

# New NPDES Policies and Guidance Procedures





# Post Mining Limits Under 47 CSR 30

Dated January 3, 2014

- ▶ This memorandum supersedes the previous guidance concerning post-mining limits issued by the agency on February 28, 1995.
- ▶ Follows provisions allowable under 40 CFR 434 Subpart E – Post-Mining Areas.
- ▶ Now includes provision for PML to be applied to deep mine discharges and instream discharges.



# Post Mining Limits Under 47 CSR 30

Dated January 3, 2014

Under 40 CFR § 434.11(k), the following operations are classified as a Post Mining Areas:

- (1) A reclamation area, which is the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced, or
- (2) The underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposit has ceased and prior to bond release.



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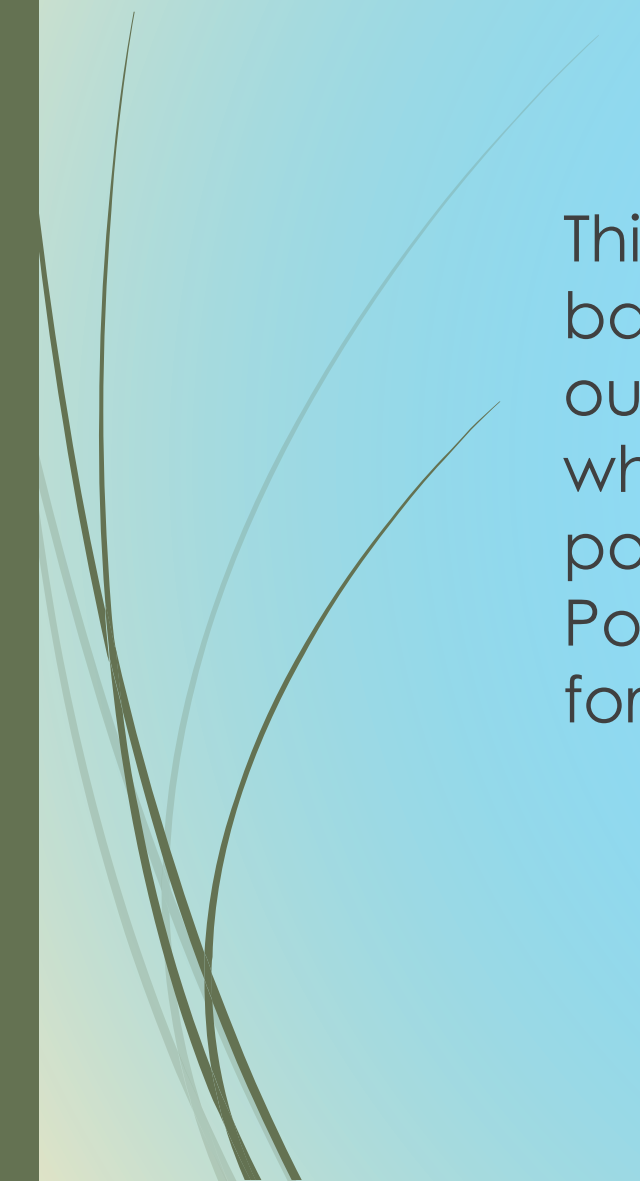
The determination for classification as a Post Mining Area is based on three factors:

- (1) Mining in the area is completed;
- (2) The surface area has been returned to contour; and
- (3) Revegetation has commenced.



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This determination is made on an outlet-by-outlet basis. The drainage area associated with each outlet will be assessed individually to determine whether each of the three factors is satisfied. It is possible for one or more outlets to be classified as a Post-Mining Area, while other outlets do not qualify for reclassification.

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**On-bench outlets.** Prior to applying for post-mining limits, the permittee must provide one of the following data sets for each outlet:

- ▶ Twelve (12) months DMR data plus 1 raw sample, if the outlet is not chemically treated;
- ▶ Six (6) months of raw sample data collected prior to any chemical treatment;
- ▶ If the outlet does not flow consistently, 12 months DMR data plus 1 raw sample with confirmation from the DEP inspector; OR
- ▶ If the outlet does not discharge, 12 months of DMR demonstrating no flow with confirmation from the DEP inspector.



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The data will be compared to the corresponding outlet's effluent limitations. If the data meets all WQBELs in the permit, then the outlet will be assigned the appropriate TBELs for a Post-Mining Area specified in 40 CFR 434. WQBELs will remain in the permit for any parameter that does not meet the effluent limitations set forth in the NPDES permit.

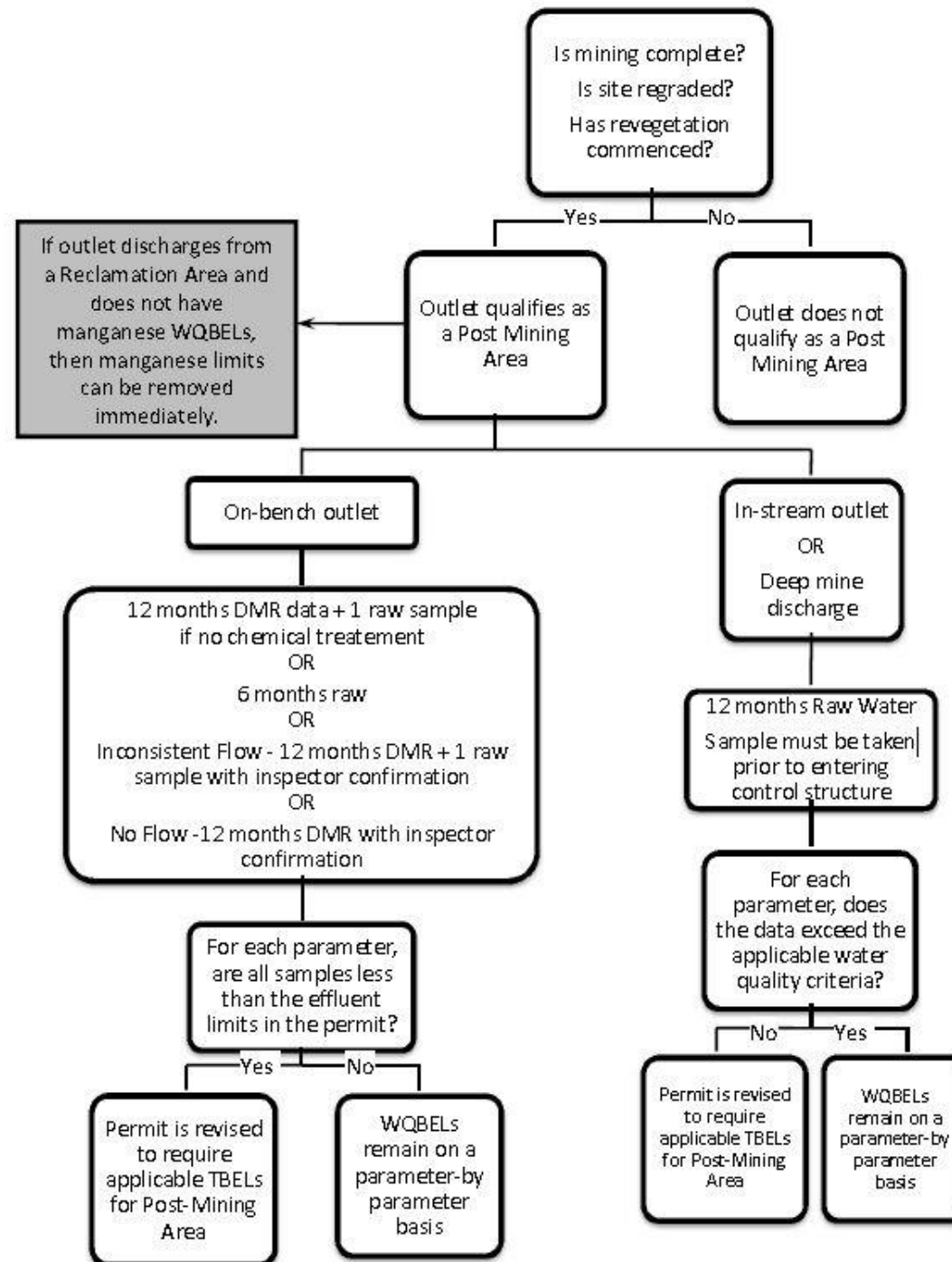
# Post Mining Limits Under 47 CSR 30

Dated January 3, 2014

**Instream or deep mine outlets.** Prior to applying for post-mining limits, the permittee must

- ▶ provide 12 months raw water data for each outlet, prior to chemical treatment. This sample needs to be taken prior to the water entering the associated control structure.
- ▶ The agency will compare the data to the applicable water quality criteria. If the data does not exceed the corresponding water quality criteria, then the outlet will be assigned the appropriate TBELs for a Post-Mining Area specified in 40 CFR 434.
- ▶ WQBELs will remain in the permit for any parameter that exceeds the applicable water quality criteria in the receiving stream.

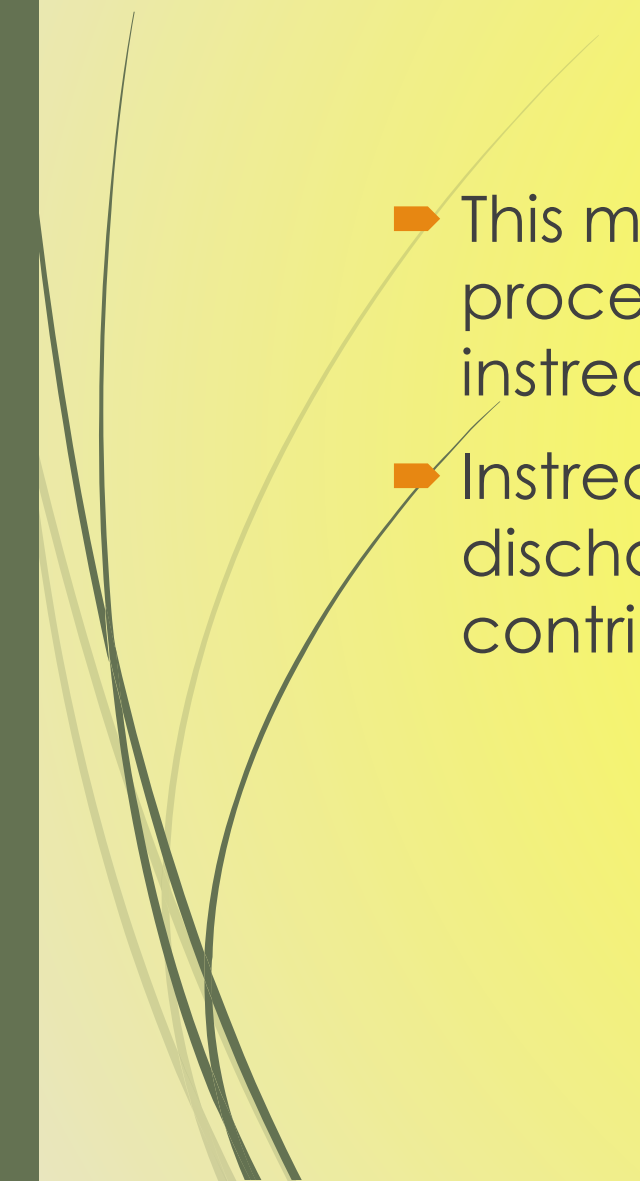






# Permitting Policy for Instream Stations

Dated February 9, 2017

- ▶ This memorandum establishes the requirements and procedures for reducing the monitoring frequency for instream monitoring stations.
  - ▶ Instream monitoring is required in a permit to ensure the discharge from the mining activity does not cause or contribute to a violation of the water quality standards.
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# Permitting Policy for Instream Stations

Dated February 9, 2017

- ▶ Normally, the monitoring frequency assigned to instream stations is the same as the associated NPDES outlets.
- ▶ In most cases for active operations the frequency is semi-monthly.
- ▶ Frequency was commonly reduced to quarterly when outlets go to post mining.

# Permitting Policy for Instream Stations

Dated February 9, 2017

- ▶ This policy allows the frequency for instream monitoring to be reduced to monthly automatically upon permit reissuance if the permit is in compliance with its effluent limitations.
- ▶ Permits may request the instream station's frequency to be reduced by way of a minor modification. No advertisement is required.
- ▶ Reduced monitoring frequency shall be assessed and granted on a stream by stream basis.

# Permitting Policy for Instream Stations

Dated February 9, 2017

- ▶ Quarterly instream monitoring may be requested if all the following circumstances are met:
  - ▶ The mining activities have been ongoing for at least two years or mineral removal is complete and final land reclamation has been initiated.
  - ▶ No violations of effluent limitations have occurred for the associated outlets for at least two years.
  - ▶ The permittee has received no violations for “conditions not allowable” in the receiving stream for at least two years.

# Permitting Policy for Instream Stations

Dated February 9, 2017

- ▶ Semi-Annual Monitoring may be requested after two years of quarterly monitoring.
- ▶ In certain circumstances where mineral removal activities are complete, final land reclamation has been initiated and the permittee has a long history of compliance with effluent limits, DEP may at its own discretion reduce the instream monitoring frequency to semi-annual.

# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- ▶ This policy establishes the procedures and practices for permitting precipitation induced outlets to coincide with our permitting of such outlets with respect to our Narrative Water Quality Standards.
- ▶ The Narrative Guidance does not apply to outlets that are precipitation induced.
- ▶ Water quality effluent limits need not be applied to precipitation induced discharges.

# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- Precipitation induced outlets will have technology based effluent limits along with benchmark monitoring criteria for instream monitoring stations.
- This policy defers a BWQ Tier 2 Antidegradation review in lieu of establishing benchmarks in the receiving stream.
- BWQ collection shall be done using the 7Q10 “rain gauge” protocol only.
- Any Tier 2 review will not include acreage contributed from precipitation outlets. Only non-precip outlets will be assessed.



# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- ▶ New permits, permit modifications and reissuances will be permitted in accordance with this policy.
- ▶ NPDES permits will be revised to be consistent with this policy upon reissuance.
- ▶ A permittee may apply for a Major Modification to apply this policy prior to reissuance of the permit.
- ▶ The permit modification will be considered on an outlet by outlet basis and may be granted only if the permittee can demonstrate that each requested outlet discharges solely in response to precipitation events

# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

The review will be conducted on a parameter by parameter basis. No change will be available for any parameter which effluent limitations were established in accordance with an approved TMDL or where the immediate receiving stream is listed as impaired in the operative 303d list.

# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- ▶ For other parameters not included in the ELG's (40 CFR 434) but may require limitations to be applied; the most stringent acute value will be assigned.
- ▶ When additional parameters are added to the outlet(s), an instream benchmark value must be added to the permit condition utilizing the most stringent chronic criteria.
- ▶ Aluminum – Where applicable, surrogate tech-based limitations of 3.0 mg/l AML and 6.0 mg/l MDL shall be applied for Total Aluminum.
- ▶ Selenium – Where applicable, outlets will be assigned “report only” monitoring for the AML and MDL.

# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- ▶ The new Precipitation Induced Outlet Condition replaces the Special Sampling Condition.
- ▶ The language and specifics are the same, except the new Precipitation Induced Outlet Condition contains a set of Benchmark values to be applied to the instream monitoring stations.
- ▶ The benchmark values will be specific to the parameters of concern and the type of stream (warm or cold water).



# Precipitation Induced Outlet Condition

In the event of a rainfall event equal to or greater than 0.3 inches occurs, during each calendar month monitoring will be conducted for the constructed on-bench outlet (precipitation induced) which has been disturbed by mining activity with the largest component drainage area and the constructed on-bench outlet (precipitation induced) at the lowest elevation on the down dip portion of the operation that has been disturbed by mining activity. The stream monitoring stations associated with these outlets must also be monitored at approximately the same time. The monitoring can be initiated at any point after rain gauge data indicates 0.3 inches of precipitation has occurred and shall be completed within eighteen (18) hours after cessation of the precipitation event. A qualifying event defined herein as any event where 0.3 inches or more of rainfall occurs within a consecutive 24 hour period.

In the event of a discharge from the precipitation induced outlets is sampled, the sample(s) must be analyzed for all parameters listed in Section A of the permit for each respective outlet and parameters listed in Section D,3 of the permit for the associated stream monitoring station(s). Analysis must be reported as a regular discharge monitoring report (DMR) and may be substituted for one of the required semi-monthly samples for the outlet(s). Once a qualified event is sampled in a given calendar month, this condition is satisfied for that calendar month. Rain gauge information must be maintained during the term of the life of the permit and made available to the Director upon request.

# Precipitation Induced Outlet Condition

b. When deemed by the WVDEP to be a Parameter of Concern, the following benchmark values (example list) shall be assigned for stream station(s):

| <u>Pollutant</u>                | <u>Benchmark Values</u> |                           |
|---------------------------------|-------------------------|---------------------------|
|                                 | <u>Warm Water</u>       | <u>Cold Water (Trout)</u> |
| Total Iron                      | 1.50 mg/l               | 1.00 mg/l                 |
| Total Manganese (if applicable) | 1.00 mg/l               | 1.00 mg/l                 |
| Dissolved Aluminum              | 0.75 mg/l               | 0.087 mg/l                |
| Total Selenium                  | 5.00 µg/l               | 5.00 µg/l                 |
| pH                              | 6.0 to 9.0 s.u.         | 6.0 to 9.0 s.u.           |

# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- ▶ New Reporting Forms must be completed, signed and submitted with the ESS Quarterly Discharge Monitoring Report (DMR) submittal.
- ▶ The original signed form(s) must be submitted to the permit inspector in the appropriate regional office.

## PRECIPITATION INDUCED OUTLET CONDITION / BENCHMARK REPORTING FORM

|              |  |                   |  |
|--------------|--|-------------------|--|
| PERMITTEE    |  | FACILITY          |  |
| NPDES No.    |  | ARTICLE 3 No.     |  |
| DATE SAMPLED |  | TIME SAMPLED      |  |
|              |  | RAINFALL (inches) |  |

| MOST DOWN-DIP CONSTRUCTED DISCHARGE |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|-------------------------------------|------------|----------|-----------------|-----------------|-----------------|----------------|-----------------|----------------|------------|----------------------|------------------|
| STATION                             | FLOW (GPM) | pH (S.U) | Total Fe (mg/l) | Total Mn (mg/l) | Total Al (mg/l) | Diss Al (mg/l) | Total Se (µg/l) | Sulfate (mg/l) | TDS (mg/l) | Conductivity (µmhos) | Parameter (Unit) |
| OUTLET No.                          |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|                                     |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
| UPSTREAM                            |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|                                     |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
| DOWNSTREAM                          |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|                                     |            |          |                 |                 |                 |                |                 |                |            |                      |                  |

| CONSTRUCTED DISCHARGE WITH THE LARGEST DRAINAGE AREA |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|--|------------|----------|-----------------|-----------------|-----------------|----------------|-----------------|----------------|------------|----------------------|------------------|
| STATION  | FLOW (GPM) | pH (S.U) | Total Fe (mg/l) | Total Mn (mg/l) | Total Al (mg/l) | Diss Al (mg/l) | Total Se (µg/l) | Sulfate (mg/l) | TDS (mg/l) | Conductivity (µmhos) | Parameter (Unit) |
| OUTLET No.   |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|  |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
| UPSTREAM   |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|  |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
| DOWNSTREAM   |            |          |                 |                 |                 |                |                 |                |            |                      |                  |
|  |            |          |                 |                 |                 |                |                 |                |            |                      |                  |

|                            |  |
|----------------------------|--|
| NAME / TITLE TYPE or PRINT | <p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p> |
|                            |  |
| SIGNATURE                  |  |
|                            |  |



# Permitting Policy for Precipitation Induced Outlets

Dated November 28, 2016

- ▶ In the event an instream station exceeds the applicable water quality criteria (benchmark value) for any pollutant, the permittee must notify the Permit Inspector within 24 hours of discovery of the exceedance.
- ▶ The facility shall conduct an investigation and take corrective action.
- ▶ Within 7 days of the exceedance (discovery), a letter stating the revised and implemented best management practices (bmp) shall be submitted to the NPDES Program Manager and Permit Inspector.



Questions?