%.

6. *the degree of operator training for the detection system that may be necessary;*

Department staff has concluded that training should consist of training by the manufacturer of the monitor or the equivalent in system operation and trouble shooting, and NEWSNY training in site operational procedures. There should also be a periodic review of those procedures as part of annual refresher training for system operators. NEWSNY has committed to this level of training. See O&M Manual at page 15.

7. *the appropriateness, as noted in the updated protocol, to have the same backlit indicator (yellow) to warn of a low alarm level and a low battery;*

An evaluation of the landfill's radiation portal monitor by Department staff found the monitor's display panel has four separate backlit indicators. There is a separate, independent backlit indicator for each of the following: Channel 1 alarm, Channel 2 alarm, Detector failure, and Low battery. The low battery indicator (LOW BAT) is the only one of the backlit indicators that lights up yellow when activated; all other indicators light up red when activated. The monitor's internal batteries' only function is to provide power for the operation of the monitor in case of a failure of the electrical power grid. If the monitor is operated on battery power, the low battery indicator warns the operator when there is less than two (2) hours of battery life remaining. A low battery warning also triggers the red "DET FAIL" backlit indicator.

8. *and whether the landfill's operating procedures adequately address the situation where waste loads continue to trigger the alarm even where the steps to check the load (as set forth in the operating protocol) are performed,*

Landfill operational protocols, as described in the O&M Manual, call for all loads that trigger an investigation alarm (low alarm) to be investigated further to determine the origin and nature of the radiation source. The course of action followed is dependent on the results of this investigation. Landfill protocol is for the Department to be notified when an investigation alarm sounds, and to be kept informed of the investigation and the result.

9. *and whether the waste would be returned to the site of generation or sent to another location for disposal.*

The O&M Manual outlines the steps to be taken when an investigation alarm is triggered, including that Department staff be notified. As such, staff has knowledge of the alarm, the investigation, and the results of the investigation. If after investigation the source is determined to be NORM or medical radionuclides in patient waste from a non-hospital setting (patient diapers, tissues, etc. in residential loads), that load is acceptable for disposal in a 6 NYCRR Part 360 permitted municipal solid waste landfill. If the alarm is determined to be caused by waste that is not acceptable for disposal in such a solid waste landfill, including processed and concentrated NORM or regulated radioactive waste, Department staff will be involved in determining where the rejected load will be sent. Additionally, a shipment approval (DOT-SP11406) is required to be issued for the vehicle hauling the rejected waste prior to moving it off the landfill site. Appropriate landfill operator staff will notify the Department and State Police if a vehicle with a rejected load leaves the landfill site without authorization.

10. *Department staff shall also consider the extent of notifications that NEWSNY and the County must provide Department staff with respect to any rejected waste loads.*

Department staff has reviewed the operating procedures and discussed their implementation with NEWSNY representatives and is confident the procedures adequately address the issues noted in the Commissioner's directive. NEWSNY has committed to a process of notifying the County and the Department of any load of waste confirmed to exceed the investigation level.

As noted above, part of the standard operating procedures outlined in the facility O&M Manual requires Department staff to be notified when an investigation alarm is triggered and to be fully informed of the investigation steps and results as well as any necessary subsequent actions. This conservative approach may be reassessed as the permittee gains experience in responding to alarms. Information on rejected loads is also included in the landfill's routine monthly report submitted to regional Department staff.

11. *Pursuant to Department staff's authorization, NEWSNY has been disposing drill cuttings which had been in a water-based medium in Chemung County's onsite construction and demolition debris landfill (see, e.g., Tr, at 141-142). Department Staff is directed to review the sufficiency of the procedures that NEWSNY has established to ensure compliance with Department staff's direction that drill cuttings from an oil-based medium are not disposed in the onsite construction and demolition debris landfill.*

Department staff has reviewed the waste acceptance procedures and believes they are sufficient to ensure that any oil-based drill cuttings received are appropriately directed to the municipal solid waste (MSW) landfill portion of the site. NEWSNY requires all generators wanting to dispose of waste from oil and gas exploration and production sites to obtain NEWSNY approval prior to bringing waste to either the construction and demolition debris (C&D) landfill or the MSW landfill. As part of the procedures, a NEWSNY representative reviews information specific to the waste and determines if it is acceptable for disposal at the C&D landfill and/or the MSW landfill. If acceptable, the waste stream is issued a "profile number." The profile number ties the waste to the generator and the waste's point of origin. When the waste is delivered to the landfill, the driver of the hauling vehicle presents the scale operator "shipping paper" which contains the profile number. The scale operator uses the profile number to identify the waste and direct it to the approved landfill. Regional Department staff also receives monthly reports that contain information on the weight of drill cuttings disposed in the C&D and MSW landfills.

It should also be noted the landfill's radiation monitor is a portal type monitoring system, which is located at the entrance to the landfill site's scale. All vehicles delivering waste for disposal at the MSW landfill or C&D landfill are weighed at this one scale. As such, all loads destined for disposal at the C&D and MSW landfills are screened for radiation. The same acceptance and rejection limits for the monitor apply to both the C&D and MSW landfill.

12. *Part 360 municipal solid waste landfills are required to have a leachate management plan (see, 6 NYCRR 360-2.9[j]), which must address the leachate collection, storage, removal and treatment systems to be utilized and discuss operational requirements including leachate monitoring. [The Commissioner is] directing Department staff to review leachate management practices at the landfill to determine whether the current landfill procedures are sufficiently explained in the landfill's operation and maintenance manual and its leachate management plan.*

Leachate management practices at the landfill are addressed throughout the O&M Manual and the EMP. Department staff has reviewed the leachate management practices at the landfill, and has determined these procedures are adequately explained and reflective of site operations. The O&M Manual addresses procedures used to operate and maintain the leachate collection system. This includes collection of leachate in the lined landfill, conveyance of leachate from the landfill to the lined leachate storage lagoon, temporary storage of leachate in the lagoon, and the loading of the tanker trailers used to transport the leachate to an approved waste water treatment plant. The O&M Manual also provides information on how the weight of the tankers is used to track the volume of leachate sent to the waste water treatment plant for treatment. These procedures are unaffected by the disposal of drill cuttings. Department staff believes that the procedures and descriptions in the O&M Manual are adequate. See also the Department staff response concerning the EMP component of the O&M Manual below at item 14.

Department staff does not anticipate that the acceptance of drill cuttings will result in any significant increase in the levels of NORM in landfill leachate. However, should the ongoing testing of the leachate for radioactivity (as explained in item 14 below) identify an appreciable increase, Department Division of Water staff will be consulted to determine whether the leachate may continue to be disposed of at a publicly owned waste water treatment plant.

13. *Accordingly, Staff is to consider whether a specific separation distance between the leachate collection system and the first layer of Marcellus Shale drill cuttings is necessary for any reason. This review should consider whether, due to the physical attributes of the drill cuttings, including the extent to which these are finely-grained, such a separation distance is appropriate to avoid potential clogging or other operational impacts to the leachate collection and removal system;*

Department staff has assessed this issue and determined that the 6 NYCRR Part 360 solid waste management regulations, existing special permit conditions in the landfill's permit, and existing landfill operational procedures adequately address concerns of sediment buildup in the leachate collection system.

6 NYCRR 360-2.17(b)(3) requires the first layer of refuse placed above the leachate collection layer to be a minimum of five feet in compacted thickness and of a select nature to prevent physical damage to the landfill's leachate collection system. The landfill's O&M Manual calls for drill cuttings to be excluded from the select fill layer and to be placed no closer than six feet from the leachate collection layer. Like all waste in the MSW landfill, drill cuttings would be covered with a minimum of six inches of approved landfill cover at the end of each working day. These operational controls minimize the potential for small particles of drill cuttings to migrate into the leachate collection system.

Potential sediment buildup in the leachate collection system is addressed by special permit condition #56 and #59 of the landfill's permit. Condition #56 requires annual removal of sediment from, and inspection of, the leachate collection pond, while condition #59 requires annual inspection and cleaning of the leachate collection system piping.

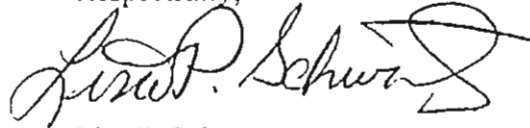
14. *and whether any circumstances exist that support adding parameters to the landfill's current leachate testing protocol.*

Department staff has reviewed the EMP and evaluated whether additional parameters should be added to the landfill's leachate testing protocol. The EMP is a major component of the O&M Manual. It describes all on-site and off-site monitoring, including location of all environmental, facility and other monitoring points, sampling schedule, analyses to be reported, statistical methods, and reporting requirements. For leachate management, the leachate and leachate pond sediment are required to be sampled and analyzed for parameters required in 6 NYCRR Part 360. The Department has also requested, and NEWSNY has agreed to, the modification of the EMP to include

testing the leachate and the leachate lagoon sediment for radioactivity. Samples will be analyzed for radium-226, radium-228, and total uranium. A gamma spectroscopic analysis will also be included. During the next three years, leachate will be analyzed for radioactivity twice per year, and lagoon sediments will be analyzed annually. At the end of the three year period, the frequency of testing will be reviewed and adjusted as appropriate. However, the sampling frequency will not be reduced to below once per year during landfill operation. With respect to radioactivity, this sample suite will be adequate to monitor the quality of the leachate at this landfill.

I hope this adequately responds to your direction. Please contact me if you have any questions or concerns.

Respectfully,

A handwritten signature in black ink, appearing to read "Lisa P. Schwartz". The signature is fluid and cursive, with a large, stylized initial "L" and "S".

Lisa P. Schwartz
Assistant Regional Attorney

Encs.

cc: Gary A. Abraham, Esq.- by Email and US Mail
Ronald G. Hull, Esq. – by Email and US Mail
Mr. Michael Krusen, Deputy County Executive – by US Mail
Thomas S. West, Esq. / Yvonne Hennessey, Esq. – by Email and US Mail

From: Thomas West <twest@westfirmllaw.com>
To: Russo, Steven
Date: 10/21/2011 6:00:08 PM
Subject: SGEIS Air Issues

Steve, as you recall, we talked about the need for a meeting to discuss some of the issues associated with the air mitigation proposals. There are a lot of moving parts given the EPA proposals. Nevertheless, I continue to believe that we can reach some common ground that will be protective of the environment and not unduly burdensome of industry.

We understand that the equipment manufacturers will be requesting a separate meeting with the Department. Although we suggested a combined meeting to them, they would like to meet with DEC staff without the operators or the service companies and we understand that they will be requesting their meeting in November. Accordingly, our current thinking is that we should pick a date in early December to schedule our meeting on behalf of the IOGA New York working group. I know that you have public hearing scheduled that first week after Thanksgiving. Potentially, we could schedule the meeting for Thursday or Friday (12/1 or 12/2) of that week or the Tuesday (12/6) of the following week. We do not want to push the meeting much further out given the close of the public comment period and the potential need to build a record support for whatever we propose. We have people traveling long distance, so I would like to avoid a Monday meeting. We also would suggest that this be a smaller meeting, like the meeting that we just had regarding water issues, which seems to be the most productive format.

I am sure that you have read some of the recent publicity regarding the industry reaction to these regulatory proposals. We are attempting to keep that message high road while still communicating our concerns about the competitiveness of New York in the face of these proposals. If you see anything that is of concern to you about what is being said in the media, please let me know.

Lastly, you may have heard that the FERC Spectra pipeline hearing last evening turned out to be quite a show for the Occupy Wall Street crowd. I understand that they were very disruptive. You may wish to take that into account relative to the upcoming public hearings.



Thomas S. West
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From: Thomas West <twest@westfirmlaw.com>
To: Maglienti, Jennifer; Russo, Steven
CC: Hennessey, Yvonne
Date: 11/7/2011 3:58:29 PM
Subject: FW: Anschutz Exploration Corporation v. Town of Dryden, et al. - Petitioner-Plaintiff's Supplemental Reply Affirmation

FYI. I suspect that this is a little-known provision of law that should be cited in the final SGEIS. The reference to Devonian shales in 1978 is very interesting.

Thomas S. West
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Website: www.westfirmlaw.com

*This transmittal is subject to our standard e-mail legend.

From: Naomi A. Storch
Sent: Monday, November 07, 2011 3:54 PM
To: mmasler@nycourts.gov
Cc: mperkin3@twcny.rr.com; aknauf@nyenvlaw.com; Yvonne Hennessey; Thomas West; akkendall1@gmail.com; mjknight@twcny.rr.com
Subject: Anschutz Exploration Corporation v. Town of Dryden, et al. - Petitioner-Plaintiff's Supplemental Reply Affirmation

Good afternoon,

Attached please find copies of the following documents in connection with the above-referenced matter:

1. Petitioner-Plaintiff's Cover Letter;
2. Supplemental Reply Affirmation of Yvonne E. Hennessey, with Exhibit A attached thereto, dated November 7, 2011;

The original documents are being sent via Federal Express Mail to the Clerk's Office.

Respectively submitted,
Naomi

Naomi A. Storch
Litigation Paralegal
The West Firm, PLLC

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Albany, NY 12207
Phone Number: 518-641-0500
Direct Number: 518-641-0514
Fax Number: 518-615-1514
Email: nstorch@westfirmlaw.com
Website: www.westfirmlaw.com

*This transmittal is subject to our standard e-mail legend.

Attachments: FINAL YEH Letter to Rumsey re_filing Supp. Reply Aff.pdf, FINAL YEH Supplemental Reply Affirmation.pdf

THE WEST FIRM
A PROFESSIONAL LIMITED LIABILITY COMPANY

Attorneys And Counselors At Law

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Albany, New York 12207-2996
Telephone (518) 641-0500
Facsimile (518) 615-1500

Thomas S. West*
Yvonne E. Hennessey†*
Gregory A. Mountain*

*Also admitted in Pennsylvania
†Also admitted in Massachusetts

Direct Dial: (518) 641-0507
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Thomas F. Puchner
Sita Legac*
Cindy M. Monaco
Francis X. O'Connor, *Of Counsel**

November 7, 2011

VIA FEDERAL EXPRESS MAIL AND ELECTRONIC MAIL

Honorable Phillip R. Rumsey
Supreme Court, Cortland County
46 Greenbush Street, Suite 301
Cortland, NY 13045

Re: *Anschutz Exploration Corporation ("AEC") v. Town of Dryden, et al.*
Index No.: 2011-0902

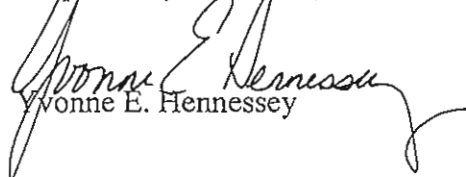
Dear Judge Rumsey:

As you are aware, we represent Petitioner-Plaintiff Anschutz Exploration Corporation ("Anschutz") in the above-referenced action.

During oral argument before Your Honor on November 4, 2011, counsel for proposed-intervenor Dryden Resources Awareness Coalition ("DRAC") argued that ECL § 23-0301's subsequent amendment to add the word "regulate" refutes Anschutz's arguments regarding the nature and extent of the State's expressed policy objectives to prevent waste, maximize recovery and protect correlative rights. DRAC did not make this argument in its proposed memorandum of law but rather raised it for the first time during oral argument. Attached, therefore, is a copy of the Supplemental Affirmation of Yvonne E. Hennessey, with the attached legislative history of the actual amendment referenced by Mr. Knauf on behalf of DRAC, that is being filed with the County Clerk in response to DRAC's new argument.

Thank you for your attention to the foregoing.

Respectively submitted,


Yvonne E. Hennessey

YEH/nas

cc: Mahlon R. Perkins, Esq. (via Electronic Mail and Hand Delivery with enclosures)
Alan Knauf, Esq. (via Electronic Mail and First Class Mail with enclosures)

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF TOMPKINS

ANSCHUTZ EXPLORATION CORPORATION,

Petitioner-Plaintiff,

-against-

For a Judgment Pursuant to Articles 78 and 3001
of the Civil Practice Law and Rules,

TOWN OF DRYDEN and TOWN OF DRYDEN
TOWN BOARD,

Respondents-Defendants.

**SUPPLEMENTAL REPLY
AFFIRMATION OF
YVONNE E. HENNESSEY**

Index No.: 2011-0902

Yvonne E. Hennessey, Esq. affirms under penalties of perjury pursuant to Rule 2106 of the Civil Practice Law and Rules:

1. I am a partner with The West Firm, PLLC, attorneys for Anschutz Exploration Corporation (“Anschutz”), the Petitioner-Plaintiff in this action.

2. I make this supplemental affirmation in further support of Anschutz’s Verified Petition and Complaint, in opposition to Respondents’ Motion for Summary Judgment and in support of summary judgment in Anschutz’s favor pursuant to paragraph (b) of Rule 3212 of the Civil Practice Law and Rules (“CPLR”).

3. During oral argument on November 4, 2011, counsel for proposed-intervenor Dryden Resources Awareness Coalition (“DRAC”) raised an argument for the first time; namely, that ECL § 23-0301’s subsequent amendment to add the word “regulate” putatively refutes Anschutz’s arguments regarding the nature and extent of the State’s expressed policy objectives to prevent waste, maximize recovery and protect correlative rights. Unfortunately for DRAC

and Respondents-Defendants, the subsequent amendment actually reinforces Anschutz's position.

4. The following responds to DRAC's newly raised argument based on my review of the legislative history for Chapter 396 of the laws of 1978, which further confirms consistent legislative support to develop the State's indigenous natural gas resources and the appropriateness of summary relief in favor of Anschutz.

5. As originally enacted, ECL § 23-0301 read as follows:

It is hereby declared to be in the public interest to *foster, encourage and promote* the development, production and utilization of natural resources of oil and gas in this state in such a manner as will prevent waste; to authorize and to provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas may be had, and that the correlative rights of all owners and the rights of all persons including landowners and the general public may be fully protected[.] (emphasis added).

6. Pertinent here, ECL § 23-0301 was thereafter amended in 1978. L. 1978, ch. 396. In particular, the words "foster, encourage and promote" were replaced with the word "regulate."

7. This was not, however, done in a vacuum or, as DRAC insinuated, to dilute the State's clear policy objectives to promote oil and gas exploration and development. Rather, the amendment was made solely to consolidate in the newly created State Energy Office the responsibility for promoting development of the State's energy resources while leaving the actual regulation of such to the Department of Environmental Conservation.

8. Part and parcel to the amendment to ECL § 23-0301, the Legislature amended subdivision 5 of section 3-101 of the Energy Law as follows:

It shall be the energy policy of the state:

5. to *foster, encourage and promote* the prudent development and wise use of [limited] *all indigenous state* energy resources *including, but not limited to, on-shore oil and natural gas, off-shore oil and gas, natural gas from Devonian shale formations*[.]

L. 1978, ch. 396.

9. Thus, the concept of foster, encouraging and promoting the development of the State's oil and gas resources was in no way curtailed. That language was merely transferred to the Energy Law. Indeed, the stated purpose of the bill was to "encourage the State to develop *all* of its indigenous energy resources." Legislative Memorandum for Governor's Program Bill (S.9021), dated June 8, 1978 (emphasis added).¹

10. Statements in support of the legislation, which passed unanimously, considered the need to have a "focused approach" to the "development of potentially significant and economic state energy resources" given its "high priority by State government." *Id.*

11. They also noted that "the bill would help counter nationally held misconceptions that the State has unreasonably impeded development of its own resources while encouraging other areas of the country to provide it with energy." *Id.*

12. Lastly, the fact that the 1978 Amendment includes reference to Devonian shale formations is significant in and of itself given that the Marcellus shale is a Devonian shale.

13. Given the foregoing, the intimation by counsel for DRAC that the State's interest in oil and gas development is somehow limited to solely the "regulation" thereof is simply untrue and altogether belied by the legislative history of the 1987 amendments.

14. Rather, the overarching State policy objectives to prevent waste and maximize recovery of the State's indigenous energy resources is established, not just in ECL § 23-0301 but, also, in Energy Law § 3-101(5).

15. This, combined with the plain language of ECL § 23-0303(2) and its legislative history, confirms the clear legislative intent to supersede *all* local laws or ordinances that are related or subject to the oil, gas and solution mining industry (except local roads and real

¹ A true and accurate copy of the entire Bill Jacket is attached hereto as Exhibit A.

property taxes), including when and where drilling is permissible in a particular municipality. Otherwise, local municipalities like the Town of Dryden could effectively prevent development of the State's indigenous natural resources in direct contravention of the State's repeatedly stated policy objectives to prevent waste and promote the development of the State's indigenous resources, specifically including Devonian shale formations such as the Marcellus.

Conclusion

16. For all of the foregoing reasons, DRAC's oral argument does not alter the result here; namely that the Town Prohibition is preempted, invalid and unenforceable. Anschutz, therefore, respectfully urges this Court to deny Defendants-Respondents' motion for summary judgment, grant summary judgment in favor of Anschutz and order the relief requested in Anschutz's Verified Petition and Complaint.

Dated: November 7, 2011
Albany, New York

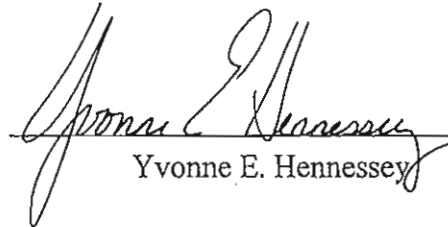

Yvonne E. Hennessey

EXHIBIT A

50

CHAPTER 396

LAWS OF 19 78

SENATE BILL 9021

ASSEMBLY BILL _____

9021

IN SENATE

March 30, 1978

Introduced by Sen AUER--(at request of the Governor)--read twice and ordered printed, and when printed to be committed to the Committee on Conservation and Recreation

AN ACT to amend the environmental conservation law and the energy law, in relation to energy resource development.

Bill compared by _____

DATE RECEIVED BY GOVERNOR
JUN 5 1978

ACTION MUST BE TAKEN BY:

GOVERNOR'S ACTION:

DATE JUN 19 1978

Memorandum No. _____

SENATE VOTE 11 Y 1 N

Date 1.1.7

Bill is disapproved

ASSEMBLY VOTE 42 Y 0 N

Date 5/25/78

Counsel to Governor

STATE OF NEW YORK

9021

IN SENATE

March 30, 1978

Introduced by Sen. AUER—(at request of the Governor)—read twice and ordered printed, and when printed to be committed to the Committee on Conservation and Recreation

AN ACT to amend the environmental conservation law and the energy law, in relation to energy resource development

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

1 Section 1. Section 23-0301 of the environmental conservation law, as
2 amended by chapter nine hundred twenty-two of the laws of nineteen hundred
3 seventy-three, is hereby amended to read as follows:

4 § 23-0301. Declaration of policy.

5 It is hereby declared to be in the public interest to [foster, encourage and
6 promote] regulate the development, production and utilization of natural
7 resources of oil and gas in this state in such a manner as will prevent waste; to
8 authorize and to provide for the operation and development of oil and gas
9 properties in such a manner that a greater ultimate recovery of oil and gas may
10 be had, and that the correlative rights of all owners and the rights of all persons
11 including landowners and the general public may be fully protected, and to
12 provide in similar fashion for the underground storage of gas and the solution
13 mining of salt.

14 § 2. Subdivision five of section 3-101 of the energy law is hereby amended to
15 read as follows:

16 5. to foster, encourage and promote the prudent development and wise use of
17 [limited] all indigenous state energy resources including, but not limited to, on-shore
18 oil and natural gas, off-shore oil and natural gas, natural gas from Devonian shale
19 formations, small head hydro, wood, solar, wind, solid waste, energy from biomass,
20 fuel cells and cogeneration; and

21 § 3. Section 5-107 of such law is hereby amended by adding a new
22 subdivision eleven to read as follows:

23 11. Conduct activities to encourage and promote the prudent development and wise
24 use of all energy resources indigenous to the state or shared by the state with the
25 Dominion of Canada, the federal government or other states.

26 § 4. This act shall take effect immediately.

5-9021
 No. 3-150 *Quora*

5/25 1978

(Republicans in Italics)

Those Who Voted In the Affirmative	Those Who Voted In the Negative	Those Who Voted In the Affirmative	Those Who Voted In the Negative	Those Who Voted In the Affirmative	Those Who Voted In the Negative
Mr. Abramson		Mr. Grannis		<i>Mr. Molinari</i>	
Miss Annunzio		Mr. Greco		Mr. Montano	
Mr. Barburo		Mr. Greenberg		<i>Mr. Murphy (G.A.)</i>	
<i>Mr. Bersani</i>		Mr. Griffith		Mr. Murphy (M.J.)	
<i>Mr. Betros</i>		<i>Mr. Guboth</i>		Mr. Nadler	
Mr. Bianchi		<i>Mr. Hanna</i>		<i>Mr. Nagle</i>	
Mr. Boykoff		<i>Mr. Hammon</i>		Mr. Nicolosi	
Mr. Brewer		Mr. Hareuberg		Mr. Nino	
Mr. Bruno		Mr. Harris		<i>Mr. Nortz</i>	
<i>Mr. Burrows</i>		<i>Mr. Hawley</i>		Mr. Orazio	
<i>Mr. Bush</i>		<i>Mr. Healy</i>		<i>Mr. Passanante</i>	
Mr. Butler		Mr. Henderson		Mr. Pesce	
<i>Mr. Calogero</i>		<i>Mr. Hecht</i>		Mr. Proud	
Mr. Cincotta		Mr. Hevesi		<i>Mr. Rappleyea</i>	
<i>Mr. Cochrane</i>		Mr. Hinchey		<i>Mr. Reilly</i>	
Mrs. Connelly		Mr. Hirsch		<i>Mr. Riford</i>	
Mr. Connors		<i>Mr. Hublock</i>		Mr. Robuch	
Mr. Connor		Mr. Hochbrueckner		<i>Mr. Ross</i>	
<i>Mr. Cook (C.D.)</i>		Mr. Hoyt		<i>Mr. Ryan (A.W.)</i>	
<i>Mrs. Cooke (A.P.)</i>		<i>Mr. Hurley</i>		Mr. Ryan (E.F.X.)	
Mr. Cooperman		Mr. Johnson		Mr. Sanders	
<i>Mr. Daly</i>		Mr. Keane		Mr. Schimminger	
<i>Mr. D'Amato</i>		<i>Mr. Kelleher</i>		Mr. Schmidt	
<i>Mr. D'Andrea</i>		Mr. Kidder		Mr. Schumer	
Mr. Dearle		Mr. Koppell		<i>Mr. Sears</i>	
<i>Mr. Dell'Iori</i>		Mr. Kremer		Mr. Serrano	
Mr. Del Toro		Mr. Lafayette		Mr. Siegel	
Mr. DeSalvio		Mr. Landes		Mr. Silver	
<i>Mr. DiCarlo</i>		<i>Mr. Lane</i>		<i>Mr. Solomon</i>	
Mrs. Diggs		Mr. Lasher		Mr. Stavisky	
Mr. DiMichele		Mr. Law		Mr. Stephens	
<i>Mr. Durpan</i>		Mr. Lehner		Mr. Strelzin	
<i>Mr. Emery</i>		Mr. Lentol		Mr. Sullivan (J.C.)	
Mr. Engel		<i>Mr. Leoy</i>		<i>Mr. Sullivan (P.M.)</i>	
<i>Mr. Esposito</i>		Mr. Lewis		Mr. Tullon	
Mr. Eve		Mrs. Lipschutz		<i>Mr. Tills</i>	
Mr. Farrell		<i>Mr. Lopredo</i>		Mr. Vann	
Mr. Ferris		<i>Mr. Madison</i>		<i>Mr. Veella</i>	
Mr. Fink		Mr. Marchiselli		Mr. Virgilio	
Mr. Finerman		<i>Mr. Marshall</i>		Mr. Walsh (D.B.)	
<i>Mr. Flack</i>		<i>Mr. Martin</i>		Mr. Walsh (S.P.)	
<i>Mr. Flanagan</i>		Mr. McCabe		<i>Mr. Warren</i>	
Mr. Fortune		Mrs. McGee		<i>Mr. Wemple</i>	
Mr. Frenning		<i>Mr. McGrath</i>		Mr. Weprin	
Mr. Friedman		Mr. McInerney		<i>Mr. Wertz</i>	
Mr. Goldstein		<i>Mr. Meqn</i>		Mr. Wilson	
<i>Mrs. Gauthier</i>		Mr. Miller (G.W.)		Mr. Yevoli	
Mr. Gorski		<i>Mr. Miller (H.M.)</i>		<i>Mr. Zagame</i>	
Mr. Gottfried		Mr. Miller (M.H.)		Mr. Zimmer	
Mr. Graber		Mr. Mirto		Mr. Spicker	

AYES 172

NOES 0

1978

SENATE

The Senate Bill
by Mr. AUER
Entitled: "

Calendar No. 1053

Senate No. 9021
Assem. Rept. No. _____

9021

Mr. Auer
An act to amend the environmental
conservation law and the energy law,
in relation to energy resource deve-
lopment

" was read the third time

The President put the question whether the Senate would agree to the final passage of said bill, the same having been printed and upon the desks of the members in its final form at least three calendar legislative days, and it was decided in the affirmative, a majority of all the Senators elected voting in favor thereof and three-fifths being present, as follows:

AYE	Dist.		NAY	AYE	Dist.		NAY
	47	Mr. Anderson			1	Mr. LaValla	
	49	Mr. Auer			29	Mr. Leichter	
	16	Mr. Babbush	EXCUSED		8	Mr. Levy	
	45	Mr. Barclay			60	Mr. Lombardi	
	18	Mr. Bartosiewicz			24	Mr. Marchi	
	23	Mr. Beatty			6	Mr. Marino	
	33	Mr. Bernstein			48	Mr. Mason	EXCUSED
	19	Mr. Bloom			30	Mrs. Mendez	
	12	Mr. Bronston			28	Mr. McCall	
	41	Mr. Bruno	EXCUSED		69	Mr. McFarland	
	9				42	Mr. Nolan	
	7	Mr. Caemmerer	EXCUSED		27	Mr. Ohrenstein	
	34	Mr. Calandra			17	Mr. Owens	
	21	Mr. Conklin			11	Mr. Padavan	
	25	Mr. Connor			60	Mr. Paterson	EXCUSED
	48	Mr. Donovan			53	Mr. Perry	
	8	Mr. Dunne			36	Mr. Pisanì	
	54	Mr. Eckert			67	Mr. Present	
	10	Mr. Farber			39	Mr. Rollson	
	44	Mr. Farley			31	Mr. Ruiz	
	35	Mr. Flynn			40	Mr. Schermerhorn	
	32	Mr. Galiber	EXCUSED		2	Mr. Smith, B.C.	
	56	Mr. Gallagher			61	Mr. Smith, W.T.	
	14	Mr. Gazzara			22	Mr. Solomon	
	13	Mr. Gold			43	Mr. Stafford	EXCUSED
	28	Mr. Goodman			56	Mr. Tauriello	
	20	Mr. Halperin			3	Mr. Trunzo	
	4	Mr. Johnson			68	Mr. Volker	
	15	Mr. Knorr			62	Mr. Warder	
					38	Mrs. Wlnikow	

AYES 51
NAYS 0

Ordered, that the Secretary deliver said bill to the Assembly and request its concurrence therein.

Approximately \$300,000 for additional Energy Office staff to create a new Bureau would be necessary to carry out the function of fostering, encouraging and promoting the development of indigenous energy resources. Revenue implications, while difficult to determine, could be extremely positive. Successful development could result in several million dollars in State revenues from increased income taxes due to increased interstate energy production; direct royalties from increased production on state-owned lands; and increased tax revenues from increased income due to reduced out-of-State expenditures by New York State residents and businesses.

Budget Implications:

Further, a centralized development function would aid the State in joining federal, regional and local interests in joint development efforts. Finally, the bill would help counter nationally held misconceptions that the State has unreasonably impeded development of its own resources while encouraging other areas of the country to provide it with energy.

Approach given a high priority by state government.

Energy resources -- Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formations; small head hydro; wood; solar; wind; solid waste; energy from biomass; cogeneration -- would benefit from a focused approach given a high priority by state government.

Responsibility for promoting energy resource development in New York State is shared by many agencies, including DEC which also has regulatory responsibilities over those same resources. Necessary development activities have proceeded in a haphazard fashion, at the expense of potentially significant and economic state energy resources -- Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formations; small head hydro; wood; solar; wind; solid waste; energy from biomass; cogeneration -- would benefit from a focused approach given a high priority by state government.

Statement in Support of the Bill:

Section 23-0301 of Article 23 of the Environmental Conservation Law declares the "development, production and utilization" of oil and gas to be in the public interest. Section 23-0303 of that law authorizes the Department of Environmental Conservation (DEC) to administer the article except where specifically entrusted to other agencies. Section 3-101(5) of the Energy Law states that it shall be state energy policy to "encourage the prudent development and wise use of limited energy resources."

Existing Law:

This bill gives the Energy Office prime responsibility for promoting the development of indigenous energy resources, including Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formations; small head hydro; wood; solar; fuel cells; solid waste; energy from biomass; cogeneration and wind. Also, the bill removes from the Department of Environmental Conservation such promotional responsibilities.

Summary of Provisions of the Bill:

To establish the Energy Office as the state agency primarily responsible for promoting the development of energy resources; to remove such promotional responsibilities from the Department of Environmental Conservation which would, however, retain regulatory responsibilities over such resources; and to encourage the state to develop all of its indigenous energy resources.

Purpose of the Bill:

RE: AN ACT to amend the environmental conservation law and the energy law, in relation to energy resource development

M E M O R A N D U M
1978
S-902/9021
Sen. Quir 9021

MAY 8 1979

Jan

59021



THE SENATE
STATE OF NEW YORK
ALBANY 12247

MARTIN S. AUER
49TH DISTRICT
541 SENATOR JOHN H. HUGHES STATE OFFICE BLDG.
SYRACUSE, NEW YORK 13202
(315) 473-8275

COMMITTEES
VICE CHAIRMAN, COMMITTEE ON LOCAL GOVERNMENT
MEMBER
SENATE STANDING COMMITTEES ON
BANKS
CONSERVATION & RECREATION
CORPORATIONS, AUTHORITIES & PUBLIC UTILITIES
INSURANCE
TAXATION

June 7, 1978

JUN 8 1978

The Honorable Judah Gribetz
Counsel to the Governor
Executive Chamber
State Capitol
Albany, New York

Re: S. 9021 and S. 8092

Dear Mr. Gribetz:

Thank you for the opportunity to comment on my bills currently before the Governor.

I am enclosing supportive memorandums provided by your Departments as, in both cases, these measures were introduced at the Department's request.

Both proposals are meritorious program bills. S. 9021 should provide the Office of Energy with new authority to foster the development of alternative energy sources.

S. 8092 will require subsidized railroads to file annually proof of tax exemption eligibility to municipalities. This measure, as suggested by Equalization and Assessment, will serve to protect our municipalities.

I would urge favorable action on both bills. Again, my thanks.

Sincerely,

Martin S. Auer
Senator, 49th District

enclosures

PROGRAM BILL # 157

GOVERNOR'S PROGRAM BILL

CONSERVATION AND RECREATION

1978

9021

MEMORANDUM

Sen. Auer 9021

RE: AN ACT to amend the environmental conservation law and the energy law, in relation to energy resource development

JUN 8 1978

Purpose of the Bill:

To establish the Energy Office as the State agency primarily responsible for promoting the development of energy resources; to remove such promotional responsibilities from the Department of Environmental Conservation which would, however, retain regulatory responsibilities over such resources; and to encourage the State to develop all of its indigenous energy resources.

Summary of Provisions of the Bill:

This bill gives the Energy Office prime responsibility for promoting the development of indigenous energy resources, including: Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formation; small head hydro; wood; solar; fuel cells; solid waste; energy from biomass; cogeneration and wind. Also, the bill removes from the Department of Environmental Conservation such promotional responsibilities.

Existing Law:

Section 23-0301 of Article 23 of the Environmental Conservation Law declares the "development, production and utilization" of oil and gas to be in the public interest. Section 23-0303 of that law authorizes the Department of Environmental Conservation (DEC) to administer the article except where specifically entrusted to other agencies. Section 3-101(5) of the Energy Law states that it shall be state energy policy to "encourage the prudent development and wise use of limited energy resources."

Statement in Support of the Bill:

Responsibility for promoting energy resource development in New York State is shared by many agencies, including DEC which also has regulatory responsibilities over those same resources. Necessary development activities have proceeded in a haphazard fashion, if at all. The development of potentially significant and economic state

energy resources -- Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formations; small head hydro; wood; solar; wind; solid waste; energy from biomass; cogeneration -- would benefit from a focused approach given a high priority by State government.

Further, a centralized development function would aid the State in joining federal, regional and local interests in joint development efforts. Finally, the bill would help counter nationally held misconceptions that the State has unreasonably impeded development of its own resources while encouraging other areas of the country to provide it with energy.

Budget Implications:

Approximately \$300,000 for additional Energy Office staff to create a new bureau would be necessary to carry out the function of fostering, encouraging and promoting the development of indigenous energy resources. Revenue implications, while difficult to determine, could be extremely positive. Successful development could result in several million dollars in State revenues from increased income taxes due to increased intrastate energy production; direct royalties from increased production on State-owned lands; and increased tax revenues from increased income due to reduced out-of-State expenditures by New York State residents and businesses.

S 9021

10-Day Bill
BUDGET REPORT ON BILLS

Session Year: 19__78

SENATE

JUN 8 1978

Introduced by:

ASSEMBLY

No. 9021

Senator Auer

No.

Law: Environmental Conservation Energy Sections: 23-0301 (ENCON)
3-101, 5-107 (Energy)

Division of the Budget recommendation on the above bill:

Approved: Veto: _____ No Objections: _____ No Recommendation: _____

1. Subject and Purpose: To authorize the State Energy Office's role as the lead agency in promoting the prudent development and wise use of all forms of indigenous State energy resources and to assign regulatory responsibility to the Department of Environmental Conservation in the development, production, and utilization of oil and gas natural resources in the State.
2. Comment on revisions: S. 9021 is a modification of the State Energy Office's Departmental Proposal 2-R which the Division of the Budget reported on in February of this year. While the major thrust of the legislation to assign promotional responsibilities to the Energy Office and regulatory duties to ENCON remains the same as in the original proposal, the instant version of the bill deletes unnecessary references to the State's representation before the Interstate Oil Compact Commission, responsibility for which was previously transferred to the State Energy Office. The DOB originally recommended further modifications to SEO 2-R to eliminate ambiguous provisions.
3. Recommendation: This bill addresses the need for the State to conduct a coordinated long range campaign for developing the State's indigenous State resources and to insure effective regulation of gas and oil development and production. Since the bill, in its present form, eliminates ambiguous provisions in the Department's original proposal relating to the Interstate Oil Compact Commission, we recommend that S-9021 be approved.

Date _____ Examiner: 

Disposition: _____ Chapter No. _____ Vote No. _____

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

June 5, 1978

SENATE #9021

JUN 12 1978

Introduced by Mr. Auer

RECOMMENDATION: Approval

STATUTES INVOLVED: Environmental Conservation Law §23-0301,
Energy Law §§3-101 and 5-107.

EFFECTIVE DATE: Immediately

DISCUSSION:

1. Purpose of bill: To vest the authority to foster, encourage and promote development of certain energy resources in the State Energy Office and to continue authority to regulate oil and gas development in the Department of Environmental Conservation.
2. Summary of provisions of bill: The bill amends Energy Law §3-101(5) by adding the words foster and promote to the existing statement encouraging the prudent development and wise use of energy resources. It further broadens the scope of the Energy Law to include all indigenous state energy resources. The words "foster, encourage and promote" would be removed from the statement of policy in Environmental Conservation Law §23-0301 and replaced by the word "regulate". A new paragraph 11 would be added to Energy Law §5-107 to allow coordination with other political jurisdictions.
3. Prior legislative history of bill and similar proposals: None
4. Known position of others respecting bill: This bill was introduced at the request of the Governor and is supported by the State Energy Office.
5. Budget implications: The State Energy Office estimates that \$300,000 will be needed for additional staff.
6. Arguments in support of bill: It is logical that jurisdiction over fostering, encouraging and promoting the prudent development and wise use of the State's energy resources be in one agency. Vesting of such jurisdiction within one agency is consistent with and in furtherance of the legislative findings contained in Chapters 819, 820 and 821 of the Laws of 1976, the New York State Energy Law.

7. Arguments in opposition to bill: None
8. Reasons for recommendation: See #6 above.

Raymond Mack

Department of Environmental Conservation

5-9021

ENERGY OFFICE REPORT ON BILLS

Session Year: 1978

SENATE

Introduced by:

ASSEMBLY

9021

JUN 8 1978 Senator Auer

Energy Office recommendation on the above bill:

Approve: X Veto: _____ No Objection: _____ No Recommendation: _____

1. Subject and Purpose: To amend the environmental conservation law and the energy law in relation to energy resource development.
2. Legislative History: Section 23-0301 of Article 23 of the Environmental Conservation Law declares the "development, production and utilization" of oil and gas to be in the public interest. Section 23-0303 of that law authorizes the Department of Environmental Conservation (DEC) to administer the article except where specifically entrusted to other agencies. Section 3-101(5) of the Energy Law states that it shall be state energy policy to "encourage the prudent development and wise use of limited energy resources."
3. Summary of Provisions: This bill gives the Energy Office prime responsibility for promoting the development of indigenous energy resources, including: Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formation; small head hydro; wood; solar; fuel cells; solid waste; energy from biomass; cogeneration and wind. Also, the bill removes from the Department of Environmental Conservation such promotional responsibilities.
4. Arguments in Support: Responsibility for promoting energy resource development in New York State is shared by many agencies, including DEC which also has regulatory responsibilities over those same resources. Necessary development activities have proceeded in a haphazard fashion, if at all. The development of potentially significant and economic state energy resources -- Lake Erie natural gas; on-shore oil and gas; Atlantic natural gas and oil; natural gas from Devonian shale formations; small head hydro; wood; solar; wind; solid waste; energy from biomass; cogeneration -- would benefit from a focused approach given a high priority by state government.

Further, a centralized development function would aid the State in joining federal, regional and local interests in joint development efforts. Finally, the bill would help counter

nationally held misconceptions that the State has unreasonably impeded development of its own resources while encouraging other areas of the country to provide it with energy.

5. Possible Objections: None Known.


6. Other State Agencies Interested:

Department of Environmental Conservation
Department of Education (State Geologist)
Department of Commerce
Department of Public Service
New York State Energy Research and Development Authority

7. Other Interested Groups:

8. Recommendations: Approval.

6/8/78
Date


James E. Larocca
Commissioner
NYS Energy Office

59021

TO COUNSEL TO THE GOVERNOR

JUN 6 1978

RE: SENATE 982
ASSEMBLY

Inasmuch as this bill does not appear to involve a legal problem nor to relate to the functions of the Department of Law, I am not commenting thereon. However, if there is a particular aspect of the bill upon which you wish comment, please advise me.

Dated: June 5, 1978 LOUIS J. LEFKOWITZ
Attorney General

S-9021

POWER AUTHORITY OF THE STATE OF NEW YORK
10 COLUMBUS CIRCLE NEW YORK, N. Y. 10019
(812) 527-6500

TRUSTEES
FREDERICK R. CLARK
CHAIRMAN
GEORGE L. INGALLS
VICE CHAIRMAN
RICHARD M. FLYNN
ROBERT I. MILLONZI
WILLIAM F. LUDDY



JUN 5 1978

May 31, 1978

GEORGE T. BERRY
GENERAL MANAGER
AND CHIEF ENGINEER
LEWIS R. BENNETT
ASSISTANT GENERAL
MANAGER-GENERAL
COUNSEL
WILBUR L. GROSSBERG
ASSISTANT GENERAL
MANAGER-ENGINEERING
JOHN W. BOSTON
DIRECTOR OF
POWER OPERATIONS
THOMAS F. McGRANN, JR.
CONTROLLER

Judah Gribetz, Esq.
Counsel to the Governor
Executive Chamber
State Capitol
Albany, New York 12224

Re: S. 9021, to amend the environmental conservation
law and the energy law, in relation to energy
resource development

Dear Mr. Gribetz:

Thank you for sending the subject bill and asking for our
comments and recommendations.

The Power Authority has no objections to this bill.

Very truly yours,

Lewis R. Bennett
General Counsel

Multiple memorandum received from the
State Comptroller dated JUN 1 1978
stating the following bill is of
"No Interest" to the Department of
Audit and Control.

Intro. No.

Print No.

S-9021

The original memorandum filed with:

S-3487-B

50.

S 9021

Memorandum



STATE OF NEW YORK
EXECUTIVE CHAMBER

June 1, 1978

THOMAS R. FREY
DIRECTOR
OF STATE OPERATIONS

To: Judah Gribetz

From: Thomas R. Frey



no comment on the following Senate bills:

- 9021
- 362-A
- 7133
- 8092
- 7457
- 7456
- 8589

JUN 8 1978

S-9021



JOHN S. DYSON
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF COMMERCE
99 WASHINGTON AVENUE
ALBANY, N. Y. 12245

AREA CODE 518
474-4100

June 5, 1978

JUN 12 1978

Honorable Judah Gribetz
Counsel to the Governor
Executive Chamber
State Capitol
Albany, New York 12224

Dear Judah:

Re: S.9021

The Department of Commerce has no objection to this bill.

It is our opinion that the subject bill places in the appropriate agency (State Energy Office) responsibility for the development of all indigenous state energy resources.

The separation of regulatory authority for such action (assigned to the Department of Environmental Conservation) from the development responsibilities (State Energy Office) is appropriate and recognizes the vast differences between the two responsibilities.

Sincerely,

John S. Dyson
John S. Dyson

From: Thomas West <twest@westfirmlaw.com>
To: Russo, Steven
Date: 12/13/2011 6:29:14 PM
Subject: Fwd: DEC engineer op ed

?

Thomas S. West
The West Firm, PLLC
677 Broadway
Albany, New York 12207-2880
Direct Phone: (518) 641-0501
Direct Fax: (518) 615-1501
Cell Phone: (518) 527-7240
E-Mail: twest@westfirmlaw.com
Website: www.westfirmlaw.com

this e-mail is subject to our standard legend.

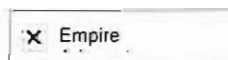
Begin forwarded message:

From: "Testani, Nancy L." <ntestani@empireadvocates.com>
Date: December 13, 2011 6:24:51 PM EST
To: Paul Hartman <paul.hartman@chk.com>, "twest@westfirmlaw.com" <twest@westfirmlaw.com>, "jcarr@hinmanstraub.com" <jcarr@hinmanstraub.com>
Subject: DEC engineer op ed

<http://www.watertowndailytimes.com/article/20111213/OPINION02/712139975>

Nancy L. Testani

Empire Advocates, LLC
A Subsidiary of Hiscock & Barclay, LLP
80 State Street • Albany, NY 12207-2830
D: (518) 429-4210 • F: (518) 429-4215 • C: (315) 436-1352
E: ntestani@empireadvocates.com



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59

From: Thomas West <twest@westfirmlaw.com>
To: Crocker, Alison
CC: Russo, Steven
Date: 12/15/2011 11:04:01 AM
Subject: FW: rd SGEIS Modeling Files

Alison, our group is still reeling from the meeting last Friday and the notion that industry can be out of compliance when they are using engines that are fully compliant with EPA requirements. In an effort to avoid this impasse, it will be very important to get these modeling files as soon as possible so that we can look for areas where DAR may have been too conservative or may have applied erroneous assumptions. Please let me know when the files are available. We will pick them up and expedite distribution to our working group. Many thanks.

Thomas S. West
The West Firm, PLLC
677 Broadway - 8th Floor
Albany, NY 12207
Direct Phone: 518-641-0501
Direct Fax: 518-615-1501
E-Mail: twest@westfirmlaw.com
Website: www.westfirmlaw.com

*This transmittal is subject to our standard e-mail legend.

From: Lee Moody [mailto:lmoody@all-llc.com]
Sent: Thursday, December 15, 2011 10:57 AM
To: lxsedefi@gw.dec.state.ny.us
Subject: rd SGEIS Modeling Files

Leon,

Based upon your voice mail, I understand the DAR staff is assembling some of the more relevant modeling files for limited distribution. The ones that would assist our efforts the most would be only those from the supplemental runs, the NO2 and PM runs (no air toxic files), and any summary tables that are available. In the interest of saving time, if you could send me a quick e-mail to say the files were ready, I will try to arrange the most expedient (and simplest for you) delivery option. Thank you and your staff for this effort and the DAR's on-going cooperation on behalf of industry.

Lee Moody

Air Quality Manager
PH: 972-306-5614
Cell: 214-995-3197

www.all-llc.com

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From: "Jim McAleer" <jmcaleer@eeaconsultants.com>
To: jmcaleer@eeaconsultants.com; Martins', 'Joe
CC: Leff, Eugene; Russo, Steven; Gill', 'Brad; Catell', 'Robert B.
Date: 1/11/2012 11:16:30 AM
Subject: Withdraw Revised Draft SGEIS Coalition

Dear Commissioner Martins:

Over the past few months, I have been working with and supporting Robert B. Catell and his efforts as a member of the Governor's High-Volume Hydraulic Fracturing Advisory Panel.

Recently we received a solicitation from a group which calls itself Withdraw Revised Draft SGEIS Coalition addressed to panel members requesting Bob's signature to a letter to be addressed to Governor Cuomo.

The letter requests that "the governor immediately withdraw the Department of Environmental Conservation's (DEC) Marcellus Shale Revised Draft Supplemental Generic Environmental Impact Statement (RD SGEIS) because it fundamentally fails to fulfill the requirements of Executive Order No. 41 and cannot assure that horizontal hydrofracturing will be done "safely" in New York's tight shale formations".

After contacting other members of the panel we agreed that such a statement was beyond the intent and purview of the advisory panel and that it is inappropriate for this group to approach us with this document. Our intention is to bring this matter to you and to other NYSDEC people who have worked with the panel. The attached contains the text of the solicitation as we received it.

Respectfully,



James E. McAleer
Director
Strategic Planning

EEA Inc.
55 Hilton Avenue
Garden City NY 11530
(516) 746-4400 x29
(516) 220-6207 cell
JMcAleer@eeaconsultants.com

Attachments: SKMBT_Com. Martins 1.10.12.pdf

Environmental Consultants To
Industry And Government Since 1979Telephone (516) 746-4400 x29
(212) 227-3200*James E. McAleer*
Director, Strategic Planning

January 10, 2012

Joe Martins
Commissioner
New York State
Department of Environmental Conservation
625 Broadway
Albany, NY 12233-1011

Dear Commissioner Martins:

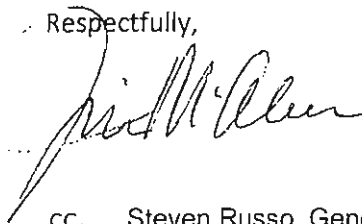
Over the past few months, I have been working with and supporting Robert B. Catell and his efforts as a member of the Governor's High-Volume Hydraulic Fracturing Advisory Panel.

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The letter requests that "the governor immediately withdraw the Department of Environmental Conservation's (DEC) Marcellus Shale Revised Draft Supplemental Generic Environmental Impact Statement (RD SGEIS) because it fundamentally fails to fulfill the requirements of Executive Order No. 41 and cannot assure that horizontal hydrofracturing will be done "safely" in New York's tight shale formations".

After contacting other members of the panel we agreed that such a statement was beyond the intent and purview of the advisory panel and that it is inappropriate for this group to approach us with this document. Our intention is to bring this matter to you and to other NYSDEC people who have worked with the panel. The attached contains the text of the solicitation as we received it.

Respectfully,

cc. Steven Russo, General Counsel
Eugene Leff, Deputy Commissioner
Robert B. Catell, Governor's Panel
Brad Gill, Governor's Panel

To: Walter Hang <walter@toxicstarqeting.com>
From: Walter Hang <walter@toxicstarqeting.com>
Date: 01/03/2012 10:40PM
Subject: Withdraw Revised Draft SGEIS Coalition Letter/de facto Moratorium Pledge Request
To: Members of the DEC High-Volume Hydraulic Fracturing Advisory Panel
Re: Withdraw Revised Draft SGEIS Coalition Letter and *de facto* Moratorium Pledge Request

Greetings:

I write to provide a self-explanatory coalition letter which requests that Governor Cuomo immediately withdraw the Department of Environmental Conservation's (DEC) Marcellus Shale Revised Draft Supplemental Generic Environmental Impact Statement (RD SGEIS) because it fundamentally fails to fulfill the requirements of Executive Order No. 41 and cannot assure that horizontal hydrofracturing will be done "safely" in New York's tight shale formations.

The coalition letter now has more than 21,000 signatories, including Government Officials; Physicians, Scientists and Health Professionals; Environmental, Civic and Public Interest Organizations; Wineries, Tourism and Other Businesses; Farmers and Agricultural Organizations and Citizens.

I invite you to review the coalition letter and to become a signatory:
http://www.toxicstarqeting.com/MarcellusShale/cuomo/coalition_letter/2011

There is a *de facto* moratorium on horizontal hydrofracturing in New York's Marcellus Shale pending adoption of a Final SGEIS. DEC's 2009 Draft SGEIS received such withering criticism that Governor Paterson signed Executive Order No. 41 requiring DEC to: "*make such revisions to the Draft SGEIS that are necessary to analyze comprehensively the environmental impacts associated with high-volume hydraulic fracturing combined with horizontal drilling, ensure that such impacts are appropriately avoided or mitigated ...*" On 1/1/11, Governor Cuomo signed a "continuation" of that Order.

The coalition letter documents that the RD SGEIS is factually incorrect, incomplete and inadequate to safeguard New York from horizontal hydrofracturing. It documents long-standing regulatory enforcement problems as well as at least 16 critical shortcomings identified by Region 2 of the Environmental Protection Agency (EPA), academic researchers, local officials, environmental groups and citizens.

Given those profound inadequacies, I respectfully request that you sign the following **de facto Moratorium Pledge** as a member of the above-referenced committee:

Given the irreparable harm that shale gas extraction could wreak on New York's environment and public health, I request that Governor Cuomo maintain DEC's de facto moratorium on Marcellus Shale horizontal hydrofracturing until there is a consensus among all local, state and federal authorities as well as potentially impacted parties that the 17 major shortcomings documented in the Withdraw the Revised Draft SGEIS Coalition Letter have been fully resolved.

Member, DEC High-Volume Hydraulic Fracturing Advisory Panel.

Date: _____

Please do not hesitate to contact me if you have any questions about the coalition letter or the *de facto* Moratorium Pledge. Thank you for your consideration.

I look forward to your prompt response.

Very truly yours,

Walter Hang

THE WEST FIRM

A PROFESSIONAL LIMITED LIABILITY COMPANY

Attorneys And Counselors At Law

677 Broadway, 8th Floor
Albany, New York 12207-2996
Telephone (518) 641-0500
Facsimile (518) 615-1500

Thomas S. West*
Yvonne E. Hennessey*
Gregory A. Mountain*

*Also admitted in Pennsylvania
*Also admitted in Massachusetts

Direct Dial: (518) 641-0501
Direct Facsimile: (518) 615-1501
E-Mail: twest@westfirmllaw.com
www.westfirmllaw.com

Thomas F. Puchner
Sita Legac*
Cindy M. Monaco
Francis X. O'Connor, Of Counsel*

October 17, 2011

VIA FIRST CLASS MAIL

Mr. Joe Martens, Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Re: American Natural Gas, LLC -- LNG Fueling in New York State

Dear Commissioner Martens:

We represent American Natural Gas, LLC ("ANG"), a New York limited liability company that has been formed for the purpose of developing natural gas fueling stations in New York and other states. As you are aware, there are considerable cost and environmental benefits to fueling fleets and passenger vehicles with natural gas. Unfortunately, however, New York State has a regulatory obstacle that you control that currently precludes the development of this safe and reliable fuel and puts New York State at a competitive disadvantage compared to other states as other states ramp up support for the conversion to this clean burning, indigenous fuel.

The current trend in the natural gas fueling industry is to rely heavily on liquefied natural gas ("LNG") as a fuel source. LNG can then be easily converted to compressed natural gas ("CNG") or it can be used directly in larger vehicles. Large tractor trailer sized trucks use LNG directly, which provides the necessary range for that sector of the industry. Smaller trucks and automobiles use CNG. Without LNG, in order to create CNG stations, it is necessary to purchase and operate expensive compressors to compress natural gas from distribution pressures in the 5 to 10 pound range to fueling pressures approximating up to 4,000 pounds. With LNG, in contrast, a station can be designed based upon one or two small, 15,000 gallon LNG tanks, which can then provide fuel directly to the large tractor trailers or have the LNG converted into CNG through a simple heat exchanger and a small CNG storage tank. ANG estimates that the cost to construct and operate a fueling station based on LNG is approximately 30% less than a pure CNG station that requires compression.

Mr. Joe Martens, Commissioner
October 17, 2011
Page 2

Pennsylvania just recently announced that it is moving forward with a program to promote natural gas fueling across the state. Pennsylvania, like other states, recognizes the environmental benefits and the cost savings to industry and consumers through natural gas fueling. At today's prices, there are many places across the country where natural gas fueling saves approximately \$2.00 per gasoline gallon equivalent over gasoline or diesel fuel. And, as you may be aware, the Honda NGV is rated as the cleanest vehicle available in the United States. Many New York industries recognize the cost and environmental benefits of natural gas fueling. As such, the demand is high for this fuel.

Unfortunately, New York enacted a statute in 1979 that is found in Article 23, Title 17 of the Environmental Conservation Law. This statute, entitled Liquefied Natural and Petroleum Gas, requires permits from the DEC for LNG and liquefied petroleum gas ("LPG") facilities. Moreover, ECL § 23-1709 requires the Department to adopt regulations within one year from the effective date of the statute prescribing the form and content of applications for environmental safety permits to construct LNG or LPG facilities. Unfortunately, although the law has been on the books since 1979, those regulations have never been enacted.

Recently, we contacted the Department to determine if permits would be available without the regulations and were told that they would not. As such, we are compelled to write you to request that you immediately move forward with adopting emergency regulations to correct this inequity. In one of our conversations with Department personnel, it was mentioned that any regulations adopted by the Department would include small quantity exemptions. We believe that such an approach is prudent. As mentioned above, we believe that most facilities can be designed with several small LNG tanks. In addition, we are prepared to show that LNG storage, particularly in small quantities, is safe. In fact, it is much safer than LPG or propane storage, the latter of which is commonly undertaken throughout New York State at volumes equal to or greater than what we are proposing.

We would be pleased to have the opportunity to meet with you and Department Staff to discuss potential solutions to this situation. Please let us know when it would be convenient for such a meeting.


Very truly yours,



Thomas S. West

TSW/rsb

cc: The Honorable Andrew Cuomo
Robert Rosenthal, Esq.
Marc S. Gerstman, DEC Executive Deputy Commissioner
Alison Crocker, Esq.

Field thru Leff
AA

norse energy corp

July 25, 2011

Commissioner Joseph Martens
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-1011

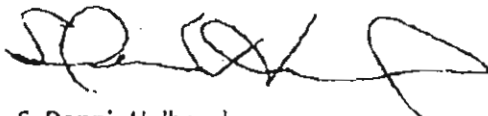
Dear Commissioner Martens,

In its July 1, 2011 press release, the Department of Environmental Conservation identified an impressive collection of lawmakers, environmental advocates and a single industry representative to serve on the Hydraulic Fracturing Advisory Panel. Norse Energy Corp. USA (Norse) feels that the initial panel members were an excellent start to develop recommendations and procedures so that high volume hydraulic fracturing may proceed safely in New York State. We believe that providing economic opportunities for New York State while ensuring the environmental safety are of the utmost importance to our citizens.

Although the initial advisory panel was a solid start, the panel can only be strengthened by including additional, relevant viewpoints. Specifically, the panel is light in terms of industry representatives, in particular those representing small to medium business operators such as Norse Energy. Our company has been operating safely in New York State for nearly 30 years and in recent years has been among the most active drillers operating in this state. While many others have left, Norse has stayed, adding over 50 full time professionals in offices in Buffalo, Jamestown and Norwich in the past three years. We encourage you to add representation from trade groups such as IOGA of NY, but we also believe it is important to add industry companies such as Norse that provide their own unique perspective.

I met with you this past spring, as part of an introductory industry group, shortly before your confirmation as Commissioner. My background spans nearly 40 years industry work experience which includes the Washington, DC staff of U.S. Senator James Buckley, the staff of the Federal Energy Administration, Vice President of National Fuel, Executive Committee Chairman and General Counsel of the Gas Industry Standards Board and over 15 years in private practice before joining Norse Energy in 2008 as Executive Vice President. I would welcome the opportunity to participate on your advisory panel.

Very truly yours,



S. Dennis Holbrook
Executive Vice President

ANDREW M. CUOMO
GOVERNOR



JOE MARTENS
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

SEP 29 2011

Mr. S. Dennis Holbrook
Norse Energy Corporation
3556 Lake Shore Road
Suite 700
Buffalo, NY 14219

Dear Mr. Holbrook:

Thank you for your letter requesting the expansion of the Advisory Panel on High-Volume Hydraulic Fracturing. I am pleased to inform you that five new members were added representing local governments, the agricultural community, landowners, and the natural gas industry. I believe these additions will make for a complete panel for this important review.

Thank you for your interest in serving on the Advisory Panel.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Martens".

Joseph J. Martens



THE SENATE
STATE OF NEW YORK



THOMAS W. LIBOUS
DEPUTY MAJORITY LEADER

April 20, 2011

BROOME COUNTY: (607) 773-8771
TIOGA COUNTY: (607) 687-3399
CHENANGO COUNTY (607) 336-3401
SENATOR@SENATORLIBOUS.COM
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1607 STATE OFFICE BUILDING
44 HAWLEY STREET
ALBANY, NEW YORK 12244

Commissioner Joe Martens
NYS Department of Environmental Conservation
625 Broadway
Albany, NY 12233-1011

Dear Joe:

I recently received an email from a constituent about a gas well that has been drilled in Pennsylvania within a mile from his home in New York.

The constituent is concerned that this well in PA could drill horizontally to reach under his property in NY.

Putting aside the broader Draft SGEIS, what is DEC doing in conjunction with the Pennsylvania Department of Environmental Protection to regulate such near-border or cross-border situations today?

Please look into this and let me know what you find out.

With warm personal regards, I am

Sincerely yours,

THOMAS W. LIBOUS
Deputy Majority Leader

RECEIVED
STATE SENATE
APR 22 AM 11:01
ALBANY, NY

ANDREW M. CUOMO
GOVERNOR



JOE MARTENS
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

JUN 22 2011

Honorable Thomas W. Libous
New York State Senate
1607 State Office Building
44 Hawley Street
Binghamton, NY 13901

Dear Senator Libous:

Thank you for your letter regarding horizontal well drilling near or across the New York/Pennsylvania border. I share your constituent's concerns regarding development of Marcellus shale or other New York gas reservoirs from horizontal wells located on the Pennsylvania side of the border. Any well drilled in New York without a permit to do so would be considered in violation of DEC's regulations and the Environmental Conservation Law.

Division of Mineral Resources (DMR) staff contacted their counterparts in Pennsylvania and was advised that there are no drilled or proposed wells crossing the New York border. In the future, Pennsylvania Department of Environmental Protection (PADEP) will contact DMR immediately when an operator submits an application to drill a well with any portion of the proposed well, including any horizontal well bore, located within 330 feet of the New York border. DMR will then follow up with the operator and PADEP to address any concerns.

Please call me at (518) 402-8540 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Joe Martens".

Joseph J. Martens



Gerstman
AA

From: "Brad Gill" <brad.earthenergy@gmail.com>
To: "Joe Martens" <joemartens@gw.dec.state.ny.us>
CC: "Marc Gerstman" <mgerstm@gw.dec.state.ny.us>, "Eugene Leff" <ejleff@gw....>
Date: 3:41 PM 9/2/11
Subject: Preliminary industry comments
Attachments: IOGA-DEC Economic Impacts letter FINAL.pdf

Dear Commissioner Martens:

Attached for your review is a document prepared by the Independent Oil and Gas Association of New York (IOGANY) reflecting industry's comments and concerns about the sGEIS, the rule-making process, and the resulting economic impacts to New York. This represents a collaborative effort from various industry sources and it may provide a good working basis for our meeting next Tuesday.

Please contact me at any time to discuss.

Best regards,

Brad

Brad Gill

Executive Director

Independent Oil and Gas Association of New York

38 Lake Street

Hamburg, NY 14075

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iogany.org

Economic Impediments to Shale Gas Development
September 2, 2011

requested specific cost information regarding all of the mitigation proposals that are intended to be incorporated in new rule-making, the IOGA of NY SGEIS Working Group has determined that it would be futile to provide detailed cost information regarding individual mitigation proposals unless the overall competitiveness of the entire regulatory process is evaluated now and significant changes are made to keep New York competitive with other states that are actually promoting the development of this resource. As demonstrated herein, IOGA of NY estimates that the overall cost of the regulatory proposals will increase the cost for each wellbore in New York State in excess of \$1 million above the cost to drill the same wellbore in other states, which will render New York non-competitive. In requesting significant changes, IOGA of NY is not asking the DEC to compromise on environmental protection. Rather, we are asking the DEC to recognize that many of the proposals go too far and must be adjusted before the costs associated with specific measures should be evaluated. Consistent with that goal, IOGA of NY has prepared this document to alert the DEC to a number of overriding concerns with the current draft of the SGEIS and the associated rule-making process that are critical to maintaining a modicum of economic competitiveness. Accordingly, IOGA of NY provides the following concerns, comments, and recommendations:

- If DEC decides to move forward with the rule-making process, it should limit that process to only the most essential regulatory requirements.
- The original Generic Environmental Impact Statement (GEIS) has served the state and operators extremely well since its adoption in 1992. Flexibility in both the conduct and practices of oil and gas operations and DEC's monitoring and enforcement is desirable and necessary to promote current and future efficiencies and technological advancements.
- Adopting conditions and standards in rule-making will blunt and delay implementation of new technologies that are advancing with exploration and development of natural gas (e.g., water recycling and disposal).
- No other industry operating within New York, even though possibly impacting the environment to a greater extent than the oil and gas industry, will be burdened by these unjustified, excessive and inequitable rules, regulations, requirements, mitigation measures, permit conditions and access restrictions.
- DEC should take a hard look at the incremental environmental benefits versus the oil and gas industry's significant costs incurred in order to implement the mandated mitigation. We believe that many of the requirements impose unnecessary costs with no tangible benefit to the environment.
- Many of the proposals are inconsistent with the DEC's statutory mandate to promote the development of the resource and protect correlative rights and go beyond the statutory authority of the DEC (e.g., the effort to regulate private land use).

In addition to these overriding concerns, IOGA of NY has identified a number of critical issues that will make New York non-competitive and preclude large portions of the state from development. These issues, which are similarly not meant to be exhaustive, include:

- the proposed prohibitions and setbacks, which make it virtually impossible to lay out spacing units and engage in any meaningful development of the resource;
- the draft stormwater general permit requirements, which go well beyond what is required of any other industry in New York State and include many requirements that will unnecessarily increase the cost of drilling and completion substantially, ultimately deterring any investment in New York State;

Economic Impediments to Shale Gas Development
September 2, 2011

ubiquitous plays like the Marcellus and the Utica, this is likely to require relatively uniform rectangular-shaped abutting units in order to avoid gaps in the development of the resource.

Also paramount in the well permitting process is the need to site a well pad in a location that minimizes environmental impacts to the maximum extent practicable. This is frequently accomplished by looking for locations that avoid stream crossings, wetlands, steep slopes, endangered species, and known areas of historic significance, and by taking into account other siting considerations consistent with Best Management Practices (BMPs). The existing regulations found in 6 NYCRR Section 553.2 contain appropriate setbacks that have worked well for decades and have not led to any demonstrable problem with the 14,000 operating wells in New York State.

Against this backdrop, the DEC is proposing a series of setbacks and prohibitions. These include the following:

- Prohibitions:
 - the prohibition of well pads in the New York City and Syracuse watersheds and a buffer zone that is 4000 feet around those watersheds, and
 - certain State lands (State Forests, State Parks, etc.).
- Setbacks:
 - primary aquifers and within a 2,000-ft buffer;
 - within 2,000 feet of public water supply wells and reservoirs;
 - within 500 feet of private drinking water wells or domestic use springs, unless waived by the owner, and within 100-year floodplains.

The proSGEIS also declares that a supplemental environmental analysis (i.e., a site-specific Environmental Impact Statement [EIS]) will be required in certain instances. These instances cover three categories: location, drilling depth and type of water-related issues. The location carve-outs require a site-specific EIS:

- within 1,000 feet of New York City's subsurface water supply infrastructure;
- principal aquifers or within 500 feet of the boundary of a principal aquifer;
- within 150 feet of a perennial or intermittent stream that is not a tributary to a public drinking water supply, storm drain, lake or pond; and
- within 500 feet of a tributary to a public drinking water supply.

Furthermore, private lands with tracts of grassland greater than 30 acres or forest greater than 150 acres may be off limits to surface occupancy and/or severely restricted insofar as their future development potential is concerned. IOGA of NY questions whether the DEC has the legislative authority to impose such restrictions on private lands. Moreover, the setbacks proposed by the DEC are to the "edge of location" (i.e., the well pad), not to the well itself. Therefore, all estimates of acreage excluded from development, particularly insofar as vertical wells are concerned, must add an additional 200 feet from the restricted area/edge of surface disturbance to the centrally located well, which increases the setbacks significantly.

As an initial matter, the proposed prohibitions directly conflict with the policy objectives of the statutory scheme in that they fail to promote the recovery of the resource or protect the correlative rights of the landowners in the prohibition areas. For this reason alone, the prohibitions should be eliminated.

Economic Impediments to Shale Gas Development
September 2, 2011

As an alternative, the industry recommends that many of the setbacks be eliminated or reduced to the existing setbacks, or setbacks that are consistent with those in place in other neighboring states. Industry further recommends that broad waiver provisions be included in the regulations to allow setbacks to be waived by the DEC for good cause shown.

Stormwater General Permit for High-Volume Hydraulic Fracturing

Uncontaminated stormwater discharges associated with oil and gas extraction activities are exempt from the federal National Pollutant Discharge Elimination System (NPDES) program and therefore from the NY State Pollutant Discharge Elimination System (SPDES) program, as well as under § 402(i)(2) of the Clean Water Act as clarified in § 323 of the Energy Policy Act of 2005. Despite this, the DEC has proposed a new stormwater general permit (GP) for high volume hydraulic fracturing (HVHF) in complete disregard of this exemption. To compound this, the DEC's proposal unnecessarily creates requirements unique to the natural gas industry that are far too numerous, unnecessarily prescriptive and lacking the requisite flexibility.

- To acknowledge the exemption, the HVHF GP should reflect New York's current SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (GP-0-06-002) by requiring the HVHF GP only for "stormwater discharges associated with industrial activity from oil and gas extraction ... which have had a discharge of a reportable quantity (RQ) of oil or a hazardous substance for which notification is required under [federal regulations]."
- Similarly, statutory NPDES permit exemption applicable to stormwater discharges associated with construction activities remains in effect, even though a federal court overturned U.S. Environmental Protection Agency (EPA) regulations implementing it. The DEC should modify the HVHF GP to mirror Pennsylvania's streamlined Erosion and Sediment Control General Permit (ESCGP-1). The Pennsylvania permit requires robust planning for environmental protection along with expedited permit review and authorization.

IOGA of NY has the following technical concerns associated with the HVHF GP:

- Transition between construction and HVHF operations – The DEC should modify the final stabilization requirements to remove the requirement that all construction activities must be completed before drilling can begin to allow for the drilling of multiple wells on a single pad.
- HVHF fluid evaluation – The requirement that operators evaluate hydraulic fracturing fluid every time they conduct well stimulation should be removed. It is unique to New York, and it assumes falsely that hydraulic fracturing (HF) additives are constantly changing, equally effective, universally available, and not subject to trade secret protections.
- Site maps – The HVHF GP should incorporate the flexible site mapping requirements in the Multi-Sector GP at Part III.C.2. together with the provisions in Sector I for Oil and Gas Extraction and Refining.
- General Best Management Practices (BMP) requirements – The proposed HVHF GP should mirror the flexibility in structural and non-structural BMP selection available in the Multi-Sector GP Part IX.B.
- Specific BMP requirements – The BMP provisions in Part X are far too numerous and unnecessarily prescriptive. They should all be replaced with flexible narrative standards for BMP selection that could be modeled after Pennsylvania's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities (PAG-03).

Economic Impediments to Shale Gas Development
September 2, 2011

proposed by DEC, is misguided, unduly stringent, and contradicts the passby methods employed by the Susquehanna River Basin Commission (SRBC) and Delaware River Basin Commission (DRBC), both of which have regulatory authority for water withdrawals in their specific jurisdictions. The SRBC and DRBC have been effectively regulating water withdrawals for decades in New York State and the DEC acts as the New York State representative on these commissions. The SRBC has the most experience with the natural gas industry and SRBC methods in particular are proven to be protective of existing aquatic communities, are designed to be conservative, and incorporate data collected specific to the location of the proposed withdrawal.

It is unreasonable that DEC would impose the NFR method for passby conditions solely for the natural gas industry, when all other withdrawals, such as golf courses, water bottling and industrial sources, would be regulated using the guidance implemented by the commissions. Withdrawals within the Susquehanna and Delaware River Basins should be regulated by the SRBC and DRBC, respectively, to avoid duplication and to ensure regulatory consistency and streamlined approvals. As a result of the water withdrawal legislation adopted into law in New York State this year, outside of the Susquehanna and Delaware basins, the DEC would have primacy regarding water withdrawals greater than 100,000 gallons per day. That legislation specifically exempts from the permitting requirements withdrawals that are permitted by the DRBC or the SRBC. This is current legislative and gubernatorial recognition of the need for the DEC to defer to the Interstate Compact Commissions regarding water withdrawals subject to their jurisdiction. The DEC, therefore, should consider using the SRBC passby flow guidance, which is environmentally protective and with which the industry is familiar.

Under the NFR methodology, all withdrawals, including those on large river systems, regardless of withdrawal quantity and rate, would require a passby. While many operators have developed storage capacity and all are utilizing recycled waters, uninterrupted withdrawals with predictable availability are important for year-round operations by the industry. Using the NFR methodology would greatly increase the number of days per year that a source point is unavailable, when compared with the SRBC passby guidance. Since source points would be unusable during much of the year under NFR, the industry will be forced to construct a greater number of sources (withdrawal points), potentially increasing the overall habitat impact, and likely reducing the opportunities to share sources among operators. Additionally, industry may need to purchase additional waters from older and larger public water supplies in New York State that may not have undergone the rigorous environmental review currently employed by SRBC. Purchasing water from public water supplies also will increase costs to the industry. The NFR methodology is overly complicated, will be difficult and costly to implement and appears to be administratively burdensome on both the industry and the regulatory agency. Metering and monitoring requirements themselves are projected to exceed an additional \$200,000 per withdrawal location, with no demonstrated environmental benefits over the passby flow guidance conditions implemented by SRBC.

Moreover, the NFR methodology being proposed by the DEC does not take into account its statutory obligation to balance competing water resources as required by Environmental Conservation Law Section 15-0105 and the cases interpreting the balancing obligations of the DEC regarding water consumption and use. The unnecessarily conservative NFR methodology conflicts with this statutory obligation.

All of the concerns expressed by DEC in the prdSCEIS regarding potential water withdrawal impacts, including reduced stream flow, impacts to aquatic habitats and ecosystems, impacts to wetlands, and aquifer depletion, are addressed by the river basin commissions through their extensive water withdrawal regulatory programs. In the prdSCEIS, the DEC itself recognizes that the amount of water withdrawn specifically for HVHF is projected to be low compared to overall water use in New York State, increasing fresh water demand by only 0.24%. In light of this small increase in projected water use and the existing authorities operating in New York State, this proposed duplicative effort is unwarranted. The programs

Economic Impediments to Shale Gas Development
September 2, 2011

species plan are difficult to predict; however, it would not be unreasonable to anticipate costs associated with plan development, equipment needs and implementation to exceed \$50,000 for every well pad or similar construction task (e.g., compressor stations). IOGA of NY is not aware of other states with such strict requirements.

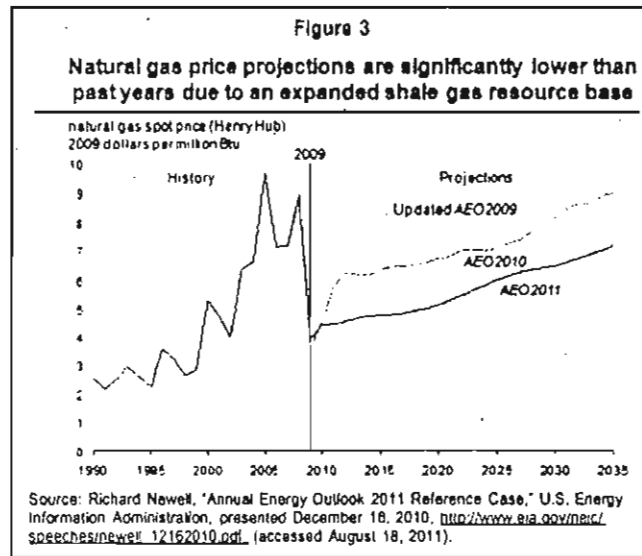
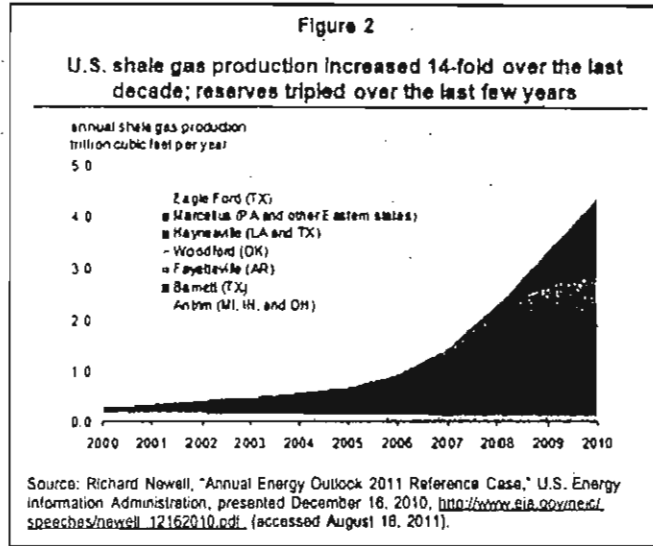
IOGA of NY would suggest, as an alternative, the requirement to implement BMPs relative to the handling of invasive species common to the area of operations currently utilized by other construction industries active in the area. Absent such a requirement, IOGA of NY is prompted to pose the questions: Does New York place equivalent requirements on the logging and forest products industries that potentially disturb land and vegetation even more extensively than does the oil and gas industry? Also, does New York place equivalent requirements on the logging and forest products industries regarding the restoration and re-vegetation of disturbed land?

- The detailed invasive species plan is just one of many plans being required by the DEC that will choke the ability of industry to develop New York's indigenous natural gas resources in an economically viable manner. Another example is the requirement to conduct pre-disturbance biological studies and an evaluation of potential impacts on forest interior birds from a proposed project. Pre-disturbance studies by a qualified biologist would be required. These studies must include a compilation of historical information on forest interior birds and a minimum one-year field survey to determine the extent (if any) of such birds' use of the site. Similar pre-development surveys of plants and animals are required as is post-disturbance monitoring. Requiring a one-year pre-disturbance study will mean that many leases will expire without timely development. Industry simply cannot tolerate that kind of regulatory delay. In addition, these types of detailed surveys will add significant expense (\$100,000 or more) for each well pad. These types of studies, delays and expenses simply are not justified for the temporal activities associated with natural gas exploration and development. Again, this is just another example of a burdensome and costly requirement that is being selectively applied to the natural gas industry and will turn that industry away from New York State.
- Retrofitting every engine with Selective Catalytic Reduction (SCR) (not even considering particulate traps), which is difficult if not useless on variable load engines, has not been demonstrated to IOGA of NY's knowledge, and is expected to cost approximately \$140,000 in capital expenditures, plus every year another \$145,000 in operating costs in addition to manpower and reductant (chemical) costs.³ IOGA of NY would suggest guidelines to promote emissions controls such as the promotion of the use of state of the art equipment when available as well as emissions guidelines designed around the temporary nature of most of the equipment utilizing engines.
- In the development of a plan for handling hydrocarbon vapors that may be emitted from crude or condensate tanks, requiring a vapor recovery unit (VRU) for every tank battery is expected to cost upwards of \$80,000 in capital costs per tank battery (plus fuel, operations, and maintenance costs).⁴ Alternatively, a combustion device can be installed at roughly \$22,000 plus another \$1,000 each year in operating costs.⁵ The combustor typically achieves a destruction efficiency of 98% or greater, requires no electricity, is low maintenance, and is more appropriate for sites such as the dry gas development anticipated in New York where insufficient Volatile Organic Compound (VOC) emissions exist to operate the VRU.

Should operators decide to pursue development in New York their costs will no doubt be greater than in other states. One operator has estimated that the cost to drill and complete a generic Marcellus or Utica well will increase by at least \$1,000,000 per well, or more, as a result of the proSCEIS. This is due to the requirements to obtain waivers from what is anticipated to be overly burdensome rulemaking (as DEC has indicated they are currently contemplating). Furthermore, it is not possible to quantify the additional costs

Economic Impediments to Shale Gas Development
September 2, 2011

cost for operating in New York versus other shale gas states. Therefore, one must anticipate that New York's imposition of additional costs resulting from more demanding mitigation and compliance requirements can only serve to weigh heavily on the profitability of shale gas prospects.



Economic Impediments to Shale Gas Development
September 2, 2011

- o Lease bonus and royalty payments for mineral rights on lands that will not be developed as a result of prohibitions and the corresponding loss of income tax revenue to the state.
- o Tax revenues that result from the robust *ad valorem* tax system applicable to oil and gas development in New York State that will be lost at a time when it is most needed.
- o Tax revenues from all associated businesses that will not be realized without development.
- To the citizens of New York:
 - o The benefits of tax revenues from development reinvested in state and community infrastructure and services.
 - o The benefits of participating in the potential economic growth that would come with gas development.

These are but a few of the examples of opportunities that have been and/or will be lost without an opportunity for timely and economically viable development of shale gas resources.

Summary

In summary, industry recognizes that there are numerous challenges to crafting a well informed regulatory framework for hydrocarbon development with the proven technologies of horizontal drilling and hydraulic fracturing that is simultaneously protective of the environment and the rights of the citizens and still encourages the investment of capital and creation of jobs and wealth. The *prdSGEIS* and the parallel rule-making process will not facilitate industry investment in New York's hydrocarbon resources. The already long and drawn-out process of developing the *SGEIS* and the anticipated highly restrictive regulatory framework for New York exploration has already destroyed real economic value for mineral owners, towns, the state as well as the investors and operators who have thus far had the courage to invest in New York.

Also the economic uncertainty of commodity prices compounded by the costs of *SGEIS*-imposed mitigation requirements weighs heavily on sensitive drilling economics. These uncertainties are further complicated by the fact that there has a yet to be a single horizontal well drilled and stimulated using HVHF in New York; consequently, there is still no in-state local benchmark with which to better predict production.

The limitations imposed by the *prdSGEIS* and, we expect, the regulations likely to emerge from the rule making process will make the exploration and development of unconventional natural gas in New York non-economic and unattractive. IOGA of NY anticipates that there will be every incentive for industry to spend their exploration and production budgets in states with more pragmatic regulations. Furthermore, shale plays that are rich in liquid hydrocarbons, such as the nearby Utica Shale in Ohio, will sport more favorable economics. As noted herein, the *prdSGEIS* proposes to impose mitigation solutions with, in some cases, limited environmental benefit and little or no flexibility in how operators may implement them. New York's regulations and requirements, if finalized, will be viewed by industry as too challenging and restrictive to allow for cost-competitive development in the current and forecast natural gas market. Thus, New York is rapidly moving towards, and showing all signs of becoming, non-competitive with other states in its ability to attract industry's development dollars.

In the final analysis, the regulatory proposals being put forth by the DEC relative to shale gas development in New York State do not send the signal that New York State is "open for business." Not only does this conflict with statutory mandate of the DEC to promote the development of the resource and

Attachment A

Stormwater General Permit Supporting Information

acknowledging the continuing exemption but imposing a streamlined state-specific permit regime that accomplishes the same objectives of the federal program. The DEP's ESCGP-1 provides an expedited permit process for earth disturbance activities associated with oil and gas exploration, production, processing or treatment operations or transmission facilities that disturb five or more acres.

ESCGP-1 requires the submission of a robust Erosion and Sediment Control Plan that must contain best management practices (BMPs) designed to minimize point source discharges to surface waters, preserve the integrity of stream channels and protect the physical, biological and chemical qualities of the receiving water. The plan must also address Special Protection requirements when earth disturbance activities occur in a High Quality or Exceptional Value watershed or Exceptional Value wetlands. The permit also requires operators to ensure that proposed construction activities will not adversely impact threatened and endangered plant and animal species and their critical habitats by requiring proof that a Project Planning Environmental Review was conducted and any possible impacts were reviewed and mitigated through work with the various state and federal agencies with jurisdictional responsibility for the listed species.

DEP has also established an expedited permit review procedure for the ESCGP-1 that can be utilized for oil and gas activities other than transmission facilities. Applicants that follow the expedited review process and qualify for permit coverage will be provided with an acknowledgement of coverage under ESCGP-1 within 14 business days from the submission of a complete and acceptable Notice of Intent (NOI).

Under the terms of a recent settlement of litigation initiated by the Chesapeake Bay Foundation, the ESCGP-1 will no longer be available for projects potentially affecting Special Protection water bodies or for those located in a floodplain or on contaminated land. Instead, the DEC plans to develop a new ESCGP-2 that will expand the period for public review of a proposed earth disturbance and require a more detailed technical review of the application.

DEC's decision to impose the full SPDES stormwater permit program on oil and gas extraction activities that continue to be exempt from the federal program was unnecessary and need not be expanded through the HVHF GP. Instead, the DEC should consider adopting a General Permit program that incorporates the advantages provided to both the DEC and to operators by the Pennsylvania ESCGP-1. Expedited permit review does not translate into reduced environmental protection.

The following paragraphs provide additional information:

- Transition from the Construction Phase of Permit Coverage – Final stabilization requirements in Part VI.D.2. and Part VIII.A.3. stipulate that the operator must provide written certification of the completion of all construction activities to the DEC before HVHF operations can begin. The HVHF Phase cannot begin until the Construction Phase is complete. These provisions appear to create artificial barriers to drilling multiple wells on a single pad.
- HVHF Fluid Evaluation – New HVHF SWPPP content provisions in Part IX.A.A.1. require operators to evaluate HVHF Phase fluid additives for each well stimulation project and use HVHF additives that exhibit the least aquatic toxicity and pose the least risk to water resources and the environment. In the alternative, the provisions require the operator to provide documentation to the DEC's satisfaction that some of the available alternative products are not equally effective or feasible.

The requirements assume that hydraulic fracturing (HF) additives are constantly changing, equally effective, universally available, and not subject to trade secret protections. It includes no standards for demonstrating the validity of a HF additive selection decision to the DEC, and no criteria for assessing DEC satisfaction. This requirement exists in no other state program should be deleted.

**Attachment A
Stormwater General Permit
Supporting Information**

Attachment B

Air Emissions Supporting Information

vapor recovery system for condensate storage tanks that would emit more than 6 tpy of VOC (presently based on a condensate throughput threshold of only 1 barrel of oil equivalent per day of condensate or 20 barrels of oil per day).

A VRU requires a pressurized system to handle pressure surges during separator dumps; therefore, safety becomes an issue of concern. It takes a minimum amount of vent gas to technically and safely operate a VRU (around 10,000 to 12,000 standard cubic feet/day (SCFD)). In the absence of sufficient emissions to operate a VRU, a combustion system is typically the most appropriate mitigation device. In a Texas study of 22 tank batteries in the Dallas-Fort Worth and Houston-Galveston-Brazoria regions, only 3 of those tank batteries produced sufficient flow rates (i.e., above 12,000 SCFD) to operate a VRU.¹⁴ Since the Marcellus Shale in New York is expected to produce dry gas, there will be little if any condensate or crude to potentially produce flashing emissions. Therefore, requiring their use in this area for every tank battery is expected to be unsafe and inappropriate. Implementing each VRU system can cost upwards of \$80,000 in capital costs per tank battery (plus fuel, operations, and maintenance costs),¹⁵ while a combustion device can be installed at roughly \$22,000 plus another \$1,000 each year in operating costs.¹⁶ The combustor typically achieves a destruction efficiency of 98% or greater, requires no electricity, is low maintenance, and is more appropriate for sites where insufficient VOC emissions exist to operate the VRU. The prdSGEIS does not need to address controls on condensate storage tanks since a national standard has been proposed.

Remove the limit of 5 million standard cubic feet (MMSCF) of gas that may be vented from completions from one well pad in any 12-month period.

The EPA's proposed new NSPS Subpart OOOO for the oil and gas industry contains work practice standards for all new well completions. The standard requires REC's for all completions where a sales pipeline is available and flaring of the vented gas if a good reason for not conducting a REC is documented. Therefore, the prdSGEIS does not need to address completions venting since a national standard has been proposed.

Attachment B

Air Emissions Supporting Information

Ultra Low Sulfur Diesel fuel along with the appropriate diesel Tier standard provides safe, available (or soon will be), and appropriate emissions controls for this equipment. It is both counterproductive environmentally and cost inefficient to require the use of additional add-on control technologies, such as adding SCR control to the completion engines, which may not be readily available, effective, or safe to operate.

Remove particulate filter traps (CRDPF) control requirements for the completion equipment engines if air modeling based on a more appropriate PM emissions rate demonstrates compliance with the PM_{10} and $PM_{2.5}$ NAAQS

The DEC has assumed that particulate traps are feasible add-on controls regardless of the engine's size, purpose, or hours of operation and, based upon that assumption, DEC is mandating the use of this control measure. This approach fails to consider the potential issues that can arise when multiple add-on controls are used. For instance, the added fuel use to operate particulate traps raises NO_2 emissions, followed by higher NO_x to NO_2 conversions when traps are used, and the possibility of particulate contamination of the catalyst, etc. This is one of the reasons the EPA chose advanced emission control technologies that integrate with the engine.

While the guidance on modeling intermittent emissions above was for the 1-hour NO_2 NAAQS, the same rationale applies to the 24-hour PM_{10} and $PM_{2.5}$ NAAQS. At the very least, the DEC should accept the industry's previous comments that the average PM emissions rate of 1.9 pound per hour (lb/hr) should be used for modeling instead of the maximum PM emissions rate of 6.6 lb/hr. In fact, EPA guidance for intermittent emissions when modeling for the 1-hour NO_2 NAAQS recommends using an average emissions rate based on 8,760 hours. From the same EPA memo on Treatment of Intermittent Emissions for air modeling of the 1-hour NO_2 NAAQS:¹³

Another approach that may be considered in cases where there is more uncertainty regarding the applicability of this guidance would be to model impacts from intermittent emissions based on an average hourly rate, rather than the maximum hourly emission. For example, if a proposed permit includes a limit of 500 hours/year or less for an emergency generator, a modeling analysis could be based on assuming continuous operation at the average hourly rate, i.e., the maximum hourly rate times 500/8760. This approach would account for potential worst-case meteorological conditions associated with emergency generator emissions by assuming continuous operation, while use of the average hourly emission represents a simple approach to account for the probability of the emergency generator actually operating for a given hour. Also note that the contribution of intermittent emissions to annual impacts should continue to be addressed as in the past to demonstrate compliance with the annual NO_2 standard.

Following the above approach, a PM emissions rate of 0.38 lb/hr would be appropriate for the 24-hour PM_{10} and $PM_{2.5}$ NAAQS. ($6.6 \text{ lb/hr} \times 500/8760 = 0.38 \text{ lb/hr}$).

The only rationale given in the proSGEIS for requiring particulate filter traps (CRDPF) on the completion engines was to demonstrate compliance with the 1-hour PM_{10} and $PM_{2.5}$ NAAQS. Additional air modeling using one of the methods above may demonstrate compliance with these standards. No other states require particulate filter traps on these engines, nor do they require compliance with the NAAQS for non-road engines.

Remove the requirement for use of a VRU for every condensate storage tank

Mandating the use of vapor recovery units (VRUs) on all condensate tanks is inappropriate. This requirement is not technically feasible in most well sites that produce little condensate. EPA acknowledges this in the new NSPS Subpart OOOO and allows the use of a combustion device or a

Attachment B

Air Emissions Supporting Information

Appendix W establishes the general principle that "the most appropriate data available should always be selected for use in modeling analyses," and emphasizes the importance of "the exercise of professional judgement by the appropriate reviewing authority" in determining which nearby sources should be included in the model emission inventory. Section 8.2.3.b.

For the reasons discussed above, EPA believes the most appropriate data to use for compliance demonstrations for the 1-hour NO₂ NAAQS are those based on emissions scenarios that are continuous enough or frequent enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations (emphasis added). Section 8.1.1.b of the guideline also provides that "[t]he appropriate reviewing authority should be consulted to determine appropriate 10 source definitions and for guidance concerning the determination of emissions from and techniques for modeling various source types." When EPA is the reviewing authority for a permit, for the reasons described above, we will consider it acceptable to limit the emission scenarios included in the modeling compliance demonstration for the 1-hour NO₂ NAAQS to those emissions that are continuous enough or frequent enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations (emphasis added). Consistent with this rationale, the language in Section 8.2.3.d of Appendix W states that "[i]t is appropriate to model nearby sources only during those times when they, by their nature, operate at the same time as the primary source(s) being modeled" (emphasis in original). While we recognize that these intermittent emission sources could (emphasis added) operate at the same time as the primary source(s), the discussion above highlights the additional level of conservatism in the modeled impacts inherent in an assumption that they do in fact (emphasis added) operate simultaneously and continuously with the primary source(s).

It is clear from this EPA memo that agencies should not require compliance with the 1-hour NO₂ NAAQS for intermittent stationary emissions. This would logically apply even more for temporary non-stationary intermittent sources such as completion engines. The fracturing pump engines only emit maximum emissions for a short time for each fracturing stage. Assuming 8 fracturing stages and 2 hours of maximum fracturing pump emissions, the maximum emissions would occur only 16 hours per well. For ten wells that is only 160 hours/year, much less than 500 hours for an emergency generator. Someone might argue that the average emissions from each fracturing job should be modeled to demonstrate compliance with the 1-hour NO₂ NAAQS. However, assuming 8 fracturing stages per well for 5 hours per fracturing stage, gives 40 hours per well. For ten wells that is only 400 hours per year.

Even if completion service companies could eventually overcome the technical mountain to retrofit existing fracturing pump engines with SCR, the cost would be very substantial. Retrofitting every engine with SCR (not even considering particulate traps) is expected to cost at least \$140,000 in capital expenditures, plus every year another \$145,000 in operating costs in addition to manpower and reductant costs.¹¹ Hydraulic fracturing a well is a massive operation and adding the additional operational burden of trying to maintain an SCR control system on fracturing pump engines that only run at maximum horsepower for a very limited time period would create additional safety hazards. An additional safety concern is the storage, transport, and handling of the reductant (e.g., ammonia or urea). Operating such a system involves precise exhaust temperature regulation, unplanned injection system cut-offs, and extensive operator attention. It is doubtful if operators could maintain the emissions reductions target given the large and sudden load swings these diesel engines experience. EPA's rules aimed at controlling air emissions from nonroad diesel equipment call for new engines with advanced emission control technologies that integrate the engine with the appropriate fuel control that results in reductions of more than 90% of nitrogen oxides (NO_x) and Particulate Matter (PM) emissions.¹²

The only rationale given in the prdSGE IS for requiring SCR on the completion engines was to demonstrate compliance with the 1-hour NAAQS. Based on the above, compliance with the 1-hour NO₂ NAAQS is not necessary and neither is the SCR control requirement. Combining the mandated use of

Attachment B

Air Emissions Supporting Information

emission scenarios. The potential overestimation in these cases results from the implicit assumption that worst-case emissions will coincide with worst-case meteorological conditions based on the specific hours on specific days of each of the years associated with the modeled design value based on the form of the hourly standard (emphasis added). In fact, the probabilistic form of the standard is explicitly intended to provide a more stable metric for characterizing ambient air quality levels by mitigating the impact that outliers in the distribution might have on the design value. The February 9, 2010, preamble to the rule promulgating the new 1-hour NO₂ standard stated that "it is desirable from a public health perspective to have a form that is reasonably stable and insulated from the impacts of extreme meteorological events." 75 FR 6492. Also, the Clean Air Science Advisory Committee (CASAC) recommended a 98th-percentile form averaged over 3 years for such a standard, given the potential for instability in the higher percentile concentrations around major roadways." 75 FR 6493.

To illustrate the importance of this point, consider the following example. Under a deterministic 1-hour standard, where the modeled design value would be based on the highest of the second-highest hourly impacts (allowing one exceedance per year), a single emission episode lasting 2 hours for an emergency generator or other intermittent emission scenario could determine the modeled design value if that episode coincided with worst-case meteorological conditions. While the probability of a particular 2-hour emission episode actually coinciding with the worst-case meteorological conditions is relatively low, there is nonetheless a clear linkage between a specific emission episode and the modeled design value. By contrast, under the form of the 1-hour NO₂ NAAQS only one hour from that emission episode could contribute to the modeled design value, i.e., the daily maximum 1-hour value. However, by assuming continuous operation of intermittent emissions the modeled design value for the 1-hour NO₂ NAAQS effectively assumes that the intermittent emission scenario occurs on the specific hours of the specific days for each of the specific years of meteorological data included in the analysis which factor into the multiyear average of the 98th-percentile of the annual distribution of daily maximum 1-hour values. The probability of the controlling emission episode occurring on this particular temporal schedule to determine the design value under the probabilistic standard is significantly smaller than the probability of occurrence under the deterministic standard; thereby increasing the likelihood that impact estimates based on assuming continuous emissions would significantly overestimate actual impacts for these sources (emphasis added).

Given the implications of the probabilistic form of the 1-hour NO₂ NAAQS discussed above, we are concerned that assuming continuous operations for intermittent emissions would effectively impose an additional level of stringency beyond that intended by the level of the standard itself. As a result, we feel that it would be inappropriate to implement the 1-hour NO₂ standard in such a manner and recommend that compliance demonstrations for the 1-hour NO₂ NAAQS be based on emission scenarios that can logically be assumed to be relatively continuous or which occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations. EPA believes that existing modeling guidelines provide sufficient discretion for reviewing authorities to exclude certain types of intermittent emissions from compliance demonstrations for the 1-hour NO₂ standard under these circumstances (emphasis added).

EPA's *Guideline on Air Quality Models* provides recommendations regarding air quality modeling techniques that should be applied in preparation or review of PSD permit applications and serves as a "common measure of acceptable technical analysis when supported by sound scientific judgment." 40 C.F.R. Part 51, Appendix W, section 1.0.a. While the guidance establishes principles that may be controlling in certain circumstances, the guideline is not "a strict modeling cookbook" so that, as the guideline notes, "case-by-case analysis and judgment are frequently required." Section 1.0.c. In particular, with respect to emissions input data, section 8.0.a. of

Attachment B

Air Emissions Supporting Information

target the very same emission sources for which the DEC has proposed their own prescriptive mitigation controls based largely on a worst-case dispersion modeling scenario. Setting inflexible emissions controls based upon such a scenario is not justified for all areas of the state, at all times of the year, and for every operator. The DEC is requiring specific air emissions controls that include or apply to reduced emissions completions, benzene and other glycol dehydrator emissions, storage tanks, engine add-on controls, and venting emissions during well completions. These are all well regulated by the recent EPA enactments. New York is dealing with very similar air quality issues as many other locations around the country and the EPA rules were designed to allow for responsible development of new energy sources while greatly reducing the levels of air pollution nationwide. It is inappropriate for the DEC to mandate additional, inflexible emissions controls on these proposed sources that are not proven, not cost-effective, and that may even be unsafe in some cases.

Remove SCR control requirements for the completion equipment engines

Several concerns arise when considering these add on controls. First, the prdSCEIS needs to clarify that only the large (>2,000 horsepower [hp]) fracturing pump engines are at issue. Second, the technical requirements and costs to add Selective Catalytic Reduction (SCR) control to existing fracturing pump engines that must meet weight, height, length and width requirements for transport on tractor trailers are immense, if not technically infeasible. Indeed, we are not aware of any successful demonstration of SCR control on completion equipment engines. Moreover, no other state has such a requirement. Third, the basis for this SCR requirement is modeled exceedance of the new 1-hr nitrogen dioxide (NO₂) National Ambient Air Quality Standards (NAAQS). The NO₂ standard has been very difficult to meet, causing the EPA to acknowledge the specific problem of modeling potential emissions from intermittent sources. In a March 11, 2011, guidance document from EPA's Air Quality Modeling Group, EPA acknowledges the specific problem of modeling potential emissions from intermittent sources, such as emergency engines that operate less than 500 hours per year.¹⁰ In regard to "Treatment of Intermittent Emissions," EPA states in part:

TREATMENT OF INTERMITTENT EMISSIONS

Modeling of intermittent emission units, such as emergency generators, and/or intermittent emission scenarios, such as startup/shutdown operations, has proven to be one of the main challenges for permit applicants undertaking a demonstration of compliance with the 1-hour NO₂ NAAQS. Prior to promulgation of the new 1-hour NO₂ standard, the only NAAQS applicable for NO₂ was the annual standard and these intermittent emissions typically did not factor significantly into the modeled design value for the annual standard. Sources often take a 500 hour/year permit limit on operation of emergency generators for purposes of determining the potential to emit (PTE), but may actually operate far fewer hours than the permitted limit in many cases and generally have not been required to assume continuous operation of these intermittent emissions for purposes of demonstrating compliance with the annual NAAQS. *Due in part to the relatively low release heights typically associated with emergency generators, an assumption of continuous operation for these intermittent emissions would in many cases result in them becoming the controlling emission scenario for determining compliance with the 1-hour standard (emphasis added).*

EPA's guidance in Table 8-2 of Appendix W involves a degree of conservatism in the modeling assumptions for demonstrating compliance with the NAAQS by recommending the use of maximum allowable emissions, which represents emission levels that the facility could, and might reasonably be expected to, achieve if a PSD permit is granted. However, *the intermittent nature of the actual emissions associated with emergency generators and startup/shutdown in many cases, when coupled with the probabilistic form of the standard, could result in modeled impacts being significantly higher than actual impacts would realistically be expected to be for these*

Attachment B

Air Emissions Supporting Information

Selected Air Quality Issues in the Preliminary Revised Draft SGEIS (prdSGEIS) dated July 2011

With the Preliminary Revised Draft Supplemental Generic Environmental Impact Statement (prdSGEIS) the New York State Department of Environmental Conservation (DEC) is seeking to establish statewide regulations and mitigation requirements that conflict with existing and/or proposed U.S. Environmental Protection Agency (EPA) air quality regulations pertaining to the same emission sources. Furthermore, the EPA regulations allow for a more flexible approach to satisfying the goals of reduced emissions than do the prescriptive mitigation requirements of the prdSGEIS.

On August 23, 2011, the EPA proposed new standards for the oil and gas sector (sector).¹ The rule proposes a cost-effective regulation based upon proven technologies that would reduce air pollution from the sector while enabling responsible growth in U.S. oil and natural gas production. For the upstream sector the rule primarily targets wells that are hydraulically fractured (both new wells and workover operations), emissions from storage tanks, pneumatic device fugitive emissions, and some glycol dehydrators.² A good example of mandated controls in the prdSGEIS conflicting with the EPA's recently passed regulations is the New Source Performance Standard (NSPS) OOOO. The new NSPS contains work practice standards for all new well completions. The standard requires reduced emissions completions (REC) for all completions where a sales pipeline is available and flaring of the vented gas is a good reason for not conducting a REC is documented. Therefore, the prdSGEIS does not need to address completions venting since a national standard has been proposed. The proposed NSPS is now in its 60-day public comment period after which the EPA must take final action by February 28, 2012.³ EPA's proposed rule is expected to cut volatile organic compound (VOC) emissions from the sector by nearly one-fourth nationwide (540,000 tons), methane emissions by 65 million tons of carbon dioxide equivalent, and air toxics by 38,000 tons every year. EPA estimates that industry's combined annual costs for complying with the new rule will be \$754 million by 2015.⁴

In the past few years, EPA has also passed multiple new rules targeting engines including those used in the oil and gas sector.

- On August 20, 2010, the EPA finalized a rule for reciprocating internal combustion engines (40 CFR Part 63, Subpart ZZZZ).⁵ This rule complemented an earlier rule by pulling into regulation engines located at smaller sources and engines less than 500 horsepower (hp).⁶ EPA estimated this rule would reduce hazardous air pollutant (HAP) emissions by 8,000 tons per year (tpy), carbon monoxide by 108,000 tpy, VOCs by 31,000, and nitrogen dioxides by 96,000 tpy at a cost of \$263 million (in 2013 dollars).⁷
- In 2008 EPA passed several new rules targeting new and reconstructed engines (estimated to affect over 433,000 stationary engines nationwide). This rule was expected to reduce nitrogen dioxides by 84,000 tpy, carbon monoxide by 49,000 tpy, VOCs by 2,400 tpy, and HAP emissions by 900 tpy at a cost of \$44 million initially and another \$20 million annually.⁸
- Diesel engines that are not classified as stationary engines (i.e., including diesel drill rig and completion engines) were also targeted by the EPA. Since 2004, the EPA has been passing comprehensive rules to reduce emissions from these engines by integrating engine and fuel controls as a system and mandating the use of ultra low sulfur diesel fuel. EPA estimated that the new rules would reduce levels of sulfur in the fuel by more than 98% and both nitrogen dioxides and particulate emissions by 90% by 2030.⁹

All of the above new and proposed regulations have been enacted following EPA's rigorous review process that considers nationwide applicability, cost effectiveness, and proven control technologies and all have been passed within the last seven years. The extent and magnitude of these rules is seen in the emissions reductions, compliance costs, and lengthy federal notices that describe each rule. These rules

**Attachment B
Air Emissions
Supporting Information**

Attachment A

Stormwater General Permit Supporting Information

Documents referenced

New York documents

New York State Department of Environmental Conservation. *SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity*. Permit No. GP-0-06-002. December 2008. http://www.dec.ny.gov/docs/water_pdf/gp0601.pdf (accessed September 1, 2011).

New York State Department of Environmental Conservation. *SPDES Construction Stormwater General Permit for Stormwater Discharges from Construction Activity*, Permit No. GP-0-10-001. Effective January 29, 2010. http://www.dec.ny.gov/docs/water_pdf/gpscogspmt10.pdf (accessed September 1, 2011).

New York State Department of Environmental Conservation. "SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-10-001) - Requirements for Well Drilling Activities." April 1, 2010. http://www.dec.ny.gov/docs/water_pdf/welldrilling.pdf (accessed September 1, 2011).

Pennsylvania documents

Pennsylvania Department of Environmental Protection. "Erosion and Sediment Control General Permit (ESGCP-1)." 5500-PM-OG0006 and 5500-PM-OG0012. No date. <http://www.e-library.dep.state.pa.us/dsweb/View/Collection-10450> (accessed September 1, 2011).

Pennsylvania Department of Environmental Protection. "01 PAG-03 Discharges of Stormwater Associated with Industrial Activities." 3800-PM-WSFR0083. No date. <http://www.e-library.dep.state.pa.us/dsweb/View/Collection-10761> (accessed September 1, 2011).

Attachment A

Stormwater General Permit Supporting Information

The DEC should incorporate a similar annual inspection option into the HVHF GP in addition to the streamlined benchmark monitoring suggested above to replace the requirements included in current HVHF GP proposal.

Attachment A

Stormwater General Permit Supporting Information

- F. Materials and chemical storage areas
- G. Chemical mixing, material handling and loading/unloading areas
- H. Chemical/fluid storage areas
- I. Employee housing and sanitary facilities
- J. Piping/conveyances
- K. Lumber storage or processing areas
- L. Cement mixing
- M. Freshwater surface impoundments and reserve pits
- N. Well production phase

All sh could be replaced with flexible narrative standards for BMP selection. Pennsylvania's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities (PAG-03) provides an appropriate model. In Appendix J (additional facilities), PAG-03 specifies the following BMPs for the oil and gas extraction sector:

1. Perform periodic inspections and maintenance on all transfer areas, piping, pumps, valves, compressors and other equipment where failure/leaks could cause petroleum releases.
2. Ensure secondary containment and leak detection for all petroleum product tanks and produced water tanks at exploration sites.
3. Develop and implement a detailed spill response plan, including immediate clean-up of petroleum residues and contaminated soils potentially exposed to stormwater.
4. Reclaim produced water pits and other disturbed areas at extraction sites immediately upon well closure.
5. Provide for oil-water separators to treat runoff from all areas where there is potential exposure to petroleum products.

In addition, the Benchmark Monitoring requirements in all of the foregoing sections should be eliminated and replaced with provisions that reflect the current Multi-Sector GP requirements for the oil and gas sector with targeted supplemental sampling and analysis if needed. The specific monitoring parameters listed for each type of facility or activity that could be associated with a well site would more appropriately serve as supplemental investigative tools if benchmark monitoring at an outfall indicates potential stormwater contamination:

- Annual Inspections in lieu of Benchmark Monitoring – Pennsylvania's PAG-03 allows oil and gas extraction industry permittees to conduct an Annual Inspection in lieu of benchmark monitoring. The facilities are only required to monitor annually due to the medium risk associated with stormwater discharges that they pose.

The Annual Inspection reports provide information on the overall quality of the discharges, focus on industry specific pollutants of concern, and are useful to help determine the effectiveness of pollution prevention plan controls. The Annual Inspection must include visual inspection of all outfalls and a Comprehensive Site Compliance Evaluation that applies to every outfall on the site. The visual inspection must identify any substances present in the sediment. The Annual Inspection/Certification must identify all areas that may be contributing pollutants to stormwater discharges and evaluate whether measures to reduce pollutant loadings identified in the Preparedness, Prevention, and Contingency (PPC) Plan are adequate and properly implemented in accordance with terms of the General Permit or whether additional control measures are necessary.

Attachment A

Stormwater General Permit Supporting Information

- **Site Map Requirements** – Part IX (Contents of the HVHF SWPPP) requires mapping of a variety of resources, facilities and activities that extend well beyond the scope of site map requirements imposed on all other industrial sectors in the Multi-Sector GP.

Current requirements in the Multi-Sector GP at Part III.C.2., together with the provisions in Sector I for Oil and Gas Extraction and Refining, provide thorough site mapping instruction without being overly prescriptive. The current Multi-Sector GP provisions are adequate to address the needs of the SGEIS.

- **Required non-structural BMPs** – The current Multi-Sector GP provides substantial flexibility to the operator to select structural and non-structural BMPs for use at the regulated facility. The proposed HVHF GP should mirror that flexibility in Part IX.B. by eliminating unnecessary requirements related to:
 1. Good housekeeping,
 2. Minimizing exposure,
 3. Preventative maintenance,
 4. SPCC requirement,
 5. Routine site inspections,
 6. Records of inspection, and
 - 7.a. and c. Employee training.

- **BMPs and Benchmark Monitoring** – The BMP provisions in Part X of the HVHF GP are far too numerous and prescriptive. The proposed HVHF GP should track the current Multi-Sector GP by providing as much flexibility in BMP selection to the owner or operator as possible.

The benchmarking requirements in Part X are excessive, given the purpose of stormwater outfall monitoring as stipulated in section 3.e. (Benchmark/Compliance Monitoring and Analysis):

The benchmark monitoring cut-off concentrations are intended as a guideline for the owner or operator to determine the overall effectiveness of the HVHF SWPPP in controlling the discharge of pollutants to receiving waters. The benchmark concentrations do not constitute direct numeric effluent limitations and, therefore, an exceedance is not a general permit violation. However, the owner or operator must evaluate potential sources of stormwater contaminants at the HVHF operation. Any sources of contamination that are identified must be remedied.

Unlike the proposed HVHF GP, the Multi-Sector GP only requires benchmark monitoring for Total Suspended Solids (TSS), chlorides and pH in the oil and gas extraction sector. These three parameters serve as surrogates for any potential pollution that may enter receiving waters from the facilities' outfalls. They provide reliable indicators that further analysis may be warranted to determine whether other potential pollutants may be discharging through a stormwater outfall.

The following sections of Part X of the HVHF GP contain unnecessarily prescriptive BMPs, impose excessive benchmark monitoring requirements, and in some cases are more appropriately regulated in other programs:

- B. Well-Drilling and High Volume Hydraulic Fracturing
- C. Vehicle and equipment storage/maintenance areas
- D. Vehicle equipment and cleaning areas
- E. Fueling areas

Attachment A

Stormwater General Permit Supporting Information

acknowledging the continuing exemption but imposing a streamlined state-specific permit regime that accomplishes the same objectives of the federal program. The DEP's ESCGP-1 provides an expedited permit process for earth disturbance activities associated with oil and gas exploration, production, processing or treatment operations or transmission facilities that disturb five or more acres.

ESCGP-1 requires the submission of a robust Erosion and Sediment Control Plan that must contain best management practices (BMPs) designed to minimize point source discharges to surface waters, preserve the integrity of stream channels and protect the physical, biological and chemical qualities of the receiving water. The plan must also address Special Protection requirements when earth disturbance activities occur in a High Quality or Exceptional Value watershed or Exceptional Value wetlands. The permit also requires operators to ensure that proposed construction activity will not adversely impact threatened and endangered plant and animal species and their critical habitats by requiring proof that a Project Planning Environmental Review was conducted and any possible impacts were reviewed and mitigated through work with the various state and federal agencies with jurisdictional responsibility for the listed species.

DEP has also established an expedited permit review procedure for the ESCGP-1 that can be utilized for oil and gas activities other than transmission facilities. Applicants that follow the expedited review process and qualify for permit coverage will be provided with an acknowledgement of coverage under ESCGP-1 within 14 business days from the submission of a complete and acceptable Notice of Intent (NOI).

Under the terms of a recent settlement of litigation initiated by the Chesapeake Bay Foundation, the ESCGP-1 will no longer be available for projects potentially affecting Special Protection water bodies or for those located in a floodplain or on contaminated land. Instead, the DEC plans to develop a new ESCGP-2 that will expand the period for public review of a proposed earth disturbance and require a more detailed technical review of the application.

DEC's decision to impose the full SPDES stormwater permit program on oil and gas extraction activities that continue to be exempt from the federal program was unnecessary and need not be expanded through the HVHF GP. Instead, the DEC should consider adopting a General Permit program that incorporates the advantages provided to both the DEC and to operators by the Pennsylvania ESCGP-1. Expedited permit review does not translate into reduced environmental protection.

The following paragraphs provide additional information:

- Transition from the Construction Phase of Permit Coverage - Final stabilization requirements in Part VI.D.2. and Part VIII.A.3. stipulate that the operator must provide written certification of the completion of all construction activities to the DEC before HVHF operations can begin. The HVHF Phase cannot begin until the Construction Phase is complete. These provisions appear to create artificial barriers to drilling multiple wells on a single pad.
- HVHF Fluid Evaluation - New HVHF SWPPP content provisions in Part IX.A.A.1. require operators to evaluate HVHF Phase fluid additives for each well stimulation project and use HVHF additives that exhibit the least aquatic toxicity and pose the least risk to water resources and the environment. In the alternative, the provisions require the operator to provide documentation to the DEC's satisfaction that some of the available alternative products are not equally effective or feasible.

The requirements assume that hydraulic fracturing (HF) additives are constantly changing, equally effective, universally available, and not subject to trade secret protections. It includes no standards for demonstrating the validity of a HF additive selection decision to the DEC, and no criteria for assessing DEC satisfaction. This requirement exists in no other state program should be deleted.

Attachment A

Stormwater General Permit Supporting Information

Federal Stormwater Permit Exemptions for the Oil & Gas Extraction Industry

Uncontaminated stormwater discharges associated with oil and gas extraction activities are exempt from the federal National Pollutant Discharge Elimination System (NPDES) program and therefore from the NY State Pollutant Discharge Elimination System (SPDES) program as well.

The 1987 Water Quality Act (WQA) added section 402(i)(2) to the Clean Water Act (CWA) specifying that the U.S. Environmental Protection Agency (EPA) and States shall not require NPDES permits for uncontaminated stormwater discharges from oil and gas exploration, production, processing or treatment operations, or transmission facilities.

Section 323 of the Energy Policy Act of 2005 clarifies and strengthens the CWA NPDES exemption by defining the term "oil and gas exploration, production, processing, or treatment operations or transmission facilities" to mean "all field activities or operations associated with exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activity." See 33 U.S.C. §1362(24).

RQ Release as the Industrial Stormwater Permit Threshold for the Oil and Gas Extraction Sector

The current SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (GP-0-06-002) recognizes the federal exemption for uncontaminated stormwater discharges. The Multi-Sector GP states that the permit applies to "stormwater discharges associated with industrial activity from oil and gas extraction ... which have had a discharge of a reportable quantity (RQ) of oil or a hazardous substance for which notification is required under [federal regulations]." It also stipulates that operators must include information in the Stormwater Pollution Prevention Plan (SWPPP) that accompanies a Notice of Intent "about the RQ release which triggered the permit application requirements." The information in the SWPPP must include a thorough description of the nature and scope of the RQ release and its environmental impacts.

The proposed high-volume hydraulic fracturing (HVHF) General Permit (GP) should mirror these provisions and provide relief from the permitting requirements until the operator reports a RQ release at the site.

SPDES General Permit for Construction Activity

Beginning in April 2010, the New York State Department of Environmental Conservation (DEC) started to require operators to obtain Construction Stormwater General Permit coverage for Article 23 drilling activities that are exempt from the Multi-Sector GP. The construction permit is now imposed whenever well activities requiring an Article 23 well drilling permit disturb one or more acres of land. The proposed HVHF GP would continue and expand upon the current stormwater permitting requirements.

Until last April, the DEC acknowledged the federal exemption for construction activities by regulating well site development to avoid pollution via stormwater runoff through the Article 23 well permitting program. The DEC imposed the SPDES Construction Stormwater General Permit requirement after a federal court decision, in *Natural Resources Defense Council v. United States Environmental Protection Agency*, 626 F.3d 591 (9th Cir. 2008), which vacated EPA's 2006 oil and gas construction stormwater regulation.

The court decision vacating the EPA rule did not overturn the underlying federal law, however, so the NPDES permit exemption for uncontaminated stormwater discharges from oil and gas activities and facilities remains in place.

In Pennsylvania, the Department of Environmental Protection (DEP) responded to the 2005 Energy Policy Act clarification of the CWA exemption and the court action vacating the associated EPA rule by

**Attachment A
Stormwater General Permit
Supporting Information**

Economic Impediments to Shale Gas Development
September 2, 2011

¹ EPA, 40 CFR Parts 60 and 83, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, http://www.epa.gov/ttn/atw/olga_s/fr23au11.pdf (accessed August 26, 2011).

² EPA, 40 CFR Parts 60 and 83, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, http://www.epa.gov/ttn/atw/olga_s/fr23au11.pdf (accessed August 26, 2011).

³ New Mexico Environment Department (NMED), *Four Corners Air Quality Task Force Report of Mitigation Options* (November 1, 2001), http://www.nmenv.state.nm.us/acb/4C/Docs/4CAQTF_Report_FINAL_Oil_and_Gas.pdf (accessed August 19, 2011).

⁴ Newfield Exploration Company, Anadarko Petroleum Corporation, Utah Petroleum Association, Interstate Oil & Gas Compact Commission, and Independent Petroleum Association of Mountain States, "Reducing Methane Emission with Vapor Recovery on Storage Tanks: Lessons Learned from the Natural Gas STAR Program," Presentation for the Producers Technology Transfer Workshop, Vernal, UT, March 23, 2010, Slide 38, http://www.epa.gov/gasstar/documents/workshops/vernal_2010/06_vrus.pdf (accessed August 19, 2011).

⁵ Albert Handler, Jim Nunn, Joe Lundeen, and Ray McKaskle, *VOC Emissions From Oil and Condensate Storage Tanks*, Final Report (October 31, 2006, revised April 2, 2009), Table 4-2, <http://files.ham.edu/Projects/AirQuality/Projects/H051C/H051CFinalReport.pdf> (accessed August 18, 2011).

⁶ Richard Newell, "Annual Energy Outlook 2011 Reference Case," U.S. Energy Information Administration, presented December 16, 2010, http://www.eia.gov/nslc/speeches/newell_12162010.pdf (accessed August 18, 2011).

⁷ Energy Information Administration (EIA), "Short-Term Energy Outlook" (August 9, 2011), <http://www.eia.gov/emeu/sto/pub/content.html> (accessed August 18, 2011).

⁸ Richard Newell, "Annual Energy Outlook 2011 Reference Case," U.S. Energy Information Administration, presented December 16, 2010, http://www.eia.gov/nslc/speeches/newell_12162010.pdf (accessed August 18, 2011).

⁹ Tom Fowler, "More Rigs Now Drill for Oil," *Houston Chronicle* (August 18, 2011), http://www.chron.com/dispatch/story.mpl/business/energy/770226_2.html (accessed August 18, 2011).

Joe Martens - Meeting request for October 11th

Shaw

From: "Caron O'Brien Crummey" <ccrummey@hinmanstraub.com>
To: <joemartens@gw.dec.state.ny.us>
Date: Wednesday, October 05, 2011 10:06 AM
Subject: Meeting request for October 11th

Hi Joe,

I am requesting a meeting with you and our client, IBWA, for October 11th. IBWA will be in Albany for the DEC stakeholder meeting at 1pm at the DEC Albany office on Bottle bill regulations.

IBWA is seeking a separate meeting to discuss the DEC webpage on "water Bottle Fact Sheet". IBWA believes that there is some misinformation posted and would like to discuss. We are available anytime on October 11th except from 1-3pm when we will be attending the DEC Stakeholder meeting. Thanks for your help.

caron

Caron O'Brien Crummey
Email:ccrummey@hinmanstraub.com
Phone:(518) 436-0751
Fax:(518) 436-3578

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**HINMAN
STRAUB** 
ATTORNEYS AT LAW

121 STATE STREET
ALBANY, NEW YORK 12207-1693
TEL: 518-436-0751
FAX: 518-436-4751

John F. Black
E-mail: JBlack@hinmanstraub.com

August 23, 2011

Joe Martens
Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

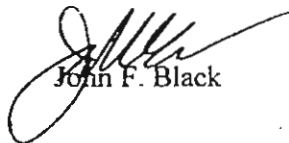
Dear Commissioner Martens:

Our firm is the legislative and governmental relations representative of the Police Benevolent Association of New York State ("PBA"). As you may know, the PBA was certified by the New York State Public Employment Relations Board on August 19, 2011 as the collective bargaining representative of the 1,200 member state agency law enforcement services (ALES) unit. The PBA represents, among other titles, environmental conservation officers and forest rangers.

We would greatly appreciate an opportunity to meet with you to introduce the PBA's leaders to you and discuss the PBA's goals as a professional law enforcement labor organization which will have considerable interaction with the Department of Environmental Conservation.

Please let me know if you can schedule a brief meeting in the near future. We look forward to hearing from you. I can be reached at the above address and/or email. Our phone number is 518 436-0751. Thank you.

Very truly yours,


John F. Black

**HINMAN
STRAUB**

ATTORNEYS AT LAW

121 STATE STREET
ALBANY, NEW YORK 12207-1693
TEL: 518-436-0751
FAX: 518-436-4751**Independent
Oil & Gas Association**

of New York

****Meeting Request for DEC Commissioner Martens
Attn: Dawn (518-402-8541)****Requested date and time: Tuesday – January 25, 2011
Anytime between 9:00am – 5:00pm****Contact name and number: Sara Van Son (Hinman Straub)
518-689-7267 or svanson@hinmanstraub.com****Organization: Hinman Straub on behalf of *IOGANY*
*The Independent Oil & Gas Association of NY*****Attendees:**Brad Gill – Executive Director of IOGANY
John Holko – President of Lenape Resources, Member of IOGANY**Hinman Straub Attendees Include:**Mara Ginsberg, Esq. - Legislative Counsel for IOGANY
Jim Carr – Principal Analyst
Darren Suarez - Governmental Analyst**Issue to be discussed:**Introduction to IOGA NY
IOGA as a resource for educational information
Future of Marcellus Shale drilling in NYS
New employment statistics
Ongoing issues related to the natural gas exploration in NYS****Thank you for your time and consideration, time is of essence and your prompt response is greatly appreciated****

Please contact Sara Van Son with an appointment date, time and location.

From: "Sara Van Son" <svanson@hinmanstraub.com>
To: "Dawn Sherwin" <dmsherwi@gw.dec.state.ny.us>
Date: 6/2/11 3:54 PM
Subject: **Meeting Request for Commissioner Martens**

<http://www.toyotaracingstyleguide.com/Toyota/files/cup/logos/TOYOTA_MOVING_FORWARD_UNDER_HOOD_LOGO.jpg>

121 State Street

Albany, New York 12207-1693

Tel: 518-436-0751

Fax: 518-436-4751

****Meeting Request for Commissioner Martens****

Attn: Dawn

Contact name and number: Sara Van Son (Hinman Straub)

518-689-7267 or svanson@hinmanstraub.com
<<mailto:svanson@hinmanstraub.com>>

Organization: Hinman Straub on behalf of Toyota Motor Sales
USA, Inc.

Requested date and time: Wednesday - June 8th

Anytime between 1:00-5:00pm

or

Thursday - June 9th

Anytime between

9:00am-12:00pm

Toyota Attendees Include:

Mr. Erik Kirkhorn

Director of State Government Affairs, Toyota Motor of North America, Inc.

Mr. Kevin Kinnaw

National Manager of Regulatory Affairs, Toyota Motor Sales USA, Inc.

Mr. Ed La Rocque

National Small Cars Marketing Manager, Toyota Motor Sales USA, Inc.

Hinman Straub Attendees Include (only Jim Carr and 1 other will attend):

James Carr, Vincent Graber, Darren Suarez, Matthew O'Connor

Items to be discussed include:

Toyota's Fuel Cell Hybrid Vehicle

Development of Private Hydrogen Fuel Cell Vehicle & Infrastructure Initiative for NYS

Steps toward "Developing a Hydrogen Powered Economy in NYS"

We appreciate your time and consideration!

Please contact Sara Van Son for any further information requests and with your preference on an appointment date and time.

Sara M. Van Son

Hinman Straub P.C.

121 State Street

Albany, NY 12207

Phone: (518) 689-7267

Fax: (518) 436-4751

Email: svanson@hinmanstraub.com <mailto:svanson@hinmanstraub.com>

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Paul Hartman

January 21, 2010

Joseph Martens
Acting Commissioner
Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

Dear Commissioner Martens,

I'd like to first extend congratulations from Chesapeake Energy Corporation on your recent nomination to serve as Commissioner of the Department of Environmental Conservation. We look forward to working with you and extend our best wishes as you move through the Senate confirmation process.

New York State is facing many challenges in the years ahead, and the Department will play an important role in advancing New York's economy while protecting its environmental treasures and developing its natural resources. To that end, the Department will continue to play an invaluable role in natural gas development in the state and bringing forth the tremendous environmental, energy and economic benefits such development could provide to all New Yorkers.

The purpose of this communication is to once again offer the assistance of the Corporation to the Department as it continues its review of the Generic Environmental Impact Statement for >>>>>>and develops its response to the draft SGEIS and establishes a Final SGEIS. To that end, Chesapeake would like to request a meeting with you and your executive team to discuss potential natural gas development in New York State and our current operations in other Marcellus states.

Please feel free to have your staff contact me at 518-477-3407 or at phartman@chk.com to set up a meeting at your earliest convenience.

Congratulations again.

Best wishes,

A handwritten signature in black ink that reads 'Paul Hartman'.

Paul Hartman
Director of State Government Relations