



February 8, 2021

Policy Office

Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building

P.O. Box 2063

Harrisburg, PA 17105-2063

Submitted www.ahs.dep.pa.gov/eComment

Point Contact: Sharon Hill, Bureau of Mining Programs, shill@pa.gov

(717)787-6842

Re: Comments on General NPDES Permit (BMP GP-104) for Mine Related Stormwater Discharges

To whom it may concern:

The Delaware Riverkeeper Network (DRN) is writing in response to the Draft GP-104 General NPDES Permit for Stormwater Discharges Associated with Mining Activities (5600-PM-BMP0388) and the Draft EPA Factsheet GP-104 the Draft Technical Guidance Document (TGD) published in the PA Bulletin on January 9, 2021 [Pa.B. Doc.No 21-53].

Background from the Notice from the Department

According to the notice, under 25 Pa. Code § 92a.32 (relating to stormwater discharges) (incorporating by reference 40 CFR 122.26(a), (b), (c)(1), (d), (e)(1), (3)—(9) and (f)-(g) (relating to storm water discharges (applicable to State NPDES programs, see § 123.25)), an NPDES permit is required for discharges associated with a mining operation which are composed entirely of stormwater. A mining operation is required to have an individual NPDES permit or coverage under a general NPDES permit if the site has expected or potential discharges of stormwater runoff. For both coal and noncoal mining operations where the only potential discharge will be composed entirely of stormwater, the discharges are controlled under a general permit. Under 25 Pa. Code § 92a.54 (relating to general permits), a general permit is justified for the following reasons: 1) these mining operations are substantially similar in scope and operations including use of common Best Management Practices (BMP) for erosion and sedimentation control; 2) they would potentially discharge the same type of pollutant (that is, suspended solids); 3) they would require the same effluent limitations or operating conditions in the form of a set of commonly-used BMPs; and 4) these

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215)369-1181
drm@delawareriverkeeper.org
www.delawareriverkeeper.org

operations, individually and cumulatively, do not have the potential to cause significant adverse environmental impact from stormwater discharges.

The United States Environmental Protection Agency has required extensive revisions to BMP GP-104 that will impact existing and potential operators. The proposed modifications to BMP GP-104 include the following:

- *Expiration date of coverage*—Coverage under this draft general permit would expire on the date the master General Permit expires. Coverage will no longer extend for 5 years from the date the operator is granted coverage. Those operators who currently have an authorization with existing coverage past February 2021 will receive a notice when the reissued permit has been published as final that will provide these operators the option to certify their acceptance of the reissued permit or apply for an individual NPDES permit. If they certify acceptance of the reissued permit, their coverage expiration date will revert to the expiration date of the reissued permit (2026). No additional fee will be required. New or reapplication for coverage (including renewal) will be issued under the 2021 reissuance of the permit and will all have the same 2026 expiration date regardless of the date coverage goes into effect. The Department is developing a process for easy renewal of coverage for those operators that need to continue coverage under the general permit after 2026.
- *Use in impaired watersheds*—This general permit can be used in impaired watersheds with some qualifications. No point source discharges are allowed to streams impaired for sediment-related causes under BMP GP-104. An applicant whose activities occur in a watershed designated as impaired for sediment-related causes will be required to implement nondischarging BMPs to account for all potential discharge. If the applicant cannot do this, they must obtain an individual NPDES permit. Additional content has been added to the Notice of Intent for this requirement.
- *Effluent limits*—Limits were changed to eliminate the 30-day average and Daily Maximum. Only an instantaneous maximum limit is included. This change was made to reflect operator sampling conducted mostly as a result of precipitation events where averages over several days or weeks could not be calculated. Additional requirements have been added to require minimized exposure of manufacturing, processing and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance and fueling operations) to rain, snow, snowmelt and runoff in order to minimize pollutant discharges.
- Standard conditions and definitions were updated to reflect consistency with the other revisions or current requirements.
- Applicability is extended to all noncoal general permits and to government-financed construction contracts/projects to reclaim coal mining areas.

According to the DEP (EPA) factsheet (revised 2021) the purpose of the document is to explain the basis for the terms and conditions of the reissued BMP GP-104, in accordance with 25 Pa. Code § 92a.53 (relating to documentation of permit conditions). The original BMP GP-104 was issued in 2010. It was reissued in 2016 after a brief administrative extension. The 2021 version is the 2nd reissuance and includes addition of coverage for Government Financed Construction Contract (GFCC) projects and for BMP GP-106 Reclamation of Forfeited Noncoal Mines. See section on Eligible Operation Types for description. The 2021 version also allows use of this GP in impaired watersheds with caveats. See section E. Use in Impaired

Watersheds. This version clarifies the effluent limits requirements as grab samples with instantaneous maximum values. Finally, this reissuance aligns the expiration of operator coverage with the expiration date of the General Permit and prohibits spanning multiple version issuances.

First as part of this comment, DRN attaches comment provided to the Department on January 28, 2021 in regard to comments on the Draft Technical Guidance: Engineering Manual for Surface Mining Operations (563-0300-101) by the Delaware Riverkeeper Network (DRN).

DRN Comments and Questions on Factsheet_GP-104

A. Scope (Page 1 and 2)

Due to the extent and long life and irreversible harms and impacts of both coal and non coal mining in Pennsylvania, DRN questions why a general permit for stormwater with disturbance of one acre or more continues to be accepted in the state for mining operations instead of an individual NPDES permit for any type of mining applicant looking to operate in the Commonwealth.

The Department lays out four reasons for allowing a general permit GP-104. DRN does not agree with these justifications and urges the Department to only consider individual NPDES permits for these highly disturbed construction mining activities that often have daily dust, compaction, industrial equipment, chemicals, diesel trucks, access roads, continual traffic, blasting of rock and other construction measures over the life of the mine – which is often decades. Though BMP's should be required, they should not come at the expense of allowing mines to operate with a general permit only – this is not protective to protect the streams and resources of the Commonwealth as required under various state laws and the Pennsylvania Constitution.

It is also unclear with a general permit what notice the public has to engage and provide input and have notice for these permits (see January 28, 2021 DRN comment) which is of great concern – again because of the industrial nature and long lifespan of these mining projects that often disrupt human and non human communities and the environment for decades.

The Department states, “the use of the BMP GP-104” by hundreds of operators since 2010 has demonstrated its effectiveness and suitability.” ---- It is not clear what evidence the DEP is drawing from to make this determination. For the public review, greater detail is warranted especially with the track record that mining has in the Commonwealth. This is especially important since stormwater runoff is coming in contact with the mineral or mine waste.

The Department lists 6 bullets when a general permit is not allowed. DRN agrees that no general permits should be allowed if the mine is seeking to discharge to HQ and EV designated waters, including EV wetlands. DRN would go further to note operation within these special protection waters should require an individual permit (See January 28, 2021 DRN Comment). Class A and wild trout waters, wild & scenic rivers, and public lands held by DCNR should also be included in this section and not be allowed to have general permits issued due to their sensitive nature. Furthermore, DRN would urge the Department that impaired waters beyond just sediment related causes require an individual permit not the general permit.

By removing the general permit entirely from mining operations - this would also help clarify the Department's rationale here under the six bullets which are confusing. DRN believes that for mines of all types, there would always be substantive reason for an individual NPDES permit over a BMP GP-104 general permit.

DRN suggests in this section to add NPDES permit to be issued or denied, since it should not be assumed that all applications for mines would be approved especially due to past harms and legacy pollution from the mining industry.

In addition, it is important to add existing use determinations and monitoring by the Department and DEP biologists with field verification to ensure the proper use is being protected before the mining operation is denied or approved.

It is important to note that DEP still lags behind on toxic substances and state water quality criteria for all toxic substances related to mining. DRN is in support and has submitted comment regarding a more protective 0.3 mg/l manganese standard limit based on the science. DRN believes that manganese limits should be required for surface mining. The Draft TGD states that manganese is exempt if the raw water without treatment has a pH greater than 6.0 and iron less than 10 mg/L. Similarly, 25 Pa. Code § 87.102(e) does not require a manganese limit. Human exposure to levels of manganese beyond those necessary for maintaining adequate health can lead to excess manganese in brain tissue resulting in symptoms that mimic Parkinson's disease. Depending upon the length and severity of the exposure, these neurological effects may result in permanent, irreversible damage to the brain.¹ Manganese is also harmful to aquatic life as it can be significantly bio-concentrated by aquatic biota at lower trophic levels.²

Numerous studies have shown that the effects of manganese on fish include impaired gill functions and hormonal and metabolic interference.³ Excess manganese also has negative implications for water uses such as agriculture. The EPA found that irrigation water containing manganese at concentrations of slightly less than 1.0 mg/L to a few milligrams per liter may be toxic to plants when applied to soils with pH values lower than 6.0.⁴ Although the Draft TGD cites the Chapter 93 water quality criterion of 1.0 mg/L for manganese, the Department of Environmental Protection (DEP) recently proposed changing the manganese criterion to 0.3 mg/L. DRN submitted comment supporting this DEP proposal in September 2020 and attended a Citizens Advisory Committee meeting on October 20 to testify to this stricter standard at the point of discharge. The proposed change to the stricter manganese limit should be taken into consideration for surface mining operations and stormwater NPDES permits.

BMPs should be required for any and all mines. Stating that explicitly on Page 2 would strengthen the protective language. The use of non discharge alternatives are best but at same time the mining operator should have strict narrative and numeric limits on the quality of the infiltration pits and there must be accountability to concerns that can occur from infiltration and evaporation.

¹ PADEP Bureau of Clean Water. Rationale for the Development of Human Health Criterion for Manganese.

² Howe et al. (2005). Manganese and its compounds: environmental aspects. Centre for Ecology & Hydrology.

³ Tuzuki et al. (2017). Effects of manganese on fat snook *Centropomus parallelus* (Carangaria: Centropomidae) exposed to different temperatures. *Neotrop. ichthyol. vol.15 no.4.*

⁴ PADEP Bureau of Clean Water. Rationale for the Development of Human Health Criterion for Manganese

B. NOI Requirements and Renewal of Coverage (Page 3 & 4)

Please see January 28 DRN comment attached regarding the guidance manual with concerns pertaining to notice and opportunity for public comment, coordination of offices, need for consistent and stringent mining checks and balances throughout all the regions of the Commonwealth and a consistent centralized method of documentation. DRN would recommend that the mining authorization not be streamlined with the NPDES authorization and issued simultaneously – again to provide for more thorough agency review and public comment and hearings. Public hearings are a critical component to mining applications again due to the disruptive nature of these industrial operations for decades. Again, DRN suggests adding the language authorization or denial in the factsheet so it does not appear an application will automatically lead to authorization or the issuance of the permits.

DRN would recommend that if there is a change of ownership to the mine, there must be more reviews and checks put in place beyond just the new NOI to be submitted.

C. Eligible Operation Types

DEP should spell out why it would allow for Coal and Large Noncoal Mining permits anything but an Individual NPDES permit due to the nature and concerns these operations cause. Why are bluestone mines allowed a “simplified permit application that may not include a discussion of BMPs for stormwater control”? This does not sound protective.

A description and definition of “forfeited sites” under GP-106 should be further explained.

D. Pollution Prevention and BMPs (Pages 5 & 6)

Typical BMP’s used at mine sites are sediment traps/basins, infiltration measures, vegetated swales, runoff capture, and various materials (silt fence/textiles/filters). Why aren’t forested riparian buffers and use of trees included in these BMP’s especially where streams and wetlands are located. Streams and wetlands would benefit from at least a 300 foot buffer from any active mining operations. The Pollution Prevention Plan and the NOI in this section again sound very streamlined and it is not clear how the public has ample opportunity to comment on these various approvals that are “incorporated into the permit coverage approval”.

How are sink holes and surrounding changes addressed in the permitting process?

DRN recommends striking natural from the following: “Unlike typical earth disturbance permits, mining activities create a natural collection area in the excavation pit.”

With more frequent and intense rain storms and flooding events due to catastrophic climate destabilization, DRN recommends updating the BMP design to better accommodate the changing climate and flood events. BMPs designed to accommodate runoff from a 10-yr 24 hour storm event may not be adequate to protect streams from sediment and other harms and associated pollutants from these mines.

Pertaining to metals of iron and manganese – see our past comment above. Is the decades of data by the Department readily available to the public for review pertaining to the claim that no metals or

potential pollutants have been detected in typical samples from sedimentation controlled discharges? And what is meant by typical? Are there atypical samples and if so please further elaborate.

The Reclamation Plan must also be designed to replicate premining infiltration and runoff conditions to the maximum extent possible and shall comply with the requirements of 25 Pa. Code §§ 77.521, 87.101 or 88.291. --- more elaboration on what these measures would look like could be helpful to the public.

With better sophisticated monitoring techniques and use of automatic data loggers, it would be more appropriate for the Department to not presume that TSS limits of 90 mg/l do not cause or contribute pollutants to streams. More monitoring requirements on the applicants with DEP external field truthing and checks is appropriate. See January 28, 2021 DRN comment.

No discharges should be allowed to streams impaired for sediment related causes under the GP-104.

G. Monitoring, Sampling, and Reporting Requirements

In the electronic age, it would benefit the public and the Department to require that all written reports be provided virtually as well as maintained onsite to the mine.

One sample a year for a discharge if there is a discharge does not seem strict enough requirement and more sampling and visual assessments by the operator – using recordings and video documentation could be beneficial to the public especially in light of the nature of stormwater events.

DEP should not remove more stringent monitoring requirements for applicants. Furthermore, the DEP should maintain monitoring information for historical reasons and the life of the mine. It is not acceptable to have the permittee only retain records of all monitoring information for three years from the date of the termination of coverage of the permit. Given the life time of these mines more monitoring data and sustained and cataloguing by the applicant and DEP is needed. These monitoring data should also be made electronically available for better public review and watchdogging.

Thank you for your time and consideration of these comments.

Sincerely,



Maya K. van Rossum
the Delaware Riverkeeper



Faith Zerbe
Delaware Riverkeeper Network