ADEQ

ARKANSAS
Department of Environmental Quality

Application Form PPS

Priority Pollutant Scan Information

ATTENTION

"Clean" Sampling Techniques

Water quality (WQ) standards (Based on aquatic toxicity and human health criteria) for many of the heavy metals are "at" analytical methods' detection levels (MDL).

It is recognized that **unclean** sampling and lab techniques can and do **cause** contamination sometimes causing measurements to be "seen" as **violations** of the WQ standards. Therefore, the permittee must recognize the **importance** of **eliminating** contamination.

For personnel responsible for collecting samples in answer to effluent monitoring requirements, the Department recommends following sample collection and handling in accordance with EPA's **Method 1669: Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels** as closely as possible and as economically feasible. A copy of Method 1669 is available upon request.

Please convey to your contract testing laboratory the extreme importance of proper sampling techniques associated with analytical testing for heavy metals. Some of the techniques may be considered too expensive to justify implementation but it could be in the best interest of your facility to **submit the PPS Form by using common sense "Clean" Sampling Techniques.**

GENERAL INSTRUCTION

1. **Generation of a form similar to the PPS form is prohibited without expressed written permission of ADEQ, Discharge Permits Section, Water Division.**

2. All major facilities, all categorical industries, or any facility that believes there are priority pollutant(s) present in their discharge, must submit the Form PPS.

3. All facilities must monitor for **metals** and **cyanide**.

4. Testing requirements for categorical industries are listed in Attachment 1.

5. If one of the EPA approved test methods (40 CFR Part 136) is used the method detection level (MDL) **must be as low as Minimum Quantification Levels** (**MQL**). MQLs are based on EPA Region 6 guidance dated April 10, 2006: "MQL = 3.3 X MDL"

6. All the units must be expressed in µg/l (Micro grams per liter).

7. **All the results less than Used Method Detection Level Achieved are reported as ND (Not Detected).**

8. The data requested for the priority pollutant scan in the enclosures shall be submitted with copies of the laboratory results, MDLs and MQLs. Certification that QA/QC procedures were implemented must be submitted with the requested information.

9. All analyses must be performed at the minimum level of sensitivity. The analyses must demonstrate that an acceptable calibration point as low as MQL was used. Test procedures must conform to approved EPA methodology listed in 40 CFR Part 136.

ATTACHMENT 1

TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY

INDUSTRY CATEGORY	Volatile	Acid	Base/Neutral	Pesticide
Adhesives & Sealants ..	X	X	X	-
Aluminum Forming	X	X	X	-
Auto & Other Laundries	X	X	X	X
Battery Manufacturing	X	-	X	-
Coal Mining	X	X	X	X
Coil Coating	X	X	X	-
Copper Forming	X	X	X	-
Electric & Electronic Compounds	X	X	X	X
Electroplating	X	X	X	-
Explosives Manufacturing	-	X	X	-
Foundries	X	X	X	-
Gum & Wood Chemicals	X	X	X	X
Inorganic Chemicals Manufacturing	X	X	X	-
Iron & Steel Manufacturing	X	X	X	-
Leather Tanning & Finishing	X	X	X	X
Mechanical Products Manufacturing	X	X	X	-
Nonferrous Metals Manufacturing	X	X	X	X
Ore Mining	X	X	X	X
Organic Chemicals Manufacturing	X	X	X	X
Paint & Ink Formulation	X	X	X	X
Pesticides	X	X	X	X
Petroleum Refining	X	X	X	X
Pharmaceutical Preparations	X	X	X	-
Photographic Equipment & Supplies	X	X	X	X
Plastic & Synthetic Materials Manufacturing	X	X	X	X
Plastic Processing	X	-	-	-
Porcelain Enameling	X	-	X	X
Printing & Publishing	X	X	X	X
Pulp & Paperboard Mills	X	X	X	X
Rubber Processing	X	X	X	-
Soap & Detergent Manufacturing	X	X	X	-
Steam Electric Power Plants	X	X	X	-
Textile Mills	X	X	X	X
Timber Products Processing	X	X	X	X

X
Testing required.
- Testing not required.

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility:

   _____

2. Name, address and telephone number of laboratory:

   _____

   _____

3. Is the lab certified by the State of Arkansas? Yes ____ No ___

4. What are the certification dates?

   Issued data _____ Expire date _____

5. Is the laboratory certified for all the parameters?

   YES ____ No ____ (Explain)

   _____

   _____

6. Date and time of samples collected:

   _____

7. Date and time samples were received in the laboratory:

   _____

8. Sample location (Outfall No.):

   _____

9. Samples collected by:

   Name _____

   Title _____

   Telephone _____

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

    _____
    Printed Name of person signing Title

    _____
    Signature Date signed

    List all attachments to this form:
    _____

    _____

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1. Antimony (Total), Recoverable				60
2. Arsenic (Total), Recoverable				0.5
3. Beryllium (Total), Recoverable				0.5
4. Cadmium (Total), Recoverable				0.5
5. Chromium (Total), Recoverable				10
7. Chromium (6+), Dissolved				10
8. Copper (Total), Recoverable				0.5
9. Lead (Total), Recoverable				0.5
10. Mercury (Total), Recoverable				0.005
12. Nickel (Total), Recoverable				0.5
13. Selenium (Total), Recoverable				5
14. Silver (Total), Recoverable				0.5
15. Thallium (Total), Recoverable				0.5
16. Zinc (Total), Recoverable				20
129. Phenols, Total Recoverable				5
17. Cyanide (Total), Recoverable				10

DIOXIN	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)				0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
19. Acrolein				50
20. Acrylonitrile				20
21. Benzene				10
22. Bromoform				10
23. Carbon Tetrachloride				2
24. Chlorobenzene				10
25. Chlorodibromomethane				10
26. Chloroethane				50
27. 2-Chloroethyl vinyl ether				10
28. Chloroform				10
29. Dichlorobromomethane				10
30. 1,1-Dichloroethane				10
31. 1,2-Dichloroethane				10
32. 1,1-Dichloroethylene				10
33. 1,2-Dichloropropane				10
34. 1,3-Dichloropropylene				10
35. Ethylbenzene				10
36. Methyl Bromide [Bromomethane]				50
37. Methyl Chloride [Chloromethane]				50
38. Methylene Chloride				20
39. 1,1,2,2-Tetrachloroethane				10
40. Tetrachloroethylene				10
41. Toluene				10
42. 1,2-trans-Dichloroethylene				10
43. 1,1,1-Trichloroethane				10
44. 1,1,2-Trichloroethane				10
45. Trichloroethylene				10
46. Vinyl Chloride				10

ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
47. 2-Chlorophenol				10
48. 2,4-Dichlorophenol				10
49. 2,4-Dimethylphenol				10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol				50
51. 2,4-Dinitrophenol				50
52. 2-Nitrophenol				20
53. 4-Nitrophenol				50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]				10
55. Pentachlorophenol				5
56. Phenol				10
57. 2,4,6-Trichlorophenol				10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
58. Acenaphthene				10
59. Acenaphthylene				10
60. Anthracene				10
61. Benzidine				50
62. Benzo(a)anthracene				5
63. Benzo(a)pyrene				5
64. 3,4-Benzofluoranthene				10
65. Benzo(ghi)perylene				20
66. Benzo(k)fluoranthene				5
67. Bis(2-chloroethoxy) methane				10
68. Bis(2-chloroethyl) ether				10
69. Bis(2-chloroisopropyl) ether				10
70. Bis(2-ethylhexyl) phthalate				10
71. 4-Bromophenyl phenyl ether				10
72. Butyl benzyl phthalate				10
73. 2-Chloronapthalene				10
74. 4-Chlorophenyl phenyl ether				10
75. Chrysene				5
76. Dibenzo (a,h) anthracene				5
77. 1,2-Dichlorobenzene				10
78. 1,3-Dichlorobenzene				10
79. 1,4-Dichlorobenzene				10
80. 3,3'-Dichlorobenzidine				5
81. Diethyl Phthalate				10
82. Dimethyl Phthalate				10
83. Di-n-Butyl Phthalate				10
84. 2,4-Dinitrotoluene				10
85. 2,6-Dinitrotoluene				10
86. Di-n-octyl Phthalate				10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
87. 1,2-Diphenylhydrazine				20
89. Fluorene				10
90. Hexachlorobenzene				5
91. Hexachlorobutadiene				10
92. Hexachlorocyclopentadiene				10
93. Hexachloroethane				20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)				5
95. Isophorone				10
96. Naphthalene				10
97. Nitrobenzene				10
98. N-nitrosodimethylamine				50
99. N-nitrosodi-n-propylamine				20
100. N-nitrosodiphenylamine				20
101. Phenanthrene				10
102. Pyrene				10
103. 1,2,4-Trichlorobenzene				10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
104. Aldrin				0.01
105. Alpha-BHC				0.05
106. Beta-BHC				0.05
107. Gamma-BHC				0.05
108. Delta-BHC				0.05
109. Chlordane				0.2
110. 4,4'-DDT				0.02
111. 4,4'-DDE (p,p-DDX)				0.1
112. 4,4'-DDD 9(p,p-TDE)				0.1
113. Dieldrin				0.02
114. Alpha-endosulfan				0.01
115. Beta-endosulfan				0.02
116. Endosulfan sulfate				0.1
117. Endrin				0.02
118. Endrin aldehyde				0.1
119. Heptachlor				0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)				0.01
130. Chlorpyrifos				0.07
121. PCB-1242				0.2
122. PCB-1254				0.2
123. PCB-1221				0.2
124. PCB-1232				0.2
125. PCB-1248				0.2
126. PCB-1260				0.2
127. PCB-1016				0.2
128. Toxaphene				0.3