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FACT SHEET

General Permit For
Coal Mining, Processing, and Associated Activities
Located in the Eastern Kentucky Coal Field

KPDES No.: KYGE40000

AI No.: 35050

Date: August 29, 2014

Public Notice Information

Public Notice Start Date: May 15, 2014

Comment Due Date: July 1, 2014

Information concerning the public notice process may be obtained on the Division of Water's Public Notice Webpage at the following address:

http://dep.gateway.ky.gov/eSearch/Search_Pending_Approvals.aspx?Program=Wastewater&NumDaysDoc=30

Comments may be filed electronically at the following e-mail address: DOWPublicNotice@ky.gov

SECTION 1

FACILITIES COVERED

1. FACILITIES COVERED

Establishments engaged in the mining and/or processing of coal and associated activities within the counties of Bath, Bell, Boyd, Breathitt, Carter, Clay, Cumberland, Elliott, Estill, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, McCreary, Madison, Magoffin, Martin, Menifee, Montgomery, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Wayne, Whitley or Wolfe. At anytime after coverage under this general permit is granted to a facility, the permittee may elect to opt out of the general permit by filing Forms 1 and C to obtain an individual KPDES permit. The general permit coverage will remain in effect until the individual permit becomes effective.

1.1. Eligibility

Only those coal mining and/or processing operations meeting the following requirements are eligible for coverage under KYGE40000 (KYGE4):

1) are physically located within the Kentucky counties listed in Section 1, and
2) have obtained a Surface Mining Control and Reclamation Act (SMCRA) permit from Department for Natural Resources (DNR) or are in the process of obtaining a SMCRA permit,

1.2. Exclusions

The following are excluded from coverage under this general permit:

1) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been categorized as an "Impaired Water" for a pollutant or pollutants of concern that may be associated with such activities and for which an approved Total Maximum Daily Load (TMDL) has been developed;
2) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been designated as Coldwater Aquatic Habitat (CAH) as listed in Table C of 401 KAR 10:026, Section 5;
3) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been designated as an Outstanding State Resource Water (OSRW) due to its support of a federally listed Threatened or Endangered Species as listed in Table C of 401 KAR 10:026, Section 5;
4) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been categorized as an Outstanding National Resource Water (ONRW) as listed in 401 KAR 10:030, Section 1;
5) New or expanded coal mining and/or processing operations that propose to discharge within five (5) miles upstream of any existing domestic water supply intake listed in 401 KAR 10:026, Section 5(2)(b) Table B; or
6) Coal mining and/or processing activities that the Division of Water (DOW) has determined would be more appropriately addressed by an individual permit or an alternate general permit.

1.3. Treatment Provided

Sedimentation

1.4. Permitting Action

Issuance of a new general KDPES permit KYGE40000 addressing the discharge of treated wastewaters from existing source and news source coal mining and/or coal processing operations within the 39 counties of the Eastern Kentucky coal field.

SECTION 2

RECEIVING WATER INFORMATION

2. RECEIVING / INTAKE WATERS

2.1. Receiving Waters

Various water bodies within the Big Sandy, Little Sandy, Tygarts, and upper Cumberland River Basins, and portions of the Kentucky and Licking River Basins

2.2. Stream Segment Use Classifications

Includes all water bodies that have been designated by DOW singularly or in combination thereof as: Warmwater Aquatic Habitat, Primary Contact Recreation, Secondary Contact Recreation, Domestic Water Supply and/or Outstanding State Resource Water other than those listed as Threatened or Endangered Species.

2.3. Stream Segment Antidegradation Categorization

Included are those water bodies which have been categorized as High Quality Waters, Impaired Waters, or Exceptional Waters.

2.4. Stream Low Flow Condition

The 7-day, 10-year low flow conditions of the receiving streams vary from zero (0) cubic feet per second (cfs) to over 500 cfs.

SECTION 3

EFFLUENT REQUIREMENTS

3. EFFLUENT REQUIREMENTS

The effluent requirements are divided into the following categories; (1) underground workings and coal preparation plants and associated areas, (2) in-stream sediment control structures, and (3) bench sediment control structures. In-stream sediment control structures are those sediment control structures that are constructed within the natural drainage way of a water body or have a continuous discharge of more than 4 consecutive days. Bench sediment control structures are sediment control structures that do not meet the definition of an in-stream sediment control structure.

Reclamation areas are defined in 401 KAR 5:065, Section 2(9) [40 CFR 434.11(l)] as 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." Non-reclamation areas are all other areas that do not meet the definition of a reclamation area, i.e. coal preparation plants and coal preparation plant associated areas, underground workings of an underground mine both active and post mining, and surface areas of coal mines where reclamation activities have not yet commenced.

3.1. Underground Workings, and Coal Preparation Plants and Associated Areas

The following effluent limitations and monitoring requirements are imposed on discharges which contain drainage from coal preparation plants, coal preparation plant associated areas, and/or the underground workings of an underground mine both active and post mining.

TABLE 1.

EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	**STORET Code**	**Units**	**Minimum**	**Monthly Average**	**Daily Maximum**	**Maximum**	**Frequency**	**Sample Type**
Flow	50050	MGD	N/A	Report	Report	N/A	2/Month	Instantaneous
Total Suspended Solids[1]	00530	mg/l	N/A	35	70	N/A	2/Month	Grab
Total Recoverable Iron	00980	mg/l	N/A	3.0	4.0	N/A	2/Month	Grab
Total Recoverable Manganese[1]	11123	mg/l	N/A	2.0	4.0	N/A	2/Month	Grab
pH	00400	SU	6.0	N/A	N/A	9.0	2/Month	Grab
Acute WET[2]	TS000	TU_A	N/A	N/A	N/A	1.00	1/Quarter	([2])
Specific Conductivity	00095	µS/cm	N/A	Report	Report	N/A	2/Month	Grab
Total Sulfate (as SO_4)	00945	mg/l	N/A	Report	Report	N/A	2/Month	Grab
Total Recoverable Selenium	00981	µg/l	N/A	5.0 [(3)]	20	N/A	2/Month	Grab
Total Recoverable Selenium (Fish Tissue)	01148	mg/Kg dry weight	N/A	N/A	N/A	8.6	([3])	([3])
Precipitation Volume	79777	Inches	N/A	N/A	N/A	Report	([4])	Grab

[1]Total Suspended Solids and Total Recoverable Manganese are eligible for alternate effluent limitations and monitoring requirements on a case-by-case basis provided a qualifying precipitation event has occurred and the permittee has requested the alternate requirements for that event.

[2] Two discrete grab samples collected during periods of discharge at least 2 hours apart but no more than 48 hours apart.

[3]Should the monthly average concentration of total recoverable selenium exceed 5.0 µg/l the permittee shall collect a sufficient number of fish the following month and analyze the fish tissue for selenium residue.

[4]Precipitaton volume is required only when a permittee is applying for alternate effluent limitations and monitoring requirements for Total Suspended Solids and/or Total Recoverable Manganese.

3.2. In-Stream Sediment Control Structures

The following effluent limitations and monitoring requirements apply to discharges from any KPDES Outfall classified as an in-stream sediment control structure. For the purposes of this permit in-stream sediment control structures are those sediment control structures that are constructed within the natural drainage way of a water body or have a continuous discharge or have an average discharge duration of 96 hours or more.

TABLE 2.

EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	**STORET Code**	**Units**	**Minimum**	**Monthly Average**	**Daily Maximum**	**Maximum**	**Frequency**	**Sample Type**
Flow	50050	MGD	N/A	Report	Report	N/A	2/Month	Instantaneous
Total Suspended Solids[1]	00530	mg/l	N/A	35	70	N/A	2/Month	Grab
Total Recoverable Iron	00980	mg/l	N/A	3.0	4.0	N/A	2/Month	Grab
Total Recoverable Manganese[1]	11123	mg/l	N/A	2.0	4.0	N/A	2/Month	Grab
pH	00400	SU	6.0	N/A	N/A	9.0	2/Month	Grab
Chronic WET[2]	TS000	TU_C	N/A	N/A	N/A	1.00	1/Quarter	([2])
Specific Conductivity	00095	µS/cm	N/A	Report	Report	N/A	2/Month	Grab
Total Sulfate (as SO_4)	00945	mg/l	N/A	Report	Report	N/A	2/Month	Grab
Total Recoverable Selenium	00981	µg/l	N/A	5.0 [(3)]	20	N/A	2/Month	Grab
Total Recoverable Selenium (Fish Tissue)	01148	mg/Kg dry weight	N/A	N/A	N/A	8.6	([3])	([3])
Precipitation Volume	79777	Inches	N/A	N/A	N/A	Report	([4])	Grab

[1]Total Suspended Solids and Total Recoverable Manganese are eligible for alternate effluent limitations and monitoring requirements on a case-by-case basis provided a qualifying precipitation event has occurred and the permittee has requested the alternate requirements for that event.

[2] Three sets of two discrete grab samples collected and composited on days 1, 3 and 5 of the discharge. The samples shall be collected during periods of discharge at least 2 hours apart but no more than 48 hours apart.

[3]Should the monthly average concentration of total recoverable selenium exceed 5.0 µg/l the permittee shall collect sufficient a sufficient number of fish the following month and analyze the fish tissue for selenium residue.

[4]Precipitaton volume is required only when a permittee is applying for alternate effluent limitations and monitoring requirements for Total Suspended Solids and/or Total Recoverable Manganese.

The following effluent limitations and monitoring requirements apply to discharges from any KPDES Outfall classified as an in-stream sediment control structure that receives drainage from reclamation areas only.

TABLE 3.

EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	**STORET Code**	**Units**	**Minimum**	**Monthly Average**	**Daily Maximum**	**Maximum**	**Frequency**	**Sample Type**
Flow	50050	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Settleable Solids[1]	00545	ml/l	N/A	N/A	N/A	0.5	1/Month	Grab
pH	00400	SU	6.0	N/A	N/A	9.0	1/Month	Grab
Specific Conductivity	00095	µS/cm	N/A	Report	Report	N/A	1/Month	Grab
Total Sulfate (as SO_4)	00945	mg/l	N/A	Report	Report	N/A	1/Month	Grab
Precipitation Volume	79777	Inches	N/A	N/A	N/A	Report	([2])	Grab

[1]Total Suspended Solids and Total Recoverable Manganese are eligible for alternate effluent limitations and monitoring requirements on a case-by-case basis provided a qualifying precipitation event has occurred and the permittee has requested the alternate requirements for that event.
[2]Precipitaton volume is required only when a permittee is applying for alternate effluent limitations and monitoring requirements for Total Suspended Solids and/or Total Recoverable Manganese.

To transition from active mining effluent limitations and monitoring requirements to reclamation area effluent limitations and monitoring requirements the following conditions apply:

(1) There is no drainage from:
   a. Active surface mine areas,
   b. Underground workings of underground mines (active or post mining), or
   c. Coal preparation plant or coal preparation associated area;
(2) The effluent from the sediment control structure has been substantially in compliance with the water quality-based effluent limitations (WQBELs).

The permittee shall provide certification to DOW that describe conditions are met using the eNOI-KYG04, available on DEP's forms library site at: http://dep.ky.gov/formslibrary/Pages/default.aspx.

3.3. Bench Sediment Control Structures

The following effluent limitations and monitoring requirements apply to discharges from any KPDES Outfall classified as a bench sediment control structure.

TABLE 4.

EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	**STORET Code**	**Units**	**Minimum**	**Monthly Average**	**Daily Maximum**	**Maximum**	**Frequency**	**Sample Type**
Flow	50050	MGD	N/A	Report	Report	N/A	2/Month	Instantaneous
Total Suspended Solids[1]	00530	mg/l	N/A	35	70	N/A	2/Month	Grab
Total Recoverable Iron	00980	mg/l	N/A	3.0	4.0	N/A	2/Month	Grab
Total Recoverable Manganese[1]	11123	mg/l	N/A	2.0	4.0	N/A	2/Month	Grab
pH	00400	SU	6.0	N/A	N/A	9.0	2/Month	Grab
Specific Conductivity	00095	µS/cm	N/A	Report	Report	N/A	2/Month	Grab
Total Sulfate (as SO_4)	00945	mg/l	N/A	Report	Report	N/A	2/Month	Grab
Precipitation Volume	79777	Inches	N/A	N/A	N/A	Report	([2])	Grab

[1]Total Suspended Solids and Total Recoverable Manganese are eligible for alternate effluent limitations and monitoring requirements on a case-by-case basis provided a qualifying precipitation event has occurred and the permittee has requested the alternate requirements for that event.
[2]Precipitaton volume is required only when a permittee is applying for alternate effluent limitations and monitoring requirements for Total Suspended Solids and/or Total Recoverable Manganese.

The following effluent limitations and monitoring requirements are imposed on discharges which contain drainage from reclamation areas only.

TABLE 5.

EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	**STORET Code**	**Units**	**Minimum**	**Monthly Average**	**Daily Maximum**	**Maximum**	**Frequency**	**Sample Type**
Flow	50050	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Settleable Solids[1]	00545	ml/l	N/A	N/A	N/A	0.5	1/Month	Grab
pH	00400	SU	6.0	N/A	N/A	9.0	1/Month	Grab
Specific Conductivity	00095	µS/cm	N/A	Report	Report	N/A	1/Month	Grab
Total Sulfate (as SO_4)	00945	mg/l	N/A	Report	Report	N/A	1/Month	Grab
Precipitation Volume	79777	Inches	N/A	N/A	N/A	Report	([2])	Grab

[1]Settable Solids is eligible for alternate effluent limitations and monitoring requirements on a case-by-case basis provided a qualifying precipitation event has occurred and the permittee has requested the alternate requirements for that event.
[2]Precipitaton volume is required only when a permittee is applying for alternate effluent limitations and monitoring requirements for Settleable Solids.

To transition from active mining effluent limitations and monitoring requirements to reclamation area effluent limitations and monitoring requirements the following conditions apply:

(1) There is no drainage from:
   a. Active surface mine areas,
   b. Underground workings of underground mines (active or post mining), or
   c. Coal preparation plant or coal preparation associated area;
(2) The effluent from the sediment control structure has been substantially in compliance with the WQBELs.

The permittee shall provide certification to DOW that describe conditions are met using the eNOI-KYG04, available on DEP's forms library site at: http://dep.ky.gov/formslibrary/Pages/default.aspx.

3.4. Sanitary Wastewater

The following effluent limitations and monitoring requirements apply to the discharge of treated sanitary wastewaters to another treatment system. These limits apply before commingling with waters of the other treatment system.

TABLE 6.								
EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	STORET Code	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	50050	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Biochemical Oxygen Demand (5 day)	00310	mg/l	N/A	30	45	N/A	1/Month	Grab
Total Suspended Solids	00530	mg/l	N/A	30	45	N/A	1/Month	Grab
The permittee shall provide disinfection of the treated effluent prior to commingling with waters of the sediment basin.								

The following effluent limitations and monitoring requirements apply to the direct discharge of treated sanitary wastewaters to a water of the Commonwealth. These limits apply before discharge to or mixing with the waters of the receiving stream.

TABLE 7.								
EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	STORET Code	Units	Minimum	Monthly Average	Weekly Average	Maximum	Frequency	Sample Type
Flow	50050	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Carbonaceous Biochemical Oxygen Demand (5 day)	00310	mg/l	N/A	10	15	N/A	1/Month	Grab
Total Suspended Solids	00530	mg/l	N/A	30	45	N/A	1/Month	Grab
Ammonia (as NH_3N)								
May 1 – October 31	00610	mg/l	N/A	2.0	3.0	N/A	1/Month	Grab
November 1 – April 30	00610	mg/l	N/A	5.0	7.5	N/A	1/Month	Grab
E. Coli	51040	#/100 ml	N/A	130	240	N/A	1/Month	Grab
Dissolved Oxygen	00300	mg/l	7.0	N/A	N/A	N/A	1/Month	Grab
Total Residual Chlorine	50060	mg/l	N/A	0.011	0.019	N/A	1/Month	Grab
pH	00400	SU	6.0	N/A	N/A	9.0	1/Month	Grab

SECTION 4

JUSTIFICATION OF REQUIREMENTS

4. JUSTIFICATION OF REQUIREMENTS

The Kentucky Administrative Regulations (KARs) cited have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs). Pursuant to 401 KAR 5:065, Section 2(4) [40 CFR 122.44], each federally or delegated state-issued NPDES permit shall include conditions meeting technology-based effluent limitations and standards and water quality standards and state requirements.

The Best Practicable Control Technology Currently Available (BPT) and the Best Available Technology Economically Achievable (BAT) requirements for existing sources have not been included for these parameters. DOW has elected not include these limitations due to the new source determination dates for: (1) coal preparation plants (January 31, 1982) and the initiation or major alteration of coal mining activities (May 4, 1984). Permittees with operations that can qualify as an existing source are required to obtain an individual KPDES permit in order to avail themselves of these limitations.

This general permit includes only requirements for acid mine drainage and acid coal preparation plants and coal preparation plant associated areas. DOW has elected to not include alkaline mine drainage or alkaline coal preparation plants and coal preparation plant associated areas under this general permit due to the minimal number of operations previously classified as such. Alkaline mine drainage [40 CFR 434 Subpart D, 40 CFR 434.52(b)(2), 40 CFR 434.53(b)(2), and 40 CFR 434.55(b)(2)] and alkaline coal preparation plants and coal preparation plant associated areas [40 CFR 434.22(b), 40 CFR 434.23(b) and 40 CFR 434.25(b)] do not include requirements for total recoverable manganese. Permittees with operations that can qualify as alkaline are required to obtain an individual KPDES permit in order to avail themselves of this reduction in effluent requirements.

The following 2009 Coal General Permit exclusions have not been included in this general permit:

1. New or expanded operations proposing to discharge directly into or to a direct first or second order tributary of a publicly owned lake or reservoir as listed in 401 KAR 10:026, Section 5;
2. New or expanded operations proposing to discharge directly into a water body that has been categorized as an Exceptional Water (EW) as listed in 401 KAR 10:030;
3. New or expanded operations involving the dredging of coal from waters of the Commonwealth;
4. New or expanded operations involving the wet beneficiation (washing) of coal
5. New or expanded operations involving the disposal of coal slurry into waters of the Commonwealth or underground injection;
6. Any operation using or proposing to use Anhydrous Ammonia as a treatment option; or
7. Any operation proposing to dispose of solid or special wastes within the mining area

DOW has determined that the removal of these specific exclusions is appropriate because the new general permits include effluent limits and conditions specific to these categories of discharges, including whole effluent toxicity (WET) limits and biological-based limits, and in-stream water quality trend analyses for specific conductivity, total suspended solids, and sulfates which are used as triggers for an enforceable adaptive management plan. These limitations and conditions are a significant improvement over the 2009 general permit. Although these exclusions may no longer be present in the general permits, exclusion 6 in Section 1.2 of the general permits provides that DOW may require any discharger to obtain an individual permit that would be more appropriately controlled using an individual permit.

Other reasons for removing the exclusions that were in the 2009 general permit include:

Due to changes in the mining regulations contained in 405 KAR there is only one (1) permitted active coal dredging operation within the physical and political boundaries of Kentucky located on the Big Sandy River. The individual KPDES permit that covers this operation has conditions that have not been incorporated into the general therefore it would not be eligible for coverage based on the current requirements of its individual permit;

Due to a number of factors related to the precision of application, the cost, supply and other non-environmental regulatory constraints the use of anhydrous ammonia as a viable treatment option has been abandoned; and

In 1992 the exclusion for the disposal of solid or special wastes within the mining area was added to the general permit in the anticipation that coal ash from coal fired power plants would be disposed of within the mine area in accordance with statutory and regulatory changes in 1988. Only one coal operation since 1988 has proposed to accept coal ash for disposal in the mine area.

DOW has modified the OSRW exclusion to address coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been designated as an OSRW due its support of a federally listed Threatened or Endangered Species as listed in Table C of 401 KAR 10:026, Section 5. This is a change from the 2009 Coal General Permit which excluded all OSRWs from general permit coverage. The reason for this change in the exclusion is that OSRWs that do not support such species are categorized under Kentucky's Antidegradation Policy Implementation Procedures as Exceptional Waters and thus the existing water quality of these waterbodies may be lowered in accordance with 401 KAR 10:030, Section 1(2)(b). However if DOW determines that a coal operation that discharges to such a water body is better addressed by an individual permit, then an individual permit can be required pursuant to exclusion 6 in Section 1.2. The same is true for any water body that has been identified as supporting a federally listed Threatened or Endangered Species but that water body has not yet been listed in Table C of 401 KAR 10:026, Section 5.

The general permit water quality-based effluent limitations, which are equivalent to the water quality standards, ensure that discharges permitted pursuant to the general permit whether discharged to an impaired or unimpaired water will not cause or contribute to an impairment of a water body for which a TMDL has not been developed because the water quality standard must be met in the discharge itself. Kentucky has determined that the permit conditions in the general permits, the proposed effluent limitations, trend analyses, adaptive management requirements, etc., provide assurance that the discharge will not cause or contribute to existing violations of WQS. In the case of a pollutant of concern that is causing or contributing to an impairment of a water body for which a TMDL has not been developed, the general permit does not already limit, and reasonable potential has been demonstrated for that pollutant, DOW will require an individual permit in accordance with exclusion 6 in Section 1.2.

4.1. Reasonable Potential Analysis

The parameters selected for effluent limitations and monitoring were primarily determined based on a reasonable potential analysis (RPA) performed by DOW utilizing data submitted in response to the requirements of the current Coal General Permit and data submitted as part of the Notice of Intent (NOI) process for seeking coverage under that permit. The RPA compares the discharge levels of a pollutant to the calculated WQBEL for that pollutant. In accordance with DOW's RPA procedures, if the pollutant concentration of the discharge is 70% or greater of the calculated WQBEL then a permit monitoring requirement for that pollutant may be appropriate. If the pollutant concentration of the discharge is greater than 90% of the calculated WQBEL, then a permit effluent limitation for that pollutant is required.

Table 8 summarizes the RPA for WQBELs performed on the data submitted in compliance with the requirements of the Coal General Permit (effective 08/01/2009). In performing the RPA, DOW assumed the worst case scenario for receiving water 7Q10 low flow conditions, the effluent comprises the stream. Under such conditions the discharge concentrations are compared directly to the water quality standards for acute and chronic aquatic life criterions and human health fish consumption criteria. Although the human health domestic water supply criteria apply at the point of withdrawal DOW compared the discharge concentrations directly to these values. Based on the RPA information summarized in Table 8, DOW did not impose effluent limitations or monitoring in this general permit for the following pollutants: (1) arsenic, (2) cadmium, (3) copper, (4) free cyanide, (5) lead, (6) mercury, (7) nickel, (8) silver or (9) zinc.

The pollutants for which reasonable potential was performed are those that analytical effluent data must be provided in accordance with the application requirements in 40 C.F.R. § 122.21(g)(7)(v) as amended by Note 1. [At 46 FR 2046, Jan. 8, 1981, the Environmental Protection Agency suspended until further notice §122.21(g)(7)(v)(A) and the corresponding portions of Item V-C of the NPDES application Form 2C as they apply to coal mines. This suspension continues in effect.]. These required pollutants are consistent with those reviewed by EPA during the development of the effluent limitation guidelines for the coal mining industry and contemplated by DOW in developing this general permit. Other pollutants that produce an acute or chronic toxic effect are addressed by WET testing pursuant to 401 KAR 10:031, Sections 2 and 4.

DOW will perform RPA on operations required to submit an electronic NOI (eNOI) and should reasonable potential (RP) be demonstrated that an effluent limitation is required for one or more of these pollutants, an individual permit will be required pursuant to exclusion 5 under Section 1.2 of the permit and this Fact Sheet. Should DOW determine that an individual KPDES is required, the applicant shall submit completed Forms 1 and C within 30 days of notification by DOW.

Conductivity

Based on data available to DOW for surface waters in eastern Kentucky related certain coal mine discharges, DOW has determined that reasonable potential exists for in-stream sediment control structures as defined by this permit to cause or contribute to an excursion of the narrative water quality standard for specific conductance.

TABLE 8.

Percentile Exceeding Standard

Pollutant	DWS RP**			Fish RP			Effluent Hardness					
							RP Acute			RP Chronic		
	70%	90%	100%	70%	90%	100%	70%	90%	100%	70%	90%	100%
Antimony	8%	4%	4%	0%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	1%	1%	1%	N/A	N/A	N/A	0%	0%	0%	0%	0%	0%
Beryllium	0%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium*	0%	0%	0%	N/A	N/A	N/A	0%	0%	0%	6%	6%	5%
Chromium	0%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copper*	0%	0%	0%	N/A	N/A	N/A	2%	1%	1%	2%	2%	2%
Cyanide, Free	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lead*	0%	0%	0%	N/A	N/A	N/A	0%	0%	0%	3%	3%	3%
Mercury	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Nickel*	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	2%
Phenol	0%	0%	0%	0%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A
Silver*	N/A	N/A	N/A	N/A	N/A	N/A	0%	0%	0%	N/A	N/A	N/A
Thallium	3%	3%	3%	2%	1%	1%	N/A	N/A	N/A	N/A	N/A	N/A
Zinc*	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

*Hardness based parameters

**DWS comparisons is a direct comparisons to the WQ standard which is applicable at the point of withdrawal.

N/A means no applicable due to no water quality criterion

Table 9 illustrates the percentage of in-stream sediment control structures, for the purposes of this permit in-stream sediment control structures are those sediment control structures that are constructed within the

natural drainage way of a water body, have a continuous discharge, or have an average discharge duration of 96 hours or more, that exhibited RP for the acute and chronic selenium WQBELs for data collected from NOIs filed from 2009 thru 2013. Based on these percentages, DOW determined that RP for chronic WQBELs existed for a sufficient number of in-stream sediment control structures to justify the imposition of selenium requirements.

TABLE 9.							
In-stream Sediment Control Structure	**# of Samples**	**Chronic (µg/l)**			**Acute (20 µg/l)**		
		> 3.5	**> 4.5**	**> 5**	**> 14**	**> 18**	**> 20**
	401	25.44%	18.95%	15.96%	2.99%	1.25%	1.00%

DOW also evaluated the data collected from 2009 thru 2013 for non-in-stream sediment control structures, sediment control structures that do not meet the definition of an in-stream sediment control structure, e.g., bench ponds. Table 10 illustrates the percentage of non-in-stream sediment control structures that exhibited RP for acute selenium WQBELs.

TABLE 10.				
Non-In-stream Sediment Control Structure	**# of Samples**	**Acute (20 µg/l)**		
		> 14	**> 18**	**> 20**
	145	2.07%	1.38%	0.69%

Such structures are characterized by short term, less than 96 hour duration, sporadic discharges. Under such conditions DOW has determined that chronic concerns are generally not present and therefore performs RPA on acute WQBELs. Based on the RPA, DOW determined that RP for acute WQBELs generally does not exist for non-in-stream sediment control structures.

4.2. Flow Duration

The aquatic life water quality criteria are developed on magnitude, duration and frequency. Chronic criteria are expressed as maximum four day average concentrations that are not to be exceeded more than once every three years on average. Acute criteria are expressed as the maximum one hour average concentration not to be exceeded more than once every three years on average. Therefore the duration of a discharge is essential in determining the applicability of a criterion. Discharges that are continuous would be subject to both chronic and acute criteria. Sporadic short term discharges would not be of sufficient duration to cause chronic concerns. Therefore acute concerns will be evaluated for such discharges.

To determine if chronic concerns exist, DOW is including within the eNOI questions related to flow duration. The applicant will be required to indicate if a sediment control structure has a continuous discharge, average discharge duration of 96 hours or greater in length or average discharge duration that is less than 96 hours in length. Typically in-stream sediment control structures exhibit either continuous or average discharge durations of 96 hours or greater and non-in-stream sediment control structures, defined as bench ponds for the purposes of this permit, exhibit average discharge durations less than 96 hours in length.

All in-stream sediment control structures and any non-in-stream sediment control structure that exhibits either continuous or average discharge durations of greater than 96 hours in length shall be subject to both chronic and acute WQBELs. All bench sediment structures, except for those that exhibit either continuous or average discharge durations of greater than 96 hours in length, shall be subject to acute WQBELs only.

4.3. Underground Workings, and Coal Preparation Plants and Associated Areas

4.3.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.3.2. Total Suspended Solids

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) applicable to coal preparation plants and coal preparation plant associated areas [40 CFR 434.25], acid mine drainage from active surface mining and underground mining operations [40 CFR 434.35], and acid mine drainage from post mining drainage from the underground workings of an underground mine [40 CFR 434.55].

4.3.3. Total Recoverable Iron

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4. The limitations are representative of the New Source Performance Standards (NSPS) applicable to coal preparation plants and coal preparation plant associated areas [40 CFR 434.25], acid mine drainage from active surface mining and underground mining operations [40 CFR 434.35], and acid mine drainage from post mining drainage from the underground workings of an underground mine [40 CFR 434.55]. The daily maximum concentration has been set at 4.0 mg/l to protect water quality.

4.3.4. Total Recoverable Manganese

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) requirements applicable to coal preparation plants and coal preparation plant associated areas [40 CFR 434.25(a)], acid mine drainage from active surface mining and underground mining operations [40 CFR 434.35], and acid mine drainage from post mining drainage from the underground workings of an underground mine [40 CFR 434.55(b)(1)].

4.3.5. pH

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434], and 401 KAR 10:031, Section 4.

4.3.6. Acute Whole Effluent Toxicity

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)] and 401 KAR 10:031, Section 4.

4.3.7. Specific Conductivity

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.3.8. Total Sulfate

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.3.9. Total Recoverable Selenium

The monthly average effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)] and 401 KAR 10:031, Section 4. The monthly average

concentration of 5 µg/l serves both as a trigger for the collection of adequate number of fish to conduct selenium residue in fish tissue testing and as a limitation in the event the permittee is unable to collect the required number of fish. These limitations are consistent with Kentucky's water quality standards for total recoverable selenium. The incorporation on Appendix A of the collection and handling requirements established in "Methods for Collection of Selenium Residue in Fish Tissue Used to Determine KPDES Permit Compliance" is consistent with the requirements of 401 KAR 5:070, Section 3[40 CFR 122.48(a)].

The daily maximum effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)] and 40 CFR 131.21 modified by the "Alaska Rule". 40 CFR 122.44(d) requires state issued NPDES permits to include effluent limits based on applicable state water quality standards. The "Alaska Rule" modification of 40 CFR 131.21 requires state water quality standards adopted after May 30, 2000 be approved by EPA before those standards may be used to develop water quality-based NPDES permit effluent limitations. In 2013 DOW revised the acute selenium criterion; however, EPA did not approve that criterion. Therefore, the revised acute criterion cannot be used to develop KPDES permit water quality-based effluent limitations. In such cases the State water quality standards last approved by EPA shall be the applicable water quality standard for purposes of KPDES permitting. In Kentucky the last selenium acute criterion approve by EPA is 20 µg/l; thus DOW shall impose in KPDES permits 20 µg/l as the daily maximum effluent limitation for selenium.

4.3.10. Precipitation Volume

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)]. Monitoring and reporting of precipitation volume is a conditional requirement that applies when the permittee is seeking alternate precipitation effluent limitations for a specific discharge event. The precipitation volume along with the type of drainage received by the sediment control structure determines eligibility.

4.4. In-Stream Sediment Control Structures – Active Mining

4.4.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.4.2. Total Suspended Solids

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) acid mine drainage from active surface mining operations [40 CFR 434.35].

4.4.3. Total Recoverable Iron

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4. The limitations are representative of the New Source Performance Standards (NSPS) applicable to acid mine drainage from active surface mining operations [40 CFR 434.35]. The daily maximum concentration has been set at 4.0 mg/l to protect water quality.

4.4.4. Total Recoverable Manganese

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) requirements applicable to acid mine drainage from active surface mining operations [40 CFR 434.35].

4.4.5. pH

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4.

4.4.6. Chronic Whole Effluent Toxicity

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)] and 401 KAR 10:031, Section 4. Chronic whole effluent toxicity is imposed in lieu of acute whole effluent toxicity due to in-stream sediment control structures exhibit base flows during dry weather conditions.

4.4.7. Specific Conductivity

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.4.8. Total Sulfate

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.4.9. Total Recoverable Selenium

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)] and 401 KAR 10:031, Section 4. The monthly average concentration of 5 µg/l serves both as a trigger for the collection of adequate number of fish to conduct selenium residue in fish tissue testing, and as a limitation in the event the permittee is unable to collect the required number of fish. These limitations are consistent with Kentucky's water quality standards for total recoverable selenium. The incorporation on Appendix A of the collection and handling requirements established in "Methods for Collection of Selenium Residue in Fish Tissue Used to Determine KPDES Permit Compliance" is consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(a)].

The daily maximum effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)] and 40 CFR 131.21 modified by the "Alaska Rule". 40 CFR 122.44(d) requires state issued NPDES permits to include effluent limits based on applicable state water quality standards. The "Alaska Rule" modification of 40 CFR 131.21 requires state water quality standards adopted after May 30, 2000 be approved by EPA before those standards may be used to develop water quality-based NPDES permit effluent limitations. In 2013 DOW revised the acute selenium criterion; however, EPA did not approve that criterion. Therefore, the revised acute criterion cannot be used to develop KPDES permit water quality-based effluent limitations. In such cases the State water quality standards last approved by EPA shall be the applicable water quality standard for purposes of KPDES permitting. In Kentucky the last selenium acute criterion approve by EPA is 20 µg/l; thus DOW shall impose in KPDES permits 20 µg/l as the daily maximum effluent limitation for selenium.

4.4.10. Precipitation Volume

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)]. Monitoring and reporting of precipitation volume is a conditional requirement that applies when the permittee is seeking alternate precipitation effluent limitations for a specific discharge event. The precipitation volume along with the type of drainage received by the sediment control structure determines eligibility.

4.5. In-Stream Sediment Control Structures – Reclamation Areas

Effluent limitations for reclamation areas are applicable to sediment control structures that receive drainage from the "surface area of a coal mine which has been returned to the required contour and on which revegetation (specifically, seeding or planting) work has commenced". These limits are available

on an outfall by outfall, i.e. sediment control structure by sediment control structure basis. In order for an outfall to be transitioned from active mining to reclamation area status, the following prerequisites must be met.

(1) There is no drainage from:
    a. Active surface mine areas,
    b. Underground workings of underground mines (active or post mining), or
    c. Coal preparation plant or coal preparation associated area;
(2) The effluent from the sediment control structure has been substantially in compliance with the WQBELs.

In general, DOW is of the opinion that once the surface area of a coal mine has been returned to the required contour and revegetation has commenced, there should be no reasonable potential for violations of water quality standards. In order to support and justify this opinion, DOW will not transition an outfall to reclamation area limitations if there is not substantial compliance with the water quality-based effluent limitations applied to the active mining areas.

4.5.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.5.2. Settleable Solids

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) applicable to reclamation areas [40 CFR 434.55(a)].

4.5.3. pH

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4.

4.5.4. Specific Conductivity

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.5.5. Total Sulfate

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.5.6. Precipitation Volume

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)]. Monitoring and reporting of precipitation volume is a conditional requirement that applies when the permittee is seeking alternate precipitation effluent limitations for a specific discharge event. The precipitation volume along with the type of drainage received by the sediment control structure determines eligibility.

4.6. Bench Sediment Control Structures – Active Mining

Due to the sporadic nature of discharges, i.e. discharges that occur only as a result of major precipitation events from bench sediment control structures, DOW has determined that reasonable potential for these discharges to result in violations of the chronic water quality standards does not exist. Therefore the imposition of the total recoverable selenium chronic trigger and whole effluent toxicity testing to implement narrative water quality standards is not necessary.

The basis for this determination is the reasonable potential analysis for selenium on bench sediment control structure discharges, the results of which are provided in Table 10 of the KYGE40000 Fact Sheet. The results of that analysis indicate that approximately 1.4% of the samples analyzed exhibited reasonable potential of 90% or greater of the current acute water quality standard. Based on this analysis DOW determined that reasonable potential did not exist to justify imposition of selenium monitoring or limitations on bench sediment control structures in KYGE40000. However, if reasonable potential for exceedance of the applicable water quality standard for selenium is demonstrated by a facility in a bench sediment control structure discharge as a part of the application process, that facility will be required to obtain an individual permit.

4.6.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.6.2. Total Suspended Solids

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) acid mine drainage from active surface mining operations [40 CFR 434.35].

4.6.3. Total Recoverable Iron

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4. The limitations are representative of the New Source Performance Standards (NSPS) applicable to acid mine drainage from active surface mining operations [40 CFR 434.35]. The daily maximum concentration has been set at 4.0 mg/l to protect water quality.

4.6.4. Total Recoverable Manganese

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) requirements applicable to acid mine drainage from active surface mining operations [40 CFR 434.35].

4.6.5. pH

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4.

4.6.6. Specific Conductivity

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.6.7. Total Sulfate

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.6.8. Precipitation Volume

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)]. Monitoring and reporting of precipitation volume is a conditional requirement that applies when the permittee is seeking alternate precipitation effluent limitations for a specific discharge event. The precipitation volume along with the type of drainage received by the sediment control structure determines eligibility.

4.7. Bench Sediment Control Structures – Reclamation Areas

Effluent limitations for reclamation areas are applicable to sediment control structures that receive drainage from the "surface area of a coal mine which has been returned to the required contour and on which revegetation (specifically, seeding or planting) work has commenced". These limits are available on an outfall by outfall, i.e. sediment control structure by sediment control structure basis. In order for an outfall to be transitioned from active mining to reclamation area status, the following prerequisites must be met.

(1) There is no drainage from:
    a. Active surface mine areas,
    b. Underground workings of underground mines (active or post mining), or
    c. Coal preparation plant or coal preparation associated area;
(2) The effluent from the sediment control structure has been substantially in compliance with the WQBELs.

In general DOW is of the opinion that once the surface area of a coal mine has been returned to the required contour and revegetation has commenced, there should be no reasonable potential for violations of water quality standards. In order to support and justify this opinion, DOW will not transition an outfall to reclamation area limitations if there is not substantial compliance with the water quality-based effluent limitations applied to the active mining areas.

4.7.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.7.2. Settleable Solids

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44] and 401 KAR 5:065, Section 2(9) [40 CFR 434]. The limitations are representative of the New Source Performance Standards (NSPS) applicable to reclamation areas [40 CFR 434.55(a)].

4.7.3. pH

The effluent limitations for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44], 401 KAR 5:065, Section 2(9) [40 CFR 434] and 401 KAR 10:031, Section 4.

4.7.4. Specific Conductivity

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.7.5. Total Sulfate

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)].

4.7.6. Precipitation Volume

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:070, Section 3 [40 CFR 122.48(b)]. Monitoring and reporting of precipitation volume is a conditional requirement that applies when the permittee is seeking alternate precipitation effluent limitations for a specific discharge event. The precipitation volume along with the type of drainage received by the sediment control structure determines eligibility.

4.8. Sanitary Wastewaters

Sanitary wastewaters are biochemically degradable wastewaters generated by bathhouses and offices located on a mine site or at a coal preparation plant. Such effluents shall, at a minimum, meet the technology-based treatment standards of secondary treatment defined in 401 KAR 5:045, Section 2.

4.8.1. Discharge to Other Treatment Plant

When wastewaters subject to technology-based effluent limitations are commingled with other wastewaters in another treatment plant such as a sediment control pond, determination of compliance with the technology-based standards may not be possible. Therefore in such cases 401 KAR 5:065, Section 2(5) [40 CFR 122.45(h)] requires the imposition of the technology-based standards at an internal monitoring point.

4.8.1.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.8.1.2. Biochemical Oxygen Demand

The effluent limitations for this parameter are consistent with the secondary treatment for biochemically degradable waste requirements of 401 KAR 5:045, Section 2(1).

4.8.1.3. Total Suspended Solids

The effluent limitations for this parameter are consistent with the biochemically degradable waste requirements of 401 KAR 5:045, Section 2(2).

4.8.2. Discharge to Water Body

4.8.2.1. Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(i)(1)(ii)].

4.8.2.2. Carbonaceous Biochemical Oxygen Demand

The effluent limitations for this parameter are consistent with the biochemically degradable waste requirements of 401 KAR 5:045, Section 2(1) and water quality standards in 401 KAR 10:031, Section 4.

4.8.2.3. Total Suspended Solids

The effluent limitations for this parameter are consistent with the biochemically degradable waste requirements of 401 KAR 5:045, Section 2(2).

4.8.2.4. Ammonia, Dissolved Oxygen, pH and Total Residual Chlorine

The effluent limitations for these parameters consistent with the water quality standards for unionized ammonia in 401 KAR 10:031, Section 4.

4.8.2.5. E. Coli

The effluent limitations for this parameter consistent with the water quality standards for dissolved oxygen in 401 KAR 10:031, Section 6.

SECTION 5

SCHEDULE OF COMPLIANCE
AND
OTHER CONDITIONS

5. SCHEDULE OF COMPLIANCE AND OTHER CONDITIONS

5.1. Schedule of Compliance

Section 303(e)(3)(F) of the CWA authorizes the use of a compliance schedule to meet effluent requirements based on new or revised water quality standards provided the compliance schedule duration does not exceed that specified in Sections 301(b)(1), 301(b)(2), 306 and 307. DOW anticipates existing facilities will need to make modifications to their operations to achieve compliance with the revised water quality standards for selenium; therefore a compliance schedule has been included in the permits. DOW agrees that 40 C.F.R. §122.47(a)(1) requires the compliance schedule be designed to achieve compliance as soon as possible. In this case the language has been modified to require compliance "as soon as possible but no later than January 1, 2016".

The compliance schedule for existing facilities implementing a new requirement is provided in 40 CFR 122.47(a). 40 CFR 122.47(a) states that a permit may when appropriate specify a schedule of compliance leading to compliance with the CWA and regulations. Monitoring is a regulatory requirement established in 40 CFR 122.48(b) and is further supported by 40 CFR 122.41(j) which establishes how monitoring results are to be reported.

In addition, concerns have been expressed regarding the availability of sufficient laboratory infrastructure in the state and the region for the substantial demand on sample collection, fish tissue analysis and WET analysis created by these new general permit requirements. It is estimated that DOW will receive between 1200 and 1500 NOIs for coverage under these general permits. The immediate demand for these services may surpass the local and regional capacities.

Finally, due to the expected volume of renewal NOIs the agency has changed due date for submission of the NOI to180 days from the effective date of the permit. As a practical matter, because the agency will be processing new and expanded operations for the first several months after this permit becomes effective, the compliance schedule for existing facilities will only extend compliance with the new general permit coverage a few months.

5.2. Alternate Precipitation Effluent Limitations

The availability of alternate precipitation effluent limitations for technology-based effluent requirements is authorized by 401 KAR 5:065, Section 2(9) [40 CFR 434.63].

5.3. Antidegradation

The conditions of 401 KAR 10:029, Section 1 have been satisfied. In accordance with 401 KAR 10:030, Section 1(3)(b)(2) DOW is requiring new and expanded operations to submit with the eNOI a Socioeconomic Demonstration and Alternatives Analysis (SDAA). It is the practice of DOW to public notice the acceptance of a SDAA for a period of 15 days to meet the public participation requirements of 401 KAR 10:029, Section 1(2).

5.4. In-Stream Monitoring Requirements

The imposition of in-stream biological trending and water quality trending requirements is consistent with the requirements of 401 KAR 5:065, Section 2(4) [40 CFR 122.44(d)]. These requirements are implemented through Section 5 and Subsection 6.9 of the permit and are in the judgment of DOW necessary to determine compliance with the narrative standards for specific conductance.

5.5. Best Management Practices Plan

The imposition of a best management practices plan is consistent with 401 KAR 5:065, Section 2(4) [40 CFR 122.44(k)].

5.6. Notice of Intent

The information requirements of the Notice of Intent are consistent with the requirements of 401 KAR 5:065, Section 2(a)1a [40 CFR 122.28].

5.7. Certified Operator

This requirement for the operation of a sanitary wastewater treatment plant is consistent with 401 KAR 5:010.

5.8. Certified Laboratory

This requirement for environmental analysis to be performed by a certified laboratory is consistent with the requirements of 401 KAR 5:320, Section 3.

5.9. Continuation of Expiring Permit

Continuation of coverage under this permit after its expiration is consistent with the 401 KAR 5:060, Section 2(4).

5.10. Substantially Identical Outfalls

Substantially identical outfalls are outfalls that receive drainage from the same type of activities, utilize the same type of sediment control structures, are within the same watershed, are expected to produce similar effluents and would be subject to the same effluent limitations. In such cases, DOW may authorize the permittee, upon request, to monitor representative outfalls for compliance purposes. Such requests shall be made at the time of coverage or modification of coverage under this general permit, and shall include sufficient documentation to justify the selection of the representative outfalls. If approved, the permittee shall submit the data from the representative outfall on the DMRs for each outfall substantially similar to the representative outfall. Violations, corrective actions, and/or selenium fish tissue monitoring triggered by monitoring results from the representative outfall shall apply to all substantially identical outfalls. The Eastern Kentucky Coal General Permit Coverage Letter (EKCL) will identify DOW approved representative outfalls and those outfalls deemed to be substantially identical.

DOW is providing this option to permittees to address logistics and costs associated with the sampling and monitoring the conditions of this permit. The use of representative outfalls is consistent with the requirements of 401 KAR 5:065, Section 2(1) [40 CFR 122.41(j)(1)].

5.11. Effluent Data for New Operations

Within two (2) years of commencing discharge new operations shall submit to DOW actual discharge data for the pollutants required by the eNOI.

SECTION 6

OTHER INFORMATION

6. OTHER INFORMATION

6.1. Permit Duration

The permit duration shall be five (5) years in length from the effective date unless modified or reissued. This permit includes facilities in all five Basin Management Units of the Kentucky Watershed Management Framework.

6.2. Permit and Public Notice Information

The draft permit, fact sheet and public notice are available on the DOW Public Notice web page and the Department of Environmental Protection's Pending Approvals Search web page at:

http://water.ky.gov/Pages/PublicNotices.aspx:

6.3. References and Cited Documents

All material and documents referenced or cited in this fact sheet are parts of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the Division of Water's Open Records Coordinator at (502) 564-3410 or by e-mail at DEP.KORA@ky.gov.