

APPENDIX C: COMPARISON OF MSAC WATER RECOMMENDATIONS AND ACT 13

The following is adapted from the Pennsylvania Environmental Council's "Comparative Analysis and Commentary on Act 13 of 2012" completed in March 2012. Additional details from other sources on the implementation of the Marcellus Shale Advisory Commission (MSAC) recommendations are included. The full PEC report can be found on its website: <http://marcellus.pecpa.org/wp-content/uploads/2012/03/PEC-Act-13-Comparative-Analysis-March-2012.pdf>

Under each of the headings below are excerpts from the MSAC recommendations and corresponding sections of Act 13 that address the same issue. Not all of the MSAC recommendations require a legislative action, like Act 13, to be implemented. Of the 96 recommendations put forth by MSAC, it is likely that only 35 would require legislation. An additional five could be implemented through regulatory changes and 56 could be implemented through changes in agency policy.

Construction Restoration Requirement

Commission Recommendation 9.1.18

DEP should ensure that natural gas construction activities are required to meet the same standards as general construction activities. Modifications to current construction standards as they are applied to unconventional natural gas drilling activities may be necessary.

Note: Recommendation 9.1.18 goes beyond restoration requirements at a well site and provides guidance to both the General Assembly and DEP on the enactment and promulgation of statutes and regulations, including the upcoming Chapter 78 regulations.

Commission Recommendation 9.2.20

The Oil and Gas Act's well site remediation provisions should be amended to authorize the Department to extend the nine-month well-site restoration requirement when the Department determines that an extension would ultimately result in less surface disturbance, increased water reuse, or more efficient development of the resource. Such an extension would be for a defined period of time and could include interim restoration/stabilization measures, as specified by DEP.

Act 13 of 2012

The Act allows extension of the 9 month restoration requirement (for a period not to exceed two years) based upon demonstration of net environmental benefit, provided the operator submits and implements a restoration plan that includes removal of any pits as well as establishing postconstruction stormwater management BMPs. [§3216]

Wastewater Disposal and Transportation Record Keeping

Commission Recommendation 9.2.7

Well operators should be required to track and report on the transporting, processing and treatment or disposal of wastewater from high-volume wells (i.e., 80,000 gallons or more of water used).

Act 13 of 2012

The Act requires tracking and record keeping on the transportation and disposal of wastewater from any unconventional well, although this information only needs to be submitted to DEP upon request of the Department. [§3218.3]

Setback Distance from Drinking Water Supplies

Commission Recommendation 9.2.11

Increase the minimum setback distance from a private water well from 200 feet to 500 feet and establish a minimum setback distance from a public water supply (water well, surface water intake or reservoir) to 1,000 feet unless waived in writing by the owner or public water supply operator.

Act 13 of 2012

Act 13 follows the Commission recommendation in expanding the setback from structures and private water supplies to 500 feet and public water supplies to 1,000 feet. Both setbacks are measured from the physical well bore (not the edge of the well pad). However, the Oil and Gas Act contains its own setback distance (100 feet) from the edge of the well pad to a waterway.

The Act shifts the variance standard toward requiring a waiver when necessary for the operator to access and recover the gas resource, although submission of a BMP plan is still required. Act 13 still vests discretion in DEP in granting waivers. The waiver will only be granted if doing so ensures that the waters of the Commonwealth will be protected. [§3215(b)(4) and (f)(2)]

Restrictions for Siting within Floodplains

Commission Recommendation 9.2.12

Provide DEP with additional authority to establish further protective measures for the storage of hazardous chemicals or materials on a well site located within a floodplain.

Commission Recommendation 9.2.13

Impose additional conditions for locating well sites in floodplains, including prohibiting where appropriate.

Act 13 of 2012

The Act contains new restrictions on the siting of well sites within floodplains, prohibiting the placement of pits or other storage of hazardous or waste materials without a variance subject to implementation of BMPs. The Act also contains a new provision establishing protection standards generally for hazardous chemicals or materials, as well as new containment system standards for prevention of off-site spills. [§3215, §3218.2]

Adaptive Management of the Shale Gas Industry

Commission Recommendation 9.2.18

Over the next six months, DEP should evaluate all of its regulatory programs to determine if obstacles exist or changes could be made to facilitate the increase in proper recycling of flowback and produced water from gas wells and to facilitate and encourage the increased use of non-freshwater for hydraulic fracturing.

Note: Recommendation 9.2.18 is currently the subject of a DEP policy review.

Commission Recommendation 9.2.22

The Commonwealth should encourage the use of non-freshwater sources where technically feasible and environmentally beneficial. For example, legislation that would provide operators with immunity from environmental liability for the use of acid mine drainage water from abandoned mine pools would encourage operators to reduce their use of freshwater sources for water utilization as well as reduce the amount of acid mine water draining into local streams.

Note: Recommendation 9.2.22 is being implemented in three ways:

1. *Water Management Plans will now require a Water Reuse Plan*
2. *Legislation has been introduced by Senator Richard Kasunic to amend the Environmental Good Samaritan Statute to address state legal liabilities related to the use of acid mine drainage (AMD) in the well development process.*
3. *DEP is working on releasing a white paper regarding the use of AMD for hydraulic fracturing.*

Act 13 of 2012

The Act contains a new section requiring development and implementation of a Water Management Plan (discussed in more detail, immediately below) that describes operators' plans for reuse/recycling of wastewater. [§3211]

Water Management Plans

Commission Recommendation 9.2.21

The Oil & Gas Act should be amended to clarify that DEP has authority pursuant to the Clean Streams Law to require a Water Management Plan (Plan) as part of the Section 201 permitting process to protect the ecological health of water resources. Approval of a Plan shall authorize the removal and use of such water away from the riparian lands, provided the use is conducted in accordance with the Plan. An operator must still obtain legal permission from the riparian rights owner for access. Such program should not duplicate the authority of any interstate river basin Commissions.

Act 13 of 2012

The Act contains a new section requiring the completion and implementation of a Water Management Plan, with criteria to protect water quality and quantity. [§3211]

Stream Setback Distances

Commission Recommendation 9.2.24

The setback standard for an unconventional well should be increased to 300 feet from the wellbore to a stream or water body as provided in section 205(b) of the Oil and Gas Act. A 100-foot setback from the stream or water body to the edge of disturbance should also be implemented. DEP's current waiver authority would be retained for both setbacks. For High Quality and Exceptional Value streams, however, additional setbacks or BMPs may be required by DEP. Additional discussion of the appropriate definition of water body for the purpose of these setbacks is necessary.

Act 13 of 2012

The Act increases the setback to 300 feet from the physical well bore or 100 feet from the edge of disturbance, whichever is greater. However, while retaining reliance on USGS maps for stream identification, the new provision changes the standard to a “solid blue line stream” – a more limited standard than the original law. [§3215]

The Act increases the setback for wetlands to 300 feet, or 100 feet from the edge of disturbance from the boundary of the wetland. [§3215]

The Act also includes language on when DEP may grant a variance to these setbacks. [§3215]

Invasive Plant Species

Commission Recommendation 9.2.30

Invasive Plant Species introductions should be avoided by utilizing techniques such as:

- thorough cleaning of construction equipment;
- minimization of soil disturbances;
- timely re-vegetation of sites using native, non-invasive species;
- annual surveillance to detect and control early infestations.

Act 13 of 2012

The Act does not address this issue.

Note: Recommendation 9.2.30 does not require legislative action and is instead being implemented by Department of Conservation and Natural Resources via policy. Specifically:

- *DCNR is working with industry on and off state forest lands to develop seeding mixes made up of predominantly native grasses, which greatly reduces the introduction of invasive plant species to disturbed sites.*
- *DCNR is upgrading the current online invasive species tutorial to include items specific to gas management where applicable. When completed, the update will be available on the DCNR website.*
- *DCNR will meet with DEP about including invasive species in its permit information and the potential to incorporate best management practices (BMPs) into permit requirements.*
- *DCNR will continue to meet with stakeholders, including operators, in formal and informal settings to share information in order to update and improve invasive plant BMPs.*

Rebuttable Presumption

Commission Recommendation 9.2.6

Expand an operator's presumed liability for impaired water quality from within 1,000 feet of a well to within 2,500 feet of a well, and from 6 months to 12 months of completion or alteration of the well. In addition, the presumed liability should be applied to well stimulation.

Act 13 of 2012

Act 13 extended the "rebuttable presumption" that an unconventional gas operator caused pollution or diminution if the well was drilled within 2,500 feet (previously 1,000 feet) or the impact occurred within 12 months (previously 6 months). 58 Pa.C.S. §3218.

Pre-drilling notification

Commission Recommendation 9.2.5

Pre-drilling notification (including copy of plat) should be extended from 1,000 feet to 2,500 feet of the proposed well site, and include all landowners and water purveyors. In addition, the notification shall be made to the host municipality or adjacent municipalities within 2,500 feet of the well site.

Act 13 of 2012

Act 13 extended notice of permit applications to affected parties within 2,500 feet (previously 1,000 feet). Additionally, the Act requires notice to host municipality and adjacent municipality. 58 Pa.C.S. §3211

Quality of Water Replacement

While not included in the MSAC report, Act 13 increases the water quality replacement standard to the greater of:

1. Safe drinking water standards or
2. Pre-existing water quality standards.

Prior to Act 13, the standard was simply restore or replace to pre-existing water quality.