

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

7-17-03 CB

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COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RO
FRANKFORT KY 40601

10 52 3 18

MAR 13 2006



1-02005-0402

Jimmie C. Hodges, Site Manager
United States Department of Energy
Post Office Box 1410
Paducah, Kentucky 42001

Re: NPDES No. **KY0004049**
McCracken County, Kentucky

Dear Mr. Hodges:

Enclosed is the Kentucky Pollutant Discharge Elimination System (KPDES) permit for Paducah Gaseous Diffusion Plant. This action constitutes a final permit issuance under 401 KAR 5:075 pursuant to KRS 224.16-050.

This permit will become effective on the date indicated in the attached permit provided that no request for adjudication is granted. All provisions of the permit will be effective and enforceable in accordance with 401 KAR 5:075 unless stayed by the Hearing Officer under Sections 11 and 13.

Any demand for a hearing on the permit shall be filed in accordance with the procedures specified in KRS 224.10-420, 224.10-440, 224.10-470 and any regulations promulgated thereto. Any person aggrieved by the issuance of a permit final decision may demand a hearing pursuant to KRS 224.10-420(2) within thirty (30) days from the date of the issuance of this letter. Two copies of request for hearing should be submitted in writing to the Natural Resources and Environmental Protection Cabinet, Office of Administrative Hearings, 35-36 Fountain Place, Frankfort, Kentucky 40601 and the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601. For your record keeping purposes, it is recommended that these requests be sent by certified mail. The written request must conform to the appropriate statutes referenced above.

If you have any questions regarding the KPDES decision, please contact Ms. Judy Zeigler, Inventory and Data Management Section, KPDES Branch, at (502) 564-2225, extension 465.

Further information on procedures and legal matters pertaining to the hearing request may be obtained by contacting the Hon. Barbara Foster, Division of Hearings, at (502) 564-7312.

Sincerely,

Jack A. Wilson, Director
Division of Water

JAW :NG
Enclosure
c: U.S. EPA Region IV
Orsanco
Karen Exton
Jon Maybriar
Paducah Regional Office



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KPDES



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

PERMIT NO.: KY0004049

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

United States Department of Energy (USDOE)
P.O. Box 1410
Paducah, Kentucky 42001

is authorized to discharge from a facility located at

United States Department of Energy
Paducah Gaseous Diffusion Plant (PGDP)
5600 Hobbs Road
Paducah, McCracken County, Kentucky

to receiving waters named

Outfalls 001, 015 and 017 are to Big Bayou Creek at mile points 5.6, 6.2 and 7.1.

Outfall 019 is to an unnamed tributary of Little Bayou Creek at mile point 0.25.

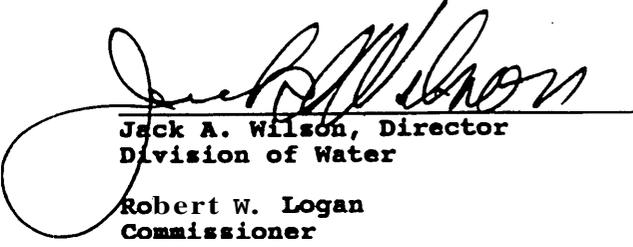
in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, IV and V hereof. The permit consists of this cover sheet, and Part I 3 page(s), Part II 1 page(s), Part III 1 page(s), Part IV 4 page(s) and Part V 3 page(s).

This permit shall become effective on **APR 01 1998**

This permit and the authorization to discharge shall expire at midnight, **MAR 31 20**

MAR 13 1998

Date Signed


Jack A. Wilson, Director
Division of Water

Robert W. Logan
Commissioner

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, Kentucky 40601

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from outfall(s) serial number(s): 001 - Combined treated wastewaters from the C-752 Waste Storage and Treatment Building, the C-616 Wastewater Treatment Facility, the Vortec Vitrification Project and C-617 Northwest Plume Interim Remedial Action Pilot Plant, purge development and decontamination waters, and miscellaneous untreated nonprocess wastewaters associated with the C-335, C-337, C-535, C-537, **C-746-A** and C-616 buildings and ancillary areas, C-600 Steam Plant and C-614 Pump and Treat Facility.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	lbs/day		Other Units (Specify)		Measurement Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow (MGD)	Report	Report	N/A	N/A	1/Week	Instantaneous
Discharge Temperature °F	N/A	N/A	89	Report	1/Week	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Week	Grab
Total Residual Chlorine (mg/l)	N/A	N/A	Report	Report	1/Week	Grab
Total Phosphorous (mg/l)	N/A	N/A	1.0	1.0	1/Week	Grab
Hardness (as mg/l CaCO ₃)	N/A	N/A	Report	Report	1/Month	Grab
Trichloroethylene (mg/l)	N/A	N/A	0.0807	Report	1/Month	Grab
Polychlorinated Biphenyls	N/A	N/A	Report	Report	1/Month	Grab
Chronic Toxicity (TU _c)	N/A	N/A	Report	1.00	1/Quarter	3 24 hr. composites
Total Uranium (mg/l)	N/A	N/A	Report	Report	1/Quarter	Grab ²
Dissolved Alpha (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab ²
Suspended Alpha (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab ²
Dissolved Beta (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab ²
Suspended Beta (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab ²
Technetium-99 (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab ²
Total Recoverable Metals'	N/A	N/A	Report	Report	1/Quarter	Grab

The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/Week by grab sample. The maximum pH of 9.0 standard units shall become effective October 1, 1998. Until that time, the maximum pH shall not exceed 10.5 standard units.

'Total Recoverable Metals means iron and those metals listed on Form C, Part C - Metals, Cyanide and Total Phenols.

'Composite samples may be used for continuous discharges

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): nearest accessible point after final treatment, but prior to actual discharge or mixing with receiving waters.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from outfall(s) serial number(s): 015 - Surface runoff from the west side of the facility, 017 - Surface runoff from the extreme southern area of facility, consisting largely of UF₆ cylinder storage and 019 - Leachate and runoff from the covered areas of the new contained landfill north of the plant.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>lbs/day</u>		<u>Other Units (Specify)</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>		
Flow (MGD)	Report	Report	N/A	N/A	1/Month	Instantaneous
Total Suspended Solids'	Report	Report	30	60	1/Month	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Month	Grab
Polychlorinated Biphenyls (µg/l)	N/A	N/A	Report	Report	1/Month	Grab
Hardness (as mg/l CaCO ₃)	N/A	N/A	Report	Report	1/Month	Grab
Acute Toxicity (TU)	N/A	N/A	Report	1.00	1/Quarter	Grab
Total Uranium (mg/l)	N/A	N/A	Report	Report	1/Quarter	Grab
Dissolved Alpha (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab
Suspended Alpha (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab
Dissolved Beta (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab
Suspended Beta (pCi/l)	N/A	N/A	Report	Report	1/Quarter	Grab
Total Recoverable Metals'	N/A	N/A	Report	Report	1/Quarter	Grab

The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/Month by grab sample.

'This parameter applies only to Outfall 019.

'Total Recoverable Metals means iron and those metals listed on Form C, Part C - Metals, Cyanide and Total Phenols.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

samples taken in compliance with the monitoring requirements specified above shall be taken during a period of discharge during the normal working hours of 8:00 am to 5:00 pm Monday through Friday except holidays at the following location(s): nearest accessible point after final treatment, but prior to actual discharge or mixing with receiving waters.

B. Schedule of Compliance

The permittee shall achieve compliance with all requirements on the effective date of this permit.

C. Big Bayou Creek and Little Bayou Creek Watershed Monitoring Program

As previously stated in the fact sheet for this permit USEC has leased gaseous diffusion process for the enrichment of uranium from the DOE and as such is obtaining a separate permit for a number of outfalls previously covered by this permit. Also as previously stated in the fact sheet DOE is currently involved with the cleanup of historic contamination and spills at the facility. The storm water runoff from the areas being remediated and those to be remediated by DOE can have a direct impact on the quality of the discharges through the outfalls now covered under the USEC permit. In light of the obvious compliance and enforcement problems this arrangement presents the Division of Water is proposing that DOE conduct an ongoing watershed monitoring program to determine the success of the cleanup efforts in lieu of establishing end of pipe limits on PCBs. This watershed monitoring program for Big Bayou and Little Bayou watersheds shall be developed using the guidelines issued by the Division of Water in "Methods for Assessing Biological Integrity of Surface Waters" and shall be reviewed by the Division of Water. The goal of this monitoring program will be to ensure that the DOE cleanup will result in these watersheds achieving compliance with the applicable water quality criteria. To that end within ninety (90) days of the effective date of the permit DOE shall submit to the Division of Water a study plan detailing the methodology for the monitoring program. Within ninety (90) days of the Division of Water review and concurrence the study plan DOE shall commence the implementation of the plan. Annual reports shall be submitted to the Division of Water by April 28th of the following year. The Division of Water may request more frequent reports if circumstances warrant such a submission.

D. Priority Pollutants

During the term of the permit the permittee shall conduct at least two complete scans for those pollutants listed on Form C, Section V, Part C from each designated outfall and shall be submitted to the Division of Water.

STANDARD CONDITIONS FOR KPDES PERMIT

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

PART III

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each month must be reported on a preprinted Discharge Monitoring Report (DMR) Form which will be mailed to you. Each month's completed DMR must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the month for which monitoring results were obtained.

Division of Water
Paducah Regional Office
4500 Clarks River Road
Paducah, Kentucky 42003
ATTN: Mr. Jeff Cummins

Kentucky Natural Resources and
Environmental Protection Cabinet
Dept. for Environmental Protection
Division of Water
Inventory & Data Management
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 thru 5:085, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Cooling Water Additives, FIFRA, Mollusk Control

The discharge of any product registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) in cooling water which ultimately may be released to the waters of the Commonwealth is prohibited, except Herbicides, unless specifically identified and authorized by the KPDES permit. In the event the permittee needs to use a biocide or chemical, not previously reported, for mollusk control or other purpose the permittee shall submit sufficient information, a minimum of thirty (30) days prior to the commencement of use of said biocides or chemicals, to the Division of Water for review and establishment of appropriate control parameters. Such information requirements shall include:

1. Name and general composition of biocide or chemical,
2. 96-hour median tolerance limit data for organisms representative of the biota of the water way into which the discharge shall occur,
3. Quantities to be used,
4. Frequencies of use,
5. Proposed discharge concentrations, and
6. EPA registration number, if applicable.

PART IV
CHRONIC CONCERNS
Biomonitoring

In accordance with Part I of this permit, the permittee shall initiate the series of tests described below within 30 days of the effective date of this permit to evaluate wastewater toxicity of the discharge from outfall(s) 001.

1. Test Requirements

- A. The permittee shall perform one short-term fathead minnow (Pimephales promelas) growth test and one short-term daphnid (Ceriodaphnia sp.) life-cycle test. Tests shall be conducted with appropriate replicates of 100% effluent, a control and a minimum of four evenly spaced serial dilutions of 100% effluent. If the permit limit is greater than 77% (TU, <1.3), then one dilution must be 100%. For all other conditions, two dilutions must be above the permit concentration and two below. Controls shall be tested concurrently with effluent testing using a synthetic water. The analysis will be deemed reasonable and good only if the minimum control requirements are met (i.e. >80% survival; 60% adults with 3 broods and 15 young/female for the Ceriodaphnia test; an average 0.25 mg weight for the minnow growth test). Any test that does not meet the control acceptability criteria shall be repeated as soon as practicable within the monitoring period (i.e. monthly or quarterly). Noncompliance with the toxicity limit will be demonstrated if the IC₂₅ (inhibition concentration) for reproduction or growth is less than 100% effluent. The average reproduction for Ceriodaphnia shall be calculated by dividing the total number of live Ceriodaphnia young in each concentration by the total number of organisms used to initiate that concentration; the average growth for the fathead minnows shall be calculated by dividing the total weight of surviving minnow larvae in each replicate by the total number of organisms used to initiate that replicate.
- B. Tests shall be conducted on both species once per quarter or at a frequency to be determined by the permitting authority.

A minimum of three (3) twenty-four hour composite samples will be collected at a frequency of one sample every other day, or at a frequency to be determined by the permitting authority. For example, the first sample would be used for test initiation, day 1, and for test solution renewal on day 2. The second sample would be used for test solution renewal on days 3 and 4. The third sample would be used for test solution renewal on days 5, 6, and 7. The lapsed time from collection of the last aliquot of the composite and its first use for test initiation, or for test solution renewal shall not exceed 36 hours. Composite samples shall be chilled during collection and maintained at 4°C until used.

If after at least 4 quarters of testing during the initial year, it can be determined that Ceriodaphnia or the Fathead minnow is more sensitive, a request for testing of only that organism can be made to the Division. Upon approval, that organism can be chosen as representative and all subsequent tests can be conducted on only that organism.

2. Reporting Requirements

Results of all tests conducted with any organism shall be reported according to the most recent format provided by the Division of Water. Test results shall be submitted to the Division of Water with the next regularly scheduled discharge monitoring report.

3. Chronic Toxicity

- A. If noncompliance with the toxicity limit occurs (IC_{25} for reproduction or growth is less than 100% effluent), the permittee must conduct a second test within 15 days of the first failure. This test will be used in evaluating the persistence of the toxic event and the possible need for a toxicity reduction evaluation (TRE).

If the second test demonstrates noncompliance with the toxicity limit, the permittee will be required to perform either of the options listed below. The Division must be notified of the option selected within 5 days of the failure of this second test.

1) Accelerated Testing

Complete four (4) additional tests within 90 days of selection of this option to evaluate the frequency and degree of toxicity. The results of the two tests specified in Section 3.A and of the four additional tests will be used for purposes of this evaluation.

If results from 2 of any 6 tests show a significant noncompliance with the chronic limit (>1.2 times the TU), or results from 4 of any 6 tests show chronic toxicity (as defined in 1.A), a Toxicity Reduction Evaluation (TRE) will be required. The Division reserves the right to require a TRE in situations of recurring toxicity.

2) Toxicity Reduction Evaluation (TRE)

If it is determined that a TRE is required, a plan and implementation schedule must be submitted to the Division within 30 days of notification. The TRE shall include appropriate measures such as in-plant controls, additional wastewater treatment, or changes in the operation of the wastewater discharge to meet permit conditions. The TRE protocol shall follow that outlined in the most recent edition of EPA's guidance for conducting TRE's.

- B. If a violation of the toxicity limit occurs, different or more stringent monitoring requirements may be imposed in lieu of the normal requirements of this permit for whatever period of time is specified by the Division of Water. The Division reserves the right to require additional testing or a TRE in situations of recurring toxicity.

4. Test Methods

All test organisms, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Second Edition), EPA-600/4-91/002 and An Interpolation Estimate for Chronic Toxicity: the IC_p approach, National Effluent Toxicity Assessment Center, U.S. EPA, Technical Report 05-88, or the most recent edition of these publications.

PART IV
ACUTE CONCERNS
Biomonitoring

In accordance with Part I of this permit, the permittee shall initiate the series of tests described below within 30 days of the effective date of this permit to evaluate wastewater toxicity of the discharge from outfall(s) 015, 017 and 019.

1. Test Requirements

- A. The permittee shall perform a 48-hour static toxicity test with Ceriodaphnia sp. and a 48-hour static toxicity test with fathead minnow (Pimephales promelas). Tests shall be conducted with one grab sample and appropriate replicates of 100% effluent, a control and a minimum of four evenly spaced serial dilutions of 100% effluent. If the permit limit is greater than 77% (TU, <1.3), then one dilution must be 100%. For all other conditions, two dilutions must be above the permit concentration and two below. Testing of the effluent shall be initiated within 36 hours of each sample collection. Controls shall be conducted concurrently with effluent testing using a synthetic water. The analysis will be deemed reasonable and good only if control survival is 90% or greater in test organisms held in synthetic water. Any test that does not meet the control acceptability criteria shall be repeated as soon as practicable within the monitoring period (i.e. monthly or quarterly). Noncompliance with the toxicity limit will be demonstrated if the LC₅₀ is less than 100% effluent.
- B. Tests shall be conducted on both species, once every quarter or at a frequency to be determined by the Division of Water.

If after at least four quarters of testing during the initial year, it can be determined that Ceriodaphnia or the fathead minnow is more sensitive, a request for testing only that organism can be made to the Division. Upon approval, that organism can be chosen as representative and all subsequent tests can be conducted on only that organism.

2. Reporting Requirements

Results of all tests conducted with any organism shall be reported according to the most recent format provided by the Division of Water. Test results shall be submitted to the Division of Water with the next regularly scheduled discharge monitoring report.

3. Acute Toxicity

- A. If noncompliance with the toxicity limit occurs (the LC₅₀ is less than 100% effluent), the permittee must conduct a second test as soon as possible with sufficient rainfall. This test will be used in evaluating the persistence of the toxic event and the possible need for a toxics reduction evaluation (TRE).

If the second test demonstrates noncompliance with the toxicity limit, the permittee will be required to perform either of the options listed below. The Division must be notified of the option selected within 5 days of the failure of this second test.

1) Accelerated Testing

Complete four (4) tests within 60 days, rainfall permitting, of selection of this option to evaluate the frequency and degree of toxicity. The results of the two tests specified in Section 3.A and of the four additional tests will be used for purposes of this evaluation.

If results from 2 of any 6 tests show a significant noncompliance with the acute limit (≥ 1.2 times the TU), or results from 4 of any 6 tests show acute toxicity (as defined in 1.A), a Toxicity Reduction Evaluation (TRE) will be required. The Division reserves the right to require a TRE in situations of recurring toxicity.

2) Toxicity Reduction Evaluation (TRE)

If it is determined that a TRE is required, a plan and implementation schedule must be submitted to the Division within 30 days of notification. The TRE shall include appropriate measures such as in-plant controls, additional treatment, or changes in the operation of the wastewater discharge to meet permit conditions. The TRE protocol shall follow that outlined in the most recent edition of EPA's guidance manual for conducting TRE's.

- B. If a violation of the toxicity limit occurs, different or more stringent monitoring requirements may be imposed in lieu of the normal requirements of this permit for whatever period of time is specified by the Division of Water. The Division reserves the right to require additional testing or a TRE in situations of recurring toxicity.

4. Test Methods

All test organisms, procedures, and quality assurance criteria used shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, EPA-600/4-90/027F (4th edition) or the most recently published edition of this publication.

PART V

BEST MANAGEMENT PRACTICES

SECTION A. GENERAL CONDITIONS

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle or discharge any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act, oil, as defined in Section 311(a)(1) of the Act, and any pollutant listed as hazardous under Section 311 of the Act and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant in a reportable quantity, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

2. BMP Plan

The permittee shall maintain a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents, or minimizes the potential for, the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. Modifications of the BMP Plan shall be in accordance with the requirements of Sections 8, 9 and 10 of this Part.

Implementation

The plan shall continue in effect and shall be modified as necessary.

4. General Requirements

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings or maps.
- b. Establish specific objectives for the control of toxic and hazardous pollutants.
 - (1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - (2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants", the plan should include a prediction of the direction, rate of flow and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.

- c. Establish specific best management practices to meet the objectives identified under Paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
- d. Include any special conditions established in part B of this section.
- e. Be reviewed by plant engineering staff and the plant manager.

5. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document" and shall include the following baseline BMP's as a minimum.

- a. BMP Committee
- b. Reporting of BMP Incidents
- c. Risk Identification and Assessment
- d. Employee Training
- e. Inspections and Records
- f. Preventive Maintenance
- g. Good Housekeeping
- h. Materials Compatibility
- i. Security
- j. Materials Inventory

6. SPCC Plans

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

7. Hazardous Waste Management

The permittee shall assure the proper management of solids and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq). Management practices required under RCRA regulations shall be referenced in the BMP plan.

8. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available to representatives of the Division of Water upon request. Copies of modified BMP Plans shall be submitted within thirty (30) days of completion to the following:

Division of Water
Paducah Regional Office
4500 Clarks River Road
Paducah, Kentucky 42003
ATTN: Mr. Jeff Cummins

Kentucky Natural Resources and
Environmental Protection Cabinet
Dept. for Environmental Protection
Division of Water
Inventory & Data Management
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601

9. BMP Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. Modification for Ineffectiveness

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants" then the specific objectives and requirements under Paragraphs b and c of Section 4, the permit and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit, the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

SECTION B. SPECIFIC CONDITIONS

Solid Waste Management Units (SMUs)

The USDOE and its contractors are actively involved in the CERCLA and National Priority Listed Superfund Site, Depleted Uranium Cylinder Management, cleanups of a current inventory of over 200 solid waste management units at the PGDP. As these sites are disturbed USDOE shall address as separate sections under this BMP plan the scope of the activity and the steps taken to prevent further migration of the pollutants to the local watersheds and subsequent degradation.

Periodically Discharged Wastewaters Not Specifically Covered By Effluent Conditions

USDOE shall include in this BMP plan procedures and controls necessary for the handling of periodically discharged uncontaminated wastewaters such as meter calibration, fire protection, hydrostatic testing water, water associated with demolition projects, etc. Contaminated wastewaters shall be sent to the appropriate wastewater treatment facilities.



COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

FACT SHEET

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE TREATED WASTEWATER
INTO WATERS OF THE COMMONWEALTH

XPDES No.: KY0004049 Permit Writer: Larry Sowder Date: January 8, 1998

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant

United States Department of Energy (USDOE)
P.O. Box 1410
Paducah, Kentucky 42001

b. Facility Location

United States Department of Energy
Paducah Gaseous Diffusion Plant (PGDP)
5600 Hobbs Road
Paducah, McCracken County, Kentucky

c. Description of Applicant's Operation

USDOE activities at PGDP include CERCLA and National Priority Listed Superfund Site, Depleted Uranium Cylinder Management, cleanups (SIC Codes 8744 - Environmental Remediation Services and 5629 - Remediation and other waste management services). The gaseous diffusion process for the enrichment of uranium (SIC Code 2819 - Fissionable material production) has been leased to United States Enrichment Corporation (USEC), who will obtain a separate KPDES permit (KY0102083). USDOE remains the owner of the facility.

d. Production Capacity of Facility

The EPA has not developed effluent guidelines for point source discharges associated with CERCLA and National Priority Listed Superfund Site cleanups. Therefore the production capacity of the facility is not germane to the development of this permit.

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e. Description of Existing Pollution Abatement Facilities

- Outfall 001 - The combined treated and untreated wastewaters do not receive additional treatment. Treated wastewaters include the C-752 Waste Storage and Treatment Building, the C-616 Wastewater Treatment Facility, the Vortec Vitrification Project and C-617 Northwest Plume Interim Remedial Action Pilot Plant. The C-752 building provides carbon treatment of trichloroethylene (TCE) and polychlorinated biphenyls (PCBs) wastes, photocatalytic reactor treatment of various wastes, air sparing of purge, development and decontamination waters associated with groundwater monitoring wells and various other treatment facilities as needed for specific wastewaters generated. The C-616 facility provides settling to the ash transfer water, demineralizer regeneration water, boiler blowdown and coal pile runoff from the C-600 Steam Plant and phosphate reduction of cooling tower blowdown which includes TCE stripping. The Vortec Process in itself is a waste treatment system for the neutralization and containment of low level wastes. Wastewaters generated by the process are wet electrostatic precipitator (WESP) waters and cooling tower blowdown. The WESP waters receive chrome reduction, clarification and ion exchanged before being recycled to the maximum extent possible. The cooling tower blowdown is recirculated. The C-617 operation removes TCE and Technetium 99 from the northwest groundwater plume through the application of green sand filtration, air stripping, air stripping off-gas treatment by vapor-phase, activated carbon absorption, ion exchange, polymer addition, thickening and settling. Untreated wastewaters include C-335 air plant cooling water and condensate blowdown, C-335 and C-337 units 1,4,5 and 6 cascade building steam condensate, once-through pump cooling water, drinking fountain drains, eyewash bath drains, safety shower drains, sinks, air conditioners, roof and floor drains, C-535 and C-537 switch house roof and floor drains and switchyard runoff, C-746-A roof drains, surface and roof runoff from C-616 chromium reduction facility and various scrap yards, storage buildings and burial grounds.
- Outfall 015 - No treatment of surface runoff from the west side of the facility.
- Outfall 017 - No treatment of surface runoff from the extreme southern area of facility, consisting largely of UF₆ cylinder storage.
- Outfall 019 - Leachate and runoff from the covered areas of the new contained landfill north of the plant.

f. Permitting Action

Reissuance of a major permit for an existing source facility. In addition permit KY0100072 is being inactivated as the landfill discharges for which it was issued are now covered by Outfall 019 of this permit.

2. RECEIVING WATERS

a. Receiving Waters Name

Outfalls 001, 015 and 017 are to Big Bayou Creek at mile points 5.6, 6.2 and 7.1, respectively.

Outfall 019 is to an unnamed tributary of Little Bayou Creek at mile point 0.25.

b. Stream Segment Use Classifications

Big Bayou and Little Bayou Creeks are classified as Warmwater Aquatic Habitat and Primary/Secondary Contact Recreation.

c. Stream Low Flow Condition

Receiving Stream Flows	Point of Discharge		Point of Intake
	Big Bayou Creek	Little Bayou Creek	(Cairo, Illinois Ohio River)
7Q10	0.00 cfs	0.00 cfs	46,300 cfs
Harmonic Mean	0.50 cfs	0.10 cfs	198,238 cfs

d. Water Quality Limited or Effluent Limited

Big Bayou and Little Bayou Creeks are designated as Water Quality Limited.

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Outfall 001 - Combined treated wastewaters from the C-752 Waste Storage and Treatment Building, the C-616 Wastewater Treatment Facility, the Vortec Vitrification Project and C-612 Northwest Plume Interim Remedial Action Pilot Plant and miscellaneous untreated nonprocess wastewaters associated with the C-335, C-337, C-535, C-537, C-746-A and C-616 buildings and ancillary areas, C-600 Steam Plant and C-614 Pump and Treat Facility.

<u>Effluent Characteristics</u>	<u>Reported Discharge</u>		<u>Proposed Limits</u>		<u>Applicable Water Quality Criteria and/or Effluent Guidelines</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	
Flow (MGD)	2.79	42.07	Report	Report	401 KAR 5:065, Section 2(8)
Discharge Temperature (°F)	59 (winter)	77 (summer)	89	Report	401 KAR 5:031, Section 4
Oil & Grease (mg/l)	4	15	10	15	401 KAR 5:080, Section 1(2)(c)2
Total Residual Chlorine (mg/l)	0.001	0.002	Report	Report	401 KAR 5:031, Section 4
Total Phosphorous (mg/l)	BDL	BDL	1.0	1.0	401 KAR 5:080, Section 1(2)(c)2
Hardness (as mg/l CaCO ₃)	N/A	300	Report	Report	401 KAR 5:065, Section 2(8)
Trichloroethylene (mg/l)	0.001	0.002	0.0807	Report	401 KAR 5:031, Section 4
Chronic Toxicity (TU _c)	N/R	N/R	Report	1.00	401 KAR 5:029, Section 5
pH (standard units)	7.3 (min)	9.6	6.0 (min)	9.0 ¹	401 KAR 5:031, Sections 3 & 4
Uranium, Total (mg/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Technetium-99 (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Polychlorinated Biphenyls (µg/l)	BDL	BDL	Report	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Metals ²	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)

¹The maximum pH of 9.0 standard units shall become effective October 1, 1998. Until that time, the maximum pH shall not exceed 10.5 standard units.

²Total Recoverable Metals means iron and those metals listed on Form C, Part C - Metals, Cyanide and Total Phenols.

N/R - Not Reported on Renewal Application

BDL - Below Detection Limit

3. REPORTED ~~DISCHARGE~~ AND PROPOSED LIMITS

Description of Discharge - Outfall 015 - Surface runoff from the west side of the facility.

<u>Effluent Characteristics</u>	<u>Reported Discharge</u>		<u>Proposed Limits</u>		<u>Applicable Water Quality Criteria and/or Effluent Guidelines</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	
Flow (MGD)	0.281	3.28	Report	Report	401 KAR 5:065, Section 2(8)
Oil & Grease (mg/l)	5.03	5.5	10	15	401 KAR 5:080, Section 1(2)(c)
Hardness (as mg/l CaCO ₃)	196	350	Report	Report	401 KAR 5:065, Section 2(8)
Acute Toxicity (TU,)	N/R	N/R	Report	1.00	401 KAR 5:029, Section 5
pH (standard units)	7.3 (min)	7.9	6.0 (min)	9.0	401 KAR 5:031, Sections 3 & 4
Uranium, Total (mg/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8j)
Beta, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Metals'	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)

'Total Recoverable Metals means iron and those metals listed on Form C, Part C - Metals, Cyanide and Total Phenols.

N/R - Not Reported on Renewal Application

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Outfall 017 - Surface runoff from the extreme southern area of facility, consisting largely of UF₆ cylinder storage.

<u>Effluent Characteristics</u>	<u>Reported Discharge</u>		<u>Proposed Limits</u>		<u>Applicable Water Quality Criteria and/or Effluent Guidelines</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	
Flow (MGD)	0.045	4.97	Report	Report	401 KAR 5:065, Section 2(8)
Oil & Grease (mg/l)	5.6	N/R	10	15	401 KAR 5:080, Section 1(2)(c)2
Hardness (as mg/l CaCO ₃)	151	280	Report	Report	401 KAR 5:065, Section 2(8)
Acute Toxicity (TU ₅)	N/R	N/R	Report	1.00	401 KAR 5:029, Section 5
pH (standard units)	7.3(min)	8.4	6.0(min)	9.0	401 KAR 5:031, Sections 3 & 4
Uranium, Total (mg/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Metals'	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)

'Total Recoverable Metals means iron and those metals listed on Form C, Part C - Metals, Cyanide and Total Phenols.

N/R - Not Reported on Renewal Application

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Outfall 019 - Leachate and runoff from the covered areas of the new contained landfill north of the plant.

<u>Effluent Characteristics</u>	<u>Reported Discharge</u>		<u>Proposed Limits</u>		<u>Applicable Water Quality Criteria and/or Effluent Guidelines</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	
Flow (MGD)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Oil & Grease (mg/l)	N/R	N/R	10	15	401 KAR 5:080, Section 1(2)(c)2
Total Suspended Solids (mg/l)	N/R	N/R	30	60	401 KAR 5:080, Section 1(2)(c)2
Polychlorinated Biphenyls (µg/l)	N/R	N/R	Report	Report	401 KAR 5:031, Section 4
Hardness (as mg/l CaCO ₃)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Acute Toxicity (TU)	N/R	N/R	Report	1.00	401 KAR 5:029, Section 5
pH (standard units)	N/R	N/R	6.0(min)	9.0	401 KAR 5:031, Sections 3 & 4
Uranium, Total (mg/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Alpha, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Dissolved (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Beta, Suspended (pCi/l)	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Metals'	N/R	N/R	Report	Report	401 KAR 5:065, Section 2(8)

'Total Recoverable Metals means iron and those metals listed on Form C, Part C - Metals, Cyanide and Total Phenols.

N/R - Not Reported on Renewal Application

4. **METHODOLOGY USED IN DETERMINING LIMITATIONS**

a. Serial Number

001 - Combined treated wastewaters from the C-752 Waste Storage and Treatment Building, the C-616 Wastewater Treatment Facility, the Vortec Vitrification Project and C-617 Northwest Plume Interim Remedial Action Pilot Plant and miscellaneous untreated nonprocess wastewaters associated with the C-335, C-337, C-535, C-537, C-746-A and C-616 buildings and ancillary areas.

b. Effluent Characteristics

Flow	Trichloroethylene	Beta, Dissolved
Discharge Temperature	Chronic Toxicity	Beta, Suspended
Oil & Grease	Polychlorinated Biphenyls	Uranium, Total
Total Residual Chlorine	Alpha, Dissolved	Technetium-99
Total Phosphorous	Alpha, Suspended	pH
Hardness	Total Recoverable Metals	

c. Pertinent Factors

EPA has not developed effluent guidelines for point source discharges associated with CERCLA and National Priority Listed Superfund Site cleanups.

d. Monitoring Requirements

PARAMETER	FREQUENCY	SAMPLE TYPE
Flow	1/Week	Instantaneous
Discharge Temperature	1/Week	Grab
Oil & Grease	1/Week	Grab
Total Residual Chlorine	1/Week	Grab
pH	1/Week	Grab
Total Phosphorous	1/Week	Grab
Hardness	1/Month	Grab
Trichloroethylene	1/Month	Grab
Polychlorinated Biphenyls	1/Month	Grab
Chronic Toxicity	1/Quarter	3 24-Hr Composites
Total Uranium	1/Quarter	Grab'
Dissolved Alpha	1/Quarter	Grab'
Suspended Alpha	1/Quarter	Grab'
Dissolved Beta	1/Quarter	Grab' .
Suspended Beta	1/Quarter	Grab'
Technetium-99	1/Quarter	Grab'
Total Recoverable Metals	1/Quarter	Grab'

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow, Hardness, Polychlorinated Biphenyls, Total Residual Chlorine, Total Uranium, Dissolved Alpha, Suspended Alpha, Dissolved Beta, Suspended Beta, and Total Recoverable Metals

The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8).

pH

The limits for this parameter are consistent with the requirements of 401 KAR 5:031, Section 4.

Oil & Grease and Total Phosphorous

The limits for these parameters are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "Best Professional Judgment" (BPJ) of the "Best Available Technology Economically Achievable" (BAT) requirements for this type of discharge.

Chronic Toxicity

The limits for this parameter are consistent with the requirements of 401 KAR 5:029, Section 5 and 401 KAR 5:031, Sections 3 & 4.

Nondegradation

The conditions of 401 KAR 5:029, Section 2(1) and (3) have been satisfied by this permit action. A review under Section 2(2) and (4) is not applicable.

METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Numbers

- 015 - Surface runoff from the west side of the facility.
- 017 - Surface runoff from the extreme southern area of facility, consisting largely of UF₆ cylinder storage.
- 019 - Leachate and runoff from the covered areas of the new contained landfill north of the plant.

b. Effluent Characteristics

Flow	Acute Toxicity	Suspended Alpha
Oil & Grease	Total Suspended Solids'	Dissolved Beta
Hardness	Total Uranium	Suspended Beta
Polychlorinated Biphenyls'	Dissolved Alpha	pH
Total Recoverable Metals		

'These parameters apply only to Outfall 019.

9. REFERENCED AND CITED DOCUMENTS

All materials and documents referenced or cited in this fact sheet are either a part of the Administrative Record as described in item 8 on this page or readily available at the Division of Water.

10. CONTACT

For further information contact the individual identified on the Public Notice or the Permit Writer - Larry Sowder at (502) 564-2225, extension 472.

11. PUBLIC NOTICE INFORMATION

Please refer to the attached Public Notice for details regarding the procedures for a final permit decision, deadline for comments and other information required by KAR 5:075, Section 4(2)(e).

c. Pertinent Factors

Outfall 019 was originally permitted under KPDES permit **KY0100072** and addressed runoff from the covered areas of the new landfill. During the renewal process for KPDES permit **KY0004049**, USDOE requested consolidation of these two permits and the authorization to discharge leachate from the new landfill through this outfall.

d. Monitoring Requirements

PARAMETER	FREQUENCY	SAMPLE TYPE
Flow	1/Month	Instantaneous
Oil & Grease	1/Month	Grab
pH	1/Month	Grab
Total Suspended Solids ¹	1/Month	Grab
Hardness	1/Month	Grab
Polychlorinated Biphenyls ¹	1/Month	Grab
Acute Toxicity	1/Quarter	Grab ¹
Total Uranium	1/Quarter	Grab ¹
Dissolved Alpha	1/Quarter	Grab ²
Suspended Alpha	1/Quarter	Grab ²
Dissolved Beta	1/Quarter	Grab ²
Suspended Beta	1/Quarter	Grab ²
Technetium-99	1/Quarter	Grab ²
Total Recoverable Metals	1/Quarter	Grab

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow, Hardness, Total Uranium, Dissolved Alpha, Suspended Alpha, Dissolved Beta, Suspended Beta, Polychlorinated Biphenyls, and Total Recoverable Metals
The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8).

pH

The limits for this parameter are consistent with the requirements of 401 KAR 5:031, Section 4.

Oil & Grease and Total Suspended Solids

The limits for these parameters are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "Best Professional Judgment" (BPJ) of the "Best Available Technology Economically Achievable" (BAT) requirements for this type of discharge.

Acute Toxicity

The limits for this parameter are consistent with the requirements of 401 KAR 5:029, Section 5 and 401 KAR 5:031, Sections 3 & 4.

Nondegradation

The conditions of 401 KAR 5:029, Section 2(1) and (3) have been satisfied by this permit action. A review under Section 2(2) and (4) is not applicable.

5. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

permittee shall comply with the effluent limitations by the effective date of the permit.

6. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

Big Bayou Creek and Little Bayou Creek Watershed Monitoring Program

As previously stated in this fact sheet, USEC has leased gaseous diffusion process for the enrichment of uranium from the DOE and as such is obtaining a separate permit for a number of outfalls previously covered by this permit. Also as previously stated in this fact sheet DOE is currently involved with the cleanup of historic contamination and spills at the facility. The storm water runoff from the areas being remediated and those to be remediated by DOE can have a direct impact on the quality of the discharges through the outfalls now covered under the USEC permit. In light of the obvious compliance and enforcement problems this arrangement presents, the Division of Water is proposing that DOE conduct an ongoing watershed monitoring program to determine the success of the cleanup efforts in lieu of establishing end of pipe limits on PCBs. This watershed monitoring program for Big Bayou and Little Bayou watersheds shall be developed using the guidelines issued by the Division of Water in "Methods for Assessing Biological Integrity of Surface Waters" and shall be reviewed by the Division of Water. The goal of this monitoring program will be to ensure that the DOE cleanup will result in these watersheds achieving compliance with the water quality criteria for those pollutants characteristic of the historic contamination and spills.

Best Management Practices (BMP) Plan

Pursuant to 401 KAR 5:065, Section 2(10) a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through storm water runoff or spillage. Some of these areas will drain to present wastewater treatment plants; others will not.

Cooling Water Additives, FIFRA, Mollusk Control

The discharge of any product registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) in cooling water which ultimately may be released to the waters of the Commonwealth is prohibited, except Herbicides, unless specifically identified and authorized by the KPDES permit. In the event the permittee needs to use a biocide or chemical, not previously reported, for mollusk control or other purpose the permittee shall submit sufficient information, a minimum of thirty (30) days prior to the commencement of use of said biocides or chemicals, to the Division of Water for review and establishment of appropriate control parameters.

Priority Pollutants

During the term of the permit the permittee shall conduct at least two complete scans for those pollutants listed on Form C, Section V, Part C from each designated outfall and shall be submitted to the Division of Water.

7. PERMIT DURATION

Five (5) Years.

a. THE ADMINISTRATIVE RECORD

The Administrative Record, including application, draft permit fact sheet, public notice, comments received and additional information is available by writing the Division of Water at 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601.

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