

March 11, 2013

Re: SB411 – liability limitation for Acid Mine Drainage for hydraulic fracturing or other development of a gas well, industrial or other water supply or other "beneficial use"

Dear Senator.

Delaware Riverkeeper Network (DRN) asks that you not support or vote in favor of Pennsylvania SB411 (PN 431) – the Bill that grants liability limitation for Acid Mine Drainage used for hydraulic fracturing or other development of a gas well, industrial or other water supply or other "beneficial use". We have grave concerns about the Bill and the adverse environmental impacts that it will facilitate. We ask that you hold back consideration of the Bill to carefully consider its ramifications or, if the Bill should come to a vote, that you vote against it.

Our principle concern is the expansive scope of immunity provided by SB411. The exemption of the users of mine drainage or mine pool water or acid mine drainage (AMD) from any liability associated with its use, even after the water's chemistry and composition changes through hydraulic fracturing or another industrial process, and the allowance of the use of AMD for broad and vaguely defined uses is too far-reaching.

The immunity could prevent downstream riparian owners and adjacent landowners and water well users from recovering from pollution—a right they now possess under current law. This will leave people defenseless and without the ability to seek a court-backed requirement to clean-up pollution that may occur from the many uses of the water that are included in the Bill. For instance, private water well owners who live adjacent to a gas well that causes pollution of their water can now seek replacement of their water supply by the gas well company that caused the damage under the Pennsylvania Oil and Gas Act. Under SB411, that provision could be overridden by the shield from liability for damage to a person's water supply provided to the gas operator if they use AMD on site.

The Bill grants immunity to broad uses which poses even further problems. These include gas well development and hydraulic fracturing ("fracking"), industrial and water supply uses and vaguely defined "beneficial uses". The Bill defines "other beneficial use" as "Any use of water for a purpose that produces any economic, environmental, ecological, or other benefits, including irrigation, silvaculture, cooling water, flow maintenance and augmentation, consumptive use

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925 Canal Street, Suite 3701 Bristol, PA 19007 Office: (215) 369-1188 fax: (215)369-1181 drn@delawareriverkeeper.org www.delawareriverkeeper.org makeup, and any other use of water deemed to be a beneficial use under common law". This opens the door for many uses that provide pathways of pollution that will impact our environment and water supplies.

For instance, the application of AMD on farm fields places this polluted water (the use of both untreated and treated AMD are shielded under SB411) onto food supplies, livestock pastures, and onto the open ground. When water is used for irrigation, some of it will infiltrate down through the soil mantle and recharge groundwater, which in turn feeds aquifers (and water wells) and provides base flow to streams and rivers. This process can deliver contaminants contained in the AMD to the groundwater, polluting water supplies and to surface waters and the natural environment. Those adjacent to the agricultural fields that may experience adverse impacts from the AMD irrigation cannot seek recovery from the end user. Similarly, those downstream of or adjacent to flow augmentation with AMD, another "beneficial use" specified in the Bill, or any of the other uses that may be allowed as a "beneficial use" are left without legal recourse against the operator should pollution occur.

Outside of a person's loss of the right to recover from damages, the environmental harm that can result from SB411 is totally unacceptable. The Bill facilitates the moving of polluted water from one place to another; it spreads acid mine drainage pollution throughout the Commonwealth, including into higher quality watersheds such as trout streams and high quality water supply watersheds, something never contemplated by the Environmental Good Samaritan Act, which was enacted to help clean up pollution, not spread it around. In fact, the Environmental Good Samaritan Act never contemplated the use of AMD off site; it was clearly a means of helping entities clean up the pollutants that were being directly discharged to a waterway untreated. SB411 is a perversion of the Environmental Good Samaritan Act – it even broadens the immunity of those operating a "water pollution abatement project".

The Bill grants project-related immunity – with no stated limits -- to the water pollution abatement project operator from the Hazardous Sites Cleanup Act, the Solid Waste Management Act, and Pennsylvania's Clean Streams Law when AMD is used. This means that these entities that might otherwise be liable for environmental damage are shielded from liability and could mean their contaminated gas or oil well sites, factories, and other places where AMD was used would fall in the laps of the taxpayer for remediation. The exemption from the Solid Waste Management Act removes the regulatory floor from the transport of AMD and heightens the potential for careless handling and adherence to the requirements of that law which mandates quick cleanup of spills and the manifesting of shipments, among other requirements. This means a greater likelihood that pollution will end up in our waterways, on land and in groundwater from spills and accidents during transport.

Essentially, SB411 facilitates pollution because it removes one of the most effective deterrents—an operator's legal responsibility to clean up pollution the operation caused. It also leaves people living next to and downstream of these sites without the ability to go to court for damages and it transfers responsibility of pollution caused by AMD to the taxpayer when it is used as the Bill specifies.

AMD varies in quality but typically it can be high in Total Dissolved Solids (TDS), sulfates, metals such as iron and manganese, and can be high in acidity or alkalinity. For instance, the Wadesville Mine pit discharges into the East Branch of Norwegian Creek, a tributary of the Schuylkill River in the Delaware River Watershed, under a discharge permit from the Pennsylvania Department of Environmental Protection. From 2003 through 2012 the mean TDS during augmentation ranged from 881 to 1303 mg/l with a maximum reading of 1520 mg/l. Considering both the effluent standard for TDS in Pennsylvania (for high TDS dischargers at new and expanded facilities) and EPA's secondary drinking water standard for TDS is 500 mg/l, this discharge is rich in TDS and is a source of pollution to the receiving waterways, even in though it is treated. Untreated and treated AMD from many locations in Pennsylvania are much higher than this and contain sulfates and other dangerous contaminants. And yet this is the material that under SB411 would be transported, stored and used anywhere in the state, free of the liability safeguards that apply to solid waste, hazardous waste cleanup, and the Clean Streams Law.

AMD's use in place of fresh water in gas and oil development and fracking is not an environmental benefit. The replacement of polluted water for other surface water in frack fluids could reduce the amount of fresh water consumed but at an unacceptably high price. AMD use makes a dirty process dirtier and it does not remove the mine pollution from the environment. Fracking injects the contaminated fluids into the well, compounding the known pollution risks associated with fracking. The frack fluid is a cocktail of chemicals; adding AMD can change its composition when mixed with the injected materials and the naturally occurring contaminants present in the geologic formations that are drilled and fracked but this is not taken into account by SB411, and immunity still applies.

The migration of fluids through failed cement and steel gas and oil well casings into aquifers, to the surface, into other geologic formations, or into natural or induced fractures that act as pollution pathways - documented to occur when those materials are compromised or age - will at some point distribute these contaminants further into the environment. The incidence of the release of contaminated fluids at gas well sites onto the surface or at pits is well documented in the state; adding more polluted material to be stored - likely in open pits – to be transferred and mixed, and injected and then recovered as flowback to the myriad of chemical hazards already in use at these sites, simply magnifies the opportunity for environmental pollution. Further, there is even a question raised about how the Clean Streams Law will apply to frack wastewater leaving a gas or oil site that employed AMD under the broad immunity of SB411.

AMD's use "for a purpose that produces any economic, environmental, ecological, or other benefits, including irrigation, silvaculture, cooling water, flow maintenance and augmentation, consumptive use makeup, and any other use of water deemed to be a beneficial use under common law" is similarly fraught with danger. As stated earlier, this vaguely defined roster of uses exposes the entire state to AMD pollution with no responsible party to clean up afterwards.

There is no mention in SB411 of any requirement for the treatment of AMD to established water quality standards before its use. DRN opposes the use of AMD without a requirement for treatment to adopted standards. The standard to be applied should be defined by the use – for instance, Safe Drinking Water Act standards should apply to injected water, effluent and stream

quality standards to flow augmentation, and so on. SB411 allows treatment and cleanup of AMD to be avoided by removing liability for pollution that can result. Attached for your consideration is a Memorandum by Jordan Yeager and Lauren Williams of Curtin and Heefner LLP providing legal analysis of the Bill.

DRN asks you, as a Pennsylvania Senator, to stand up for clean water and to honor the intent of the Environmental Good Samaritan Act and protect the Commonwealth from pollution by setting SB411 aside or, if it comes to a vote, to vote against the Bill.

Thank you for your consideration.

Sincerely,

//s//

Maya van Rossum the Delaware Riverkeeper

Mayor K. von Rom

Tracy Carluccio Deputy Director

Attachment: Legal Memo re. SB411 dated 3.8.13