ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM

REQUEST FOR COMMENTS ON FORMS JANUARY 12, 2004

Draft application forms for 1 VAC 30, Chapters 45 and 46 are available for review during the public comment period to be held on these proposed regulations. There are three application forms, two appendices, and instructions for the three application forms.

The three application forms are for the following:

- 1. Applications for simple test procedure laboratories under 1 VAC 30, Chapter 45.
- 2. Applications for general environmental laboratories under 1 VAC 30, Chapter 45.
- 3. Applications for environmental laboratories applying under 1 VAC 30, Chapter 46.

There are two appendices: Field of Testing Appendix and Field of Accreditation Appendix. The Field of Testing Appendix is to be used with the general environmental laboratory application form. The Field of Accreditation Appendix is to be used with the application under Chapter 46.

These forms are preliminary. The Division of Consolidated Laboratory Services asks that you review the forms for ease of use, availability of fields of testing or accreditation that are pertinent to your laboratory's work, and for accuracy. Please submit your comments to the contact for the proposed regulations, Nancy Saylor, by e-mail at nssaylor@erols.com. If you have any trouble viewing the forms, please contact Nancy Saylor by e-mail or telephone (804/231-7980).

Instructions for Application for Certification of Environmental Laboratories Performing Only Simple Test Procedures Under 1 VAC 30, Chapter 45

The application form is in Word 97. You may fill the application form in with ink or may fill it in using Word 97 or a more recent version of Word. You will need to complete and return the entire application form.

Boxes on Page 1.

Please use only the box on the left side of the page. Use this box to indicate what your application is for.

1. <u>Laboratory Identification</u>

For initial applications, you will not have a laboratory identification number. Please enter the legal name of the laboratory in the line provided.

2. <u>Laboratory Physical Address</u>

Please provide the street address of the laboratory as well as the city, state and zip code. Provide driving directions to the laboratory if the laboratory's location is difficult to find.

3. Laboratory Mailing Address

Please provide the mailing address if it is different than the physical address.

4. <u>Laboratory Ownership</u>

Please provide the name of the owner of the laboratory. The laboratory's owner may be a company, local government, or other organization. Please provide the organization name here and the name of the responsible official at the organization under number 6. Please provide the mailing address for the laboratory owner in this section.

5. Operator of Laboratory

If the laboratory is operated by an organization other than the owner's organization, please provide the name of the operator and mailing and contact information in this section.

6. Responsible Official

Please review the definition of "responsible official" in Chapter 45 to determine the name of the responsible official for the laboratory. Please include this person's name in this section, along with his or her contact information.

7. <u>Laboratory Manager</u>

Please provide the name of the laboratory manager who has been designated by the responsible official, along with the laboratory manager's contact information.

8. Quality Assurance Officer

Please provide the name of the quality assurance officer for the laboratory, along with his or her contact information.

9. Laboratory Contact

Please list the name of the contact person at the laboratory to call with questions about the laboratory's application or operations. Please provide this person's phone number also.

10. Laboratory Description

Please check one of the types of laboratories listed. If your laboratory type is not listed, please provide it in "other."

11. Hours of Operation

Please provide the laboratory's schedule of operation here. Show both the days of the week and the hours during the day the laboratory operates.

12. Mobile laboratories

Fill in this section if the laboratory is mobile. Otherwise skip the section.

13. Additional Documentation

This section lists the additional documents the laboratory must file with this application. Applications that do not include this information will be deemed incomplete. Please call the program staff if you have questions. The current draft of the application form only includes documentation for the initial application.

14. Fields of Testing and Method Selection

The field of testing available for laboratories performing only simple test procedures is non-potable water. "Simple test procedures" is defined in 1 VAC 30, Chapter 45, as (1) field testing and measurement performed in an environmental laboratory or (2) the test procedure to determine BOD, fecal coliform, total coliform, fecal streptococci, settleable solids, total dissolved solids, total solids, total suspended solids, total volatile solids, and total volatile suspended solids. Field testing and measurement procedures are not included in this list. If the laboratory wants to be certified for any of these procedures or methods, please provide a separate list with the application package.

To be certified for the listed parameters, please check the blank box on the right and circle the specific method you use.

15. <u>Fee Calculation</u>

As explained in this section, provide with your application package a check to cover the \$400 fee. This fee is good for the term of the certification, when issued, which is two years.

16. <u>Certificate of Compliance</u>

Please read carefully the certificate before signing. The Quality Assurance Officer, Laboratory Manager, and Responsible Official must all sign and date this certificate.

17. Application submittal

This section provides the address where the laboratory must send the application package.

Virginia Environmental Laboratory Certification Program

DATE RECEIVED

Application For Certification of Environmental Laboratories Performing Only Simple Test Procedures Under 1 VAC 30, Chapter 45

Please check one:

	Initial Application for Certification	Renewal Application	Action Initial I	
			Init Review	
	Application for Recertification	Change of Address	Complete	
	Application to add to or modify scope of certification	Change of ownership	Fees Rcvd	
			OFFICE USE OF	NLY
1.	Laboratory Identification			
	VA Laboratory Identification I (not for initial applications)	Number:		
	Laboratory Name:			
	(Legal name of the laboratory as it will	appear on the certificate)		_
2.	Laboratory Physical Addres	ss		
	(Number and Street)			-
	(City)	(State)	(Zipcode)	
	Driving Directions to Facility and/or	description of location:		
3.	Laboratory Mailing Address	s		
	(P.O. Box or Number and Street)			-
	(City)	(State)	(Zipcode)	

Laboratory Ownership		
(Name of Owner)	(Phone)	(Fax)
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode)
Operator of Laboratory (if different t	han owner)	
(Name of Operator)	(Phone)	(Fax)
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode)
Responsible Official		
(Name of Responsible Official)	(Phone)	(Fax)
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode)
(E-mail address)		
Laboratory Manager		
(Name of Laboratory Manager)	(Phone)	(Fax)
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode)
(E-mail address)		

Qı	uality Assurance Officer				
(Na	ame of Quality Assurance Officer)		(Phone)	(Fax)	
	(P.O. Box or Number and Street)				
	(City)	(State)		(Zipcode)	
	(E-mail address)				
La	aboratory Contact				
	(Name of Laboratory Contact)	_	(Pho	one)	
La	Laboratory Description				
Ple	ease check one: Public wastewater system Public water system Industrial (type of industry: Mobile (describe the type of labora) he laborato	ry is associated	
	Other (describe:))		
Н	ours of Operation				
	ease describe operation schedule and interaction:	nclude days of the	e week and	hours of	
_					
Mo	obile laboratories				
	nique identification number (indicate when Imber, serial number or license number)		is the vehic	ele identification	

13. Additional Documentation

The Virginia Environmental Laboratory Certification Program also requires that you provide the following documentation as part of your application:

Initial Application for Certification

Current copy of Laboratory Quality Manual
All Analytical Method Standard Operating Procedures (SOPs)/analytical procedures for each method for which certification is sought
Demonstration of Capability for each method for which certification is sought
Results of the three most recent proficiency test studies. These must be sent by the PT provider.
List of personnel including description of each person's position or title and the methods each performs.
Description of experience or resum— of quality assurance officer that demonstrates his or her training and/or experience in quality assurance and quality control.

14. Fields of Testing and Method Selection

Indicate the parameter for which the laboratory seeks certification by checking the last cell in the row. Circle the method or methods for which the laboratory seeks certification. List any additional methods under "Other" or on additional sheets.

Matrix - Non-potable water (Clean Water Act)

Parameter (Microbiology)	Technology/Methodology		0;		CHECK FOR CERTIFICATION
	EPA	Standard Methods	Other	CIRCLE METHOD(s) USED	
Fecal coliform (membrane filter)	EPA/600/8-78-017, p. 124	SM 9222D	USGS B-0050-85		
Fecal coliform (most probable number)	EPA/600/8-78-017, p. 132	SM 9221C E			
Fecal coliform in presence of chlorine (membrane filter)	EPA/600/8-78-017, p. 124	SM 9222D			
Fecal coliform in presence of chlorine (most probable number)	EPA/600/8-78-017, p. 132	SM 9221C E			
Total coliform (membrane filter)	EPA/600/8-78-017, p. 108	SM 9222B			
Total coliform (most probable number)	EPA/600/8-78-017, p. 114	SM 9221B	USGS B-0025-85		
Total coliform in presence of chlorine (membrane filter)	EPA/600/8-78-017, p. 111	SM 9222(B+B.5c)			
Total coliform in presence of chlorine (most probable number)	EPA/600/8-78-017, p. 114	SM 9221B			
Fecal streptococci (membrane filter)	EPA/600/8-78-017, p. 136	SM 9230C	USGS B-0055-85		
Fecal streptococci (most probably number)	EPA/600/8-78-017, p. 139	SM 9230 B			
Fecal streptococci (plate count)	EPA/600/8-78-017, p. 143				

Parameter (Oxygen Demand)	Technology/Methodology		CHECK FOR CERTIFICATION	
	EPA	Standard Methods	Other	CIRCLE METHOD(s) USED
Biochemical Oxygen Demand	EPA 405.1	SM 5210 B		

Parameter (Physical)	Technology/Methodology		CHECK FOR CERTIFICATION	
	EPA Standard Methods Other			
Total solids (TS)	EPA 160.3	SM 2540 B	USGS I-3750-85	
Total dissolved solids (TDS)	EPA 160.1	SM 2540 C	USGS 1-1750-85	
Total suspended solids (TSS)	EPA 160.2	SM 2540 D	USGS I-3765-85	
Settleable solids (SS)	EPA 160.5	SM 2540 F		
Total volatile solids (TVS)	EPA 160.4	SM 2540 G		
Total volatile suspended solids (TVSS)		SM 2540 G		

References:

- 1. Standard Methods for the Examination of Water and Wastewater. American Public Health Association. Any of the following editions may be used: 18th (1992), 19th (1995), or 20th (1998).
- 2. Microbiological Methods for Monitoring the Environment, Water, and Wastes. U.S. EPA. EPA/600/8-78-017. 1978.
- 3. Methods for chemical Analysis of Water and Wastes. U.S. EPA. EPA-600/4-79-020m Revised March 1983 and 1979 where applicable.
- 4. U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A4, "Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples," U.S.G.S., U.S. Department of the Interior. 1989. [Microbiology]
- 5. "Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments." Fishman, M.J., et al., in Techniques of Water Resource Investigations of the U.S. Geological Survey. U.S.G.S., U.S. Department of the Interior, revised 1989. [Physical]

15. Fee Calculation

The base fee is \$100 and the maximum fee is \$400. Category fees are as follows: (1) oxygen demand (biological or chemical) = \$300; (2) bacteriology or microbiology = \$300; and (3) physical = \$300. The fee is calculated by adding the base fee to the category fees. All laboratories performing only simple test procedures would pay at least \$400 when the base fee and category fees are added together. The maximum fee, therefore, is the fee charged for all laboratories filling out this application.

Please include a check for \$400 made out to the Virginia Division of Consolidated Laboratory Services as part of your application package.

16. Certificate of Compliance

The applicant understands and acknowledges that the laboratory is required to be continually in compliance with the Virginia environmental laboratory certification program regulation (1 VAC 30, Chapter 45) and is subject to the provisions of 1 VAC 30-45-100 in the event of noncompliance. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the laboratory or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. Submitting false information or data shall result in denial of certification or decertification. I hereby further certify that I am authorized to sign this application.

	Date:
(Responsible official)	
	Date:
(Laboratory manager)	
	Date:
(Quality assurance officer)	

17. Application Submittal

Please include this application, filled out completely, all additional documentation listed under number 13 above, and a check for your fee in your application package. Please mail your application package to:

Virginia Division of Consolidated Laboratory Services Attn: Environmental Laboratory Certification Program – STP Application 600 North 5th Street Richmond, VA 23219

Instructions for Application for Certification of General Environmental Laboratories Under 1 VAC 30, Chapter 45

The application form is in Word 97. You may fill the application form in with ink or may fill it in using Word 97 or a more recent version of Word. You will need to complete and return the entire application form.

Boxes on Page 1.

Please use only the box on the left side of the page. Use this box to indicate what your application is for.

Laboratory Identification

For initial applications, you will not have a laboratory identification number. Please enter the legal name of the laboratory in the line provided.

2. Laboratory Physical Address

Please provide the street address of the laboratory as well as the city, state and zip code. Provide driving directions to the laboratory if the laboratory's location is difficult to find.

3. Laboratory Mailing Address

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4. Laboratory Ownership

Please provide the name of the owner of the laboratory. The laboratory's owner may be a company, local government, or other organization. Please provide the organization name here and the name of the responsible official at the organization under number 6. Please provide the mailing address for the laboratory owner in this section.

Operator of Laboratory

If the laboratory is operated by an organization other than the owner's organization, please provide the name of the operator and mailing and contact information in this section.

6. Responsible Official

Please review the definition of "responsible official" in Chapter 45 to determine the name of the responsible official for the laboratory. Please include this person's name in this section, along with his or her contact information.

7. Laboratory Manager

Please provide the name of the laboratory manager who has been designated by the responsible official, along with the laboratory manager's contact information.

8. Quality Assurance Officer

Please provide the name of the quality assurance officer for the laboratory, along with his or her contact information.

9. Laboratory Contact

Please list the name of the contact person at the laboratory to call with questions about the laboratory's application or operations. Please provide this person's phone number also.

10. Laboratory Description

Please check one of the types of laboratories listed. If your laboratory type is not listed, please provide it in "other."

11. Hours of Operation

Please provide the laboratory's schedule of operation here. Show both the days of the week and the hours during the day the laboratory operates.

12. Mobile laboratories

Fill in this section if the laboratory is mobile. Otherwise skip the section.

13. Additional Documentation

This section lists the additional documents the laboratory must file with this application. Applications that do not include this information will be deemed incomplete. Please call the program staff if you have questions.

14. Fields of Testing and Method Selection

The fields of testing, method and analytes can be found in the Fields of Testing Appendix to the application form. The laboratory must use this appendix to select the fields of testing, methods and analytes for which it wishes to be certified. To be certified for the listed parameters, please check the blank box on the right and circle the specific method you use.

15. Fee Calculation

This section explains the calculation laboratories need to make to calculate the fee to be paid. Please call the program staff if there is any question about how to calculate the fee. Provide a check for the fee with your application package. This fee is good for the term of the certification, when issued, which is two years.

16. Certificate of Compliance

Please read carefully the certificate before signing. The Quality Assurance Officer, Laboratory Manager, and Responsible Official must all sign and date this certificate.

17. Application submittal

This section provides the address where the laboratory must send the application package.

Virginia Environmental Laboratory Certification Program Application For Certification of General Environmental Laboratories Under 1 VAC 30, Chapter 45

DATE RECEIVED	

Please check one:

nitial Application for Certification	Renewal Application	Action Initial Date
Application for Recertification	Change of Address	Complete
Application to add to or modify scope of certification	Change of ownership	Fees Rcvd
		OFFICE USE ONLY
Laboratory Identification		
VA Laboratory Identification I (not for initial applications)	Number:	
Laboratory Name:		
(Legal name of the laboratory as it will	appear on the certificate)	
Laboratory Physical Addre	ss	
(Number and Street)		
(City)	(State) (Z	ipcode)
Driving Directions to Facility and/or	r description of location:	
Laboratory Mailing Addres	s	
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode)

Laboratory Ownership 4. (Name of Owner) (Phone) (Fax) (P.O. Box or Number and Street) (City) (State) (Zipcode) 5. **Operator of Laboratory (if different than owner)** (Name of Operator) (Phone) (Fax) (P.O. Box or Number and Street) (City) (State) (Zipcode) Responsible Official 6. (Name of Responsible Official) (Phone) (Fax) (P.O. Box or Number and Street) (City) (State) (Zipcode) (E-mail address) **Laboratory Manager** 7. (Name of Laboratory Manager) (Phone) (Fax) (P.O. Box or Number and Street) (City) (State) (Zipcode) (E-mail address)

Quality Assurance Officer				
(Nan	ne of Quality Assurance Officer)	(Phone)	(Fax	
	(P.O. Box or Number and Street)			
	(City)	(State)	(Zipcode)	
	(E-mail address)			
Lab	poratory Contact			
	(Name of Laboratory Contact)		Phone)	
Lab	poratory Description			
Plea	ase check one: Public wastewater system Public water system Industrial (type of industry: Mobile (describe the type of laborate) ory with which the labor:	atory is associate	
	Other (describe:		atory to accordate	
Ηοι	urs of Operation			
	ase describe operation schedule and incl ration:	ude days of the week a	and hours of	
Mol	bile laboratories			
	que identification number (indicate wheth nber, serial number or license number):	er the number is the ve	ehicle identification	

13. Additional Documentation

The Virginia Environmental Laboratory Certification Program also requires that you provide the following documentation as part of your application:

Initial Application for Certification

Current copy of Laboratory Quality Manual
All Analytical Method Standard Operating Procedures (SOPs)/analytical procedures for each method for which certification is sought
Demonstration of Capability for each method for which certification is sought
Results of the three most recent proficiency test studies. These must be sent by the PT provider.
List of personnel including description of each person's position or title and the methods each performs.
Description of experience or resum— of the laboratory manager that demonstrates his or her experience in managing a laboratory and/or performing environmental analyses.
Description of experience or resum— of the quality assurance officer that demonstrates his or her training and/or experience in quality assurance and quality control.

14. Fields of Testing and Method Selection

Please use the Fields of Testing Appendix to select Fields of Testing, methods, and analytes.

15. Fee Calculation

The base fee is \$1700. The category fees are as follows:

TEST CATEGORY	FEE
Oxygen demand (BOD or COD)	\$300
Bacteriology	\$300
Inorganic chemistry, fewer than four methods	\$300
Inorganic chemistry, four or more methods	\$600
Chemistry metals, fewer than four methods	\$300
Chemistry metals, four or more methods	\$600
Organic chemistry, fewer than four methods	\$350
Organic chemistry, four or more	\$700
Whole effluent toxicity, acute methods only	\$300
Whole effluent toxicity, acute and chronic methods	\$600
Radiochemical	\$900
Physical	\$300

Add the base fee to the sum of the category fees. For example, if applying for certification for BOD, several bacteriology [microbiology] methods, and four inorganic chemistry methods, the sum of your category fees will be as follows: \$300 + \$300 + \$300 = \$900. Your total fee will be as follows: \$1700 + \$900 = \$2600. If the sum of your base fee and category fees exceeds \$3800, you will pay the maximum fee of \$3800.

Please include a check for the total fee made out to the Virginia Division of Consolidated Laboratory Services as part of your application package.

16. Certificate of Compliance

The applicant understands and acknowledges that the laboratory is required to be continually in compliance with the Virginia environmental laboratory certification program regulation (1 VAC 30, Chapter 45) and is subject to the provisions of 1 VAC 30-45-100 in the event of noncompliance. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the laboratory or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. Submitting false information or data shall result in denial of certification or decertification. I hereby further certify that I am authorized to sign this application.

	Date:
(Responsible official)	
	Date:
(Laboratory manager)	
	Date:
(Quality assurance officer)	

17. Application Submittal

Please include this application, filled out completely, all additional documentation listed under number 13 above, and a check for your fee in your application package.

Please mail your application package to:

Virginia Division of Consolidated Laboratory Services
Attn: Environmental Laboratory Certification Program –
Chapter 45, General Environmental Application
600 North 5th Street
Richmond, VA 23219



CLEAN WATER ACT METHODOLOGY:

INORGANIC - TRACE METAL: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Digestion Methods	AA/I	Direct	GFAA/	Furnace	AA/Hydride		AA/Hydride		ICP		Cold Vapor		Other	
			EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM/Other		
	Aluminum		202.1	3111 D	202.2	3113 B			200.7	3120 B						
	Antimony		204.1	3111 B	204.2	3113 B			200.7	3120 B						
	Arsenic				206.2	3113 B	206.3	3114 B	200.7	3120 B			206.4	3500-As C		
	Barium		208.1	3111 D	208.2	3113 B			200.7	3120 B						
	Beryllium		210.1	3111 D	210.2	3113 B			200.7	3120 B				3500-Be D		
	Boron								200.7	3120 B			212.3	4500-B B		
	Cadmium		213.1	3111 B 3111 C	213.2	3113 B			200.7	120 B						
	Calcium		215.1	3111 B					200.7	3120 B				215.2 3500-Ca D		
	Chromium		218.1	3111 B	218.2	3113 B			200.7	3120 B						
	Chromium VI		218.4	3111 C										3500-Cr D		
	Cobalt		219.1	3111 B 3111 C	219.2	3113 B			200.7	3120 B						
	Copper		220.1	3111 B 3111 C	220.2	3113 B			200.7	3120 B				3500-Cu D, E HACH 8506		
	Gold		231.1	3111 B	231.2											
	Iridium		235.1	3111 B	235.2											
	Iron		236.1	3111 B 3111 C	236.2	3113 B			200.7	3120 B				3500-Fe D HACH 8008		
	Lead		239.1	3111 B 3111 C	239.2	3113 B			200.7	3120 B				3500-Pb D		
	Magnesium		242.1	3111 B					200.7	3120 B				3500-Mg D		
	Manganese		243.1	3111 B	243.2	3113 B			200.7	3120 B				3500-Mn D HACH8034		

INORGANIC - TRACE METAL (CONT'D): Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Digestion Methods	AA/	Direct	GFAA	/Furnace	AA/H	Hydride		ICP	Cold	Vapor		Other
			EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM/Other
	Mercury										245.1 245.2	3112 B		
	Molybdenum		246.1	3111 D	246.2	3113 B			200.7	3120 B				
	Nickel		249.1	3111 B	249.2	3113 B			200.7	3120 B				3500-Ni D
	Osmium		252.1	3111 D	252.2									
	Palladium		253.1	3111 B	253.2									
	Platinum		255.1	3111 B	255.2									
	Potassium		258.1	3111 B					200.7	3120 B				3500-K D
	Rhodium		265.1	3111 B	265.2									
	Ruthenium		267.1	3111 B	267.2									
	Selenium				270.2	3113 B		3114 B	200.7	3120 B				270.4
	Silica								200.7	3120 B				370.1 4500-Si D
	Silver		272.1	3111 C 3111 B	272.2	3113 B			200.7	3120 B				
	Sodium		273.1	3111 B					200.7	3120 B				3500-Na D
	Thallium		279.1	3111 B	279.2				200.7	3120 B				
	Tin		282.1	3111 B	282.2	3113 B			200.7					
	Titanium		283.1	3111 D	283.2									
	Vanadium		286.1	3111 D	286.2				200.7	3120 B				3500-V D
	Zinc		289.1	3111 C 3111 B	289.2				200.7	3120 B				3500-Zn E 3500-Zn F HACH8009

MICROBIOLOGY: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Coliform (MF) Fecal	EPA/600/8-78- 017, p. 124	SM 9222 D	
	Fecal Coliform (MPN) EC	EPA/600/8-78- 017, p. 132	SM 9221 E1	
	Fecal Coliform (MPN) A-1	EPA/600/8-78- 017, p. 132	SM 9221 E2	
	Total Coliform (MF)	EPA/600/8-78- 017, p. 108	SM 9222 B	
	Total Coliform (MPN)	EPA/600/8-78- 017, p. 108	SM 9221 B	
	Fecal Streptococci (MF)	EPA/600/8-78- 017, p. 136	SM 9230 C	
	Fecal Streptococci (MPN)	EPA/600/8-78- 017, p. 136	SM 9230 B	

TOXICITY TESTING: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform. Type or write in the information on the specific method or publication used where necessary.

Select by check	Parameter	Methodolog	у	
		EPA	Standard Methods	Other
	Freshwater Acute Tests (EPA/600/4-90/027)			
	Definitive Toxicity using Daphnia pulex			
	Definitive Toxicity using Ceriodaphnia dubia			
	Definite Toxicity using <i>Pimephales</i> promelas			
	Saltwater Acute Tests (EPA/600/4-90/027)			
	Definitive Toxicity using Mysidopsis bahia			
	Definitive Toxicity using Cyprinodon variegatus			
	Definitive Toxicity using Menida beryllina			

Select by check	Parameter	Methodolog	у	
		EPA	Standard Methods	Other
	Freshwater Chronic Tests (EPA/600/4-91/002)			
	Ceriodaphnia dubia Survival and Reproduction	EPA 1002.0		
	7-day <i>Pimephales promelas</i> (fathead minnow)	EPA 1000.0		
	Larval Survival and Growth			
	Saltwater Chronic Tests (EPA/600/4-91/003)			
	7-day <i>Mysidopsis bahia</i> Survival and Growth	EPA 1007.0		
	7-day <i>Cyprinodon variegatus</i> Larval Survival and Growth Test	EPA 1004.0		
	7-day <i>Menida beryllina</i> Larval Survival and Growth Test	EPA 1006.0		

INORGANIC - BIOLOGICAL EXAMINATIONS: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Biomass (Plankton, Dry Weight)		SM 10200 I-5	
	Biomass (Plankton, Biovolume)		SM 10200 I-2	
	Biomass (Plankton, Displ. Volume)		SM 10200 I-4	
	Biomass (Periphyton, Dry Weight)		SM 10300 C-5	
	Chlorophyll a (Spectrophotometric)		SM 10200 H-2	
	Chlorophyll a (Fluorometric)		SM 10200 H-3	

INORGANIC - DEMAND: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Biochemical Oxygen Demand	EPA 405.1	SM 5210 B	
	Carbonaceous BOD		SM 5210 B	
	Chemical Oxygen Demand	EPA 410.1 EPA 410.2 EPA 410.3 EPA 410.4	SM 5220 C SM 5220 D	HACH 8000
	Total Organic Carbon (TOC)	EPA 415.1	SM 5310 B SM 5310 C SM 5310 D	415.2
	Dissolved Oxygen	EPA 360.2 EPA 360.1	SM 4500-O C SM 4500-O G	

INORGANIC - MINERAL: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter		Methodology	
		EPA	Standard Methods	Other
	Acidity	EPA 305.1	SM 2310 B	
	Alkalinity	EPA 310.1 EPA 310.2	SM 2320 B	
	Chloride	EPA 325.1 EPA 325.2 EPA 325.3	SM 4500-Cl ⁻ E SM 4500-Cl ⁻ C SM 4500-Cl ⁻ B	
	Fluoride (Manual distillation required)	EPA 340.1 EPA 340.2 EPA 340.3	SM 4500-F ⁻ B SM 4500-F ⁻ D SM 4500-F ⁻ C SM 4500-F ⁻ E	
	Hardness, Total (CaCO ₃)	EPA 130.1 EPA 130.2	SM 2340-F ⁻ B SM 2340 C SM 3111 B	
	Hydrogen-Ion Concentration (pH)	EPA 150.1 EPA 150.2	SM 4500-H B	
	Specific Conductance	EPA 120.1	SM 2510 B	
	Sulfate	EPA 375.1 EPA 375.3 EPA 375.4	SM 4500-SO ₄ ²⁻ C SM 4500-SO ₄ ²⁻ D	

INORGANIC - MISCELLANEOUS: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Bromide	EPA 320.1		
	Color – ADMI (Tristimulus) - Visual - Spectrophotometric (Tristimulus) - Spectrophotometric (Plat. Cobalt)	EPA 110.1 EPA 110.2 EPA 110.3	SM 2120 E SM 2120 B SM 2120 C	
	Cyanide - (Manual distillation with MgCl required)	EPA 335.3 EPA 335.2	SM 4500-CN ⁻ D SM 4500-CN ⁻ E SM 4500-CN ⁻ C	
	Cyanide Amenable to Chlor.	EPA 335.1	SM 4500-CN ⁻ G	
	Oil and Grease	EPA 413.1	SM 5520 B	
	Phenolics, Total Recoverable	EPA 420.1 EPA 420.2		
	Residual Chlorine	EPA 330.1 EPA 330.2 EPA 330.3 EPA 330.4 EPA 330.5	SM 4500-CI D SM 4500-CI C SM 4500-CI B SM 4500-CI F SM 4500-CI G	
	Sulfide	EPA 376.1 EPA 376.2	SM 4500-S ²⁻ E SM 4500-S ²⁻ D	
	Sulfite	EPA 377.1	SM 4500-SO ₃ ²⁻ B	
	Surfactants (MBAS)	EPA 425.1	SM 5540 C	
	Temperature	EPA 170.1	SM 2550 B	
	Turbidity	EPA 180.1	SM 2130 B	
	Unionized H₂S -		SM 4500-S ²⁻ F	

INORGANIC - NUTRIENT: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Ammonia-Nitrogen – (Distillation required unless alternate test approval is obtained)	EPA 350.1 EPA 350.2 EPA 350.3	SM 4500-NH ₃ H SM 4500-NH ₃ H SM 4500-NH ₃ C SM 4500-NH ₃ E SM 4500-NH ₃ F SM 4500-NH ₃ G	
	Kjeldahl Nitrogen	EPA 351.1 EPA 351.2 EPA 351.3	SM 4500-NH ₃ B SM 4500-NH ₃ C SM 4500-NH ₃ E SM 4500-NH ₃ F SM 4500-NH ₃ G	
	Nitrate-Nitrogen	EPA 352.1		NO ₃ -NO ₂ Minus
	Nitrate-Nitrite (NO ₃ NO ₂)	EPA 353.1 EPA 353.2 EPA 353.3	SM 4500-NO ₃ H SM 4500-NO ₃ F SM 4500-NO ₃ E	
	Nitrite-Nitrogen	EPA 354.1	SM 4500-NO ₂ B	HACH 8507
	Total Organic Nitrogen	EPA TKN-NH3(N)		
	Orthophosphate	EPA 365.1 EPA 365.2 EPA 365.3	SM 4500-P F SM 4500-P E	
	Phosphorus	EPA 365.1 EPA 365.2 EPA 365.3 EPA 365.4	SM 4500-P F SM 4500-P E	

INORGANIC – RESIDUE [PHYSICAL]: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Residue, Total (TS)	EPA 160.3	SM 2540 B	
	Residue, Filterable (TDS)	EPA 160.1	SM 2540 C	
	Residue, Non-filterable (TSS)	EPA 160.2	SM 2540 D	
	Residue, Settleable (SS)	EPA 160.5	SM 2540 F	
	Residue, Volatile (VS)	EPA 160.4	SM 2540 G	

Select by Check	Parameter	Methodology			
		GC	GC/MS	HPLC	
	Pesticides & PCBs				
	Organochlorine Pesticides	EPA 608			
	Organophosphate Pesticides	SM 6630 C			
	Polychlorinated Biphenyls	EPA 608			
	PCBs in Oil	EPA 600\4-81-045			
	Chlorophenoxy Acid Herb.	SM 6640 B			
	Volatile Organics				
	Acrolein	EPA 603			
	Acrylonitrile	EPA 603			
	Purgeable Aromatics	EPA 602			
	Purgeable Halocarbons	EPA 601			
	Purgeables (GC/MS)		EPA 624		
	VOC by Isotope (GC/MS)		EPA 1624		
	Semivolatiles				
	Base Neut. & Acids (GC/MS)		EPA 625		
	Benzidines	EPA 605			
	Chlorinated Hydrocarbons	EPA 612			
	Haloethers	EPA 611			
	Nitroaromatics & Isophorone	EPA 609			
	Nitrosamines	EPA 607			
	Phenols (Organics)	EPA 604			
	Phthalate Esters	EPA 606			
	Poly. Arom. Hydro (PAHs)	EPA 610		EPA 610	
	SVO by Isotope (GC/MS)		EPA 1625		
	Dioxins & Furans				
	2,3,7,8-TCDD		EPA 613		

SOLID AND HAZARDOUS WASTE METHODOLOGY:

INORGANIC -TRACE METAL: Check the parameter and circle the method(s) that the laboratory is seeking

certification to perform.

Select by Check	Parameter	Digestion Methods	FLAA/ FLAE	GFAA	Hydride	ICP	ICP/ MS	Color	Cold Vapor	Other
	Aluminum		7020			6010B	6020			
	Antimony		7040	7041	7062	6010B	6020			
	Arsenic			7060A	7061A 7062	6010B	6020			
	Barium		7080A	7081	7002	6010B	6020			
	Beryllium		7090	7091		6010B	6020			
	Cadmium		7130	7131A		6010B	6020			
	Calcium		7140			6010B	6020			
	Chromium VI		7197					719A		7199
	Chromium		7190	7191		6010B	6020			
	Cobalt		7200	7201		6010B	6020			
	Copper		7210	7211		6010B	6020			
	Iron		7380	7381		6010B	6020			
	Lead		7420	7421		6010B	6020			
	Lithium		7430			6010B	6020			
	Magnesium		7450			6010B	6020			
	Manganese		7460	7461		6010B	6020			
	Mercury								7470A 7471A	
	Molybdenum		7480	7481		6010B	6020			
	Nickel		7520	7521		6010B	6020			
	Osmium		7550			6010B	6020			
	Potassium		7610	77.40	77.44.0	6010B	6020			
	Selenium			7740	7741A 7742	6010B	6020			
	Silica					6010B	6020			
	Silver		7760A	7761		6010B	6020			
	Sodium		7770			6010B	6020			
	Strontium		7780			6010B	6020			
	Thallium		7840	7841		6010B	6020			
	Tin		7870			6010B	6020			
	Vanadium		7910	7911		6010B	6020			
	Zinc		7950	7951		6010B	6020			

MICROBIOLOGY: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Total Coliform (MPN)	EPA 9131		
	Total Coliform (MF)	EPA 9132		
	Fecal Coliform (MF)		SM 9222 D	
	Fecal Coliform (MPN) EC		SM 9221 E1	
	Fecal Streptococci (MF)		SM 9230 C	
	Fecal Streptococci (MPN)		SM 9230 B	
	Salmonella (MPN)		SM 9260 D1	
	Salmonella (MF)		SM 9260 D2	

INORGANIC - DEMAND: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Total Organic Carbon (TOC)	EPA 9060		

INORGANIC - HAZARDOUS WASTE CHARACTERISTICS: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Corrosivity - towards steel	EPA 1110			
	Corrosivity - pH	EPA 9040B			
	Dermal Corrosion	EPA 1120			
	EP Toxicity Test	EPA 1310A			
	Ignitability (Pensky Martens)	EPA 1010			
	Ignitability (Setaflash)	EPA 1020A			
	Ignitability of Solids	EPA 1030			
	Liquid Release Test (LRT) Procedure	EPA 9096			
	Reactivity - Cyanide	SW-846 S.7.3			
	Reactivity - Sulfide	SW-846 S.7.3			

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Synthetic Precipitation Leaching Proc.	EPA 1312		
	TCLP - Tox. Char. Leach. Proc nonvolatile	EPA 1311		
	TCLP - Tox. Char. Leach. Proc Zero Head.	EPA 1311		

INORGANIC - MINERAL: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Chloride	EPA 9212 EPA 9250 EPA 9251 EPA 9253 EPA 9056			
	Fluoride	EPA 9214 EPA 9056			
	Hydrogen-Ion Concentration (pH)	EPA 9040B			
	pH - Solid & Hazardous Waste	EPA 9045C			
	Specific Conductance	EPA 9050A			
	Sulfate	EPA 9035 EPA 9036 EPA 9038 EPA 9056			

INORGANIC - NUTRIENT: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Nitrate-Nitrogen	EPA 9210 EPA 9056		
	Nitrite-Nitrogen	EPA 9056		
	Orthophosphate	EPA 9056		

INORGANIC - MISCELLANEOUS: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform. [*Must be accompanied with the distillation procedure.]

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Bomb Preparation Method	EPA 5050			
	Bromide (Ion Chromatography) Bromide (Electrode)	EPA 9056 EPA 9211			
	Comp. Test (Wastes & Mem. Liners)	EPA 9090A			
	Cyanide (Distillation)	EPA 9010B			
	Cyanide (Spectro., Automated)* Cyanide (Titrimetric & Man. Spectro.)* Cyanide (Electrode)*	EPA 9012A EPA 9014 EPA 9213			
	Cyanide Amenable to Chlor. (Distillation)	EPA 9010B			
	Cyanide Amen. to Chlor. (Spectro., Automated)* Cyanide Amen. to Chlor. (Titri. & Man. Spectro.)* Cyanide Amen. to Chlor. (Electrode)*	EPA 9012A EPA 9014 EPA 9213			
	Cyanide Extraction for Solids and Oils	EPA 9013			
	Extract Proc. for Oily Wastes	EPA 1330A			
	Extract. Organic Halides in Solids (EOX)	EPA 9023			
	Intrinsic Permeability	EPA 9100			
	Multiple Extraction Procedure	EPA 1320			
	Oil and Grease Oil and Grease (Sludge & Sediment)	EPA 9070 EPA 9071A			
	Paint Filters Liquid Test	EPA 9095A			
	Phenolics, Total Recoverable (Man. Spectro.) Phenolics, Total Recoverable (Color., Auto.) Phenolics, Total Recoverable (Spectro., MBTH)	EPA 9065 EPA 9066 EPA 9067			
	Purgeable Organic Halides (POX)	EPA 9021			
	Saturated Hydraulic Conductance	EPA 9100			
	Saturated Leachate Conductance	EPA 9100			
	Sulfides, Extractable	EPA 9031			
	Sulfides, Acid Soluble & Insoluble (Distillation)	EPA 9030B			
	Sulfides, Acid Soluble & Insoluble (Titrimetric)* Sulfides, Acid Soluble & Insoluble (Electrode)*	EPA 9034 EPA 9215			
	Test Method for Total Chlorine in New and Used Petroleum Products by X-Ray Fluorescence Spectrometry (XRF)	EPA 9075			
	Test Method for Total Chlorine in New And Used Petroleum Products by Oxidative Combustion and Microcoulometry (OCM)	EPA 9076			
	Test Method for Total Chlorine in New and Used Petroleum Products (Field Test Kit Methods)	EPA 9077			
	Total Organic Halides (TOX) BTU	EPA 9020B			
	Viscosity				

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Pesticides and PCBs			
	Organochlorine Pesticides (GC)	EPA 8081A EPA 8270C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3620B EPA 3630C EPA 3640A EPA 3660B
	Organophosphorus Pesticides (GC)	EPA 8141A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3580A	EPA 3620B
	Polychlorinated Biphenyls (GC)	EPA 8082 EPA 8270 C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580	EPA 3620B EPA 3630C EPA 3640A EPA 3660B EPA 3665A
	PCBs in Oil (GC)	EPA 600/4-81-045		
	Chlorophenoxy Acid Herbicides	EPA 8151A		
	Volatiles			
	Acrylamide, Acrylonitrile, & Acrolein (HPLC)	EPA 8316		
	Acrylamide (GC)	EPA 8032A		
	Acrylonitrile (GC)	EPA 8031		
	Nonhalogenated Vol. Organics (GC)	EPA 8015B	EPA 5021 EPA 5031 EPA 5032 EPA 3585	
	Purgeable Halo. & Aromatics (GC)	EPA 8021B	EPA 5021 EPA 5030B EPA 5032 EPA 5035 EPA 3585	

Select by Check	Parameter	EPA Methodology	Extraction/ Preparation Method	Sample Clean- Up Procedure
	Volatiles Purgeables - GC/MS	EPA 8260B	EPA 5021 EPA 5030B EPA 5031 EPA 5032 EPA 5035 EPA 3585	
	TPH-Low Boiling Point (Gas.)	EPA 8015B (Mod.)	EPA 5021 EPA 5030 EPA 5031 EPA 5032 EPA 5035	
	Semivolatiles EDB & DBCP (GC)	EPA 8011		
	Base Neutrals & Acids (GC/MS)	EPA 8270C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3561 EPA 3580A	EPA 3610B EPA 3611B EPA 3620B EPA 3630C EPA 3640A EPA 3650B
	PAHs & PCBs (TE/GC/MS)	EPA 8275A		
	Base Neutrals & Acids (GC/FT-IR)	EPA 8410	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3561 EPA 3580A	EPA 3640A
	Carbonyl Compounds (HPLC)	EPA 8315A		

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Chlorinated Hydrocarbons (GC)	EPA 8121	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3550B EPA 3580A	EPA 3620B EPA 3640A
	Extractable Nonvolatiles (HPLC/TS/MS)	EPA 8321A	BASED ON ANALYTE	BASED ON ANALYTE
	Extractable Nonvolatiles (HPLC/PB/MS)	EPA 8325	BASED ON ANALYTE	BASED ON ANALYTE
	Haloethers	EPA 8111	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3550B	EPA 3620B EPA 3640A
	N-Methylcarbamates (HPLC)	EPA 8318		
	Nitroaromatics & Cyclic Ketones	EPA 8091	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3620B EPA 3640A
	Nitroglycerine (HPLC)	EPA 8332		
	Nitroaromatics, Nitramines (HPLC)	EPA 8330		
	Nitrosamines	EPA 8070A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B	EPA 3610B EPA 3620B EPA 3640A
	Phenols	EPA 8041A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3630C EPA 3640A EPA 3650B EPA 8041A

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Phthalate Esters	EPA 8061A	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3610B EPA 3611B EPA 3620B EPA 3640A
	Polynuclear Aromatic Hydrocarbons (GC)	EPA 8100	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3561 EPA 3580	EPA 3610B EPA 3611B EPA 3630C EPA 3640A EPA 3650B
	Polynuclear Aromatic Hydrocarbons (HPLC)	EPA 8310	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3561 EPA 3580	EPA 3610B EPA 3611B EPA 3630C EPA 3640A EPA 3650B
	Tetrazine Reverse Phase (HPLC)	EPA 8331		
	TPH-High Boiling Point (Diesel)	EPA 8015B (Mod.)	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560	EPA 3611B
	Dioxin & Dibenzofurans			
	PCDDs/PCDFs	EPA 8280A		
	PCDDs/PCDFs-HRGC/HRMS	EPA 8290		

Select by Check	Parameter	EPA Mathadalagu	Extraction/Preparation Method	Sample Clean-Up Procedure
	Farameter	Methodology	ivietriod	Procedure
	Infrared Methods			
	Fourier Transform Infrared (GC)	EPA 8410		
	Bis(2-chloroethyl) Ether & Hydrolysis (GC)	EPA 8430		
	Tot. Recoverable Petro. Hydrocarbons	EPA 8440		
	Immunoassay Methods			
	Immunoassay	EPA 4000		
	Pentachlorophenol by Immunoassay	EPA 4010A		
	2,4-Dichlorophenoxyacetic Acid by Imm.	EPA 4015		
	Polychlorinated Biphenyls by Imm.	EPA 4020		
	Soil Screening for TPH by Imm.	EPA 4030		
	Soil Screening for PAHs by Imm.	EPA 4035		
	Soil Screening for Toxaphene by Imm.	EPA 4040		
	Soil Screening for Chlordane by Imm.	EPA 4041		
	Soil Screening for DDT by Imm.	EPA 4042		
	TNT Explosives in Soil by Imm.	EPA 4050		
	Hexahydro-1,3,5-trinitro-1,3,5-triazine	EPA 4051		
	Miscellaneous Screening Methods			
	Headspace	EPA 3810		
	Hexadecane Ext. & Screening of Purg.	EPA 3820		
	Trinitrotoluene (TNT) in Soil (Color.)	EPA 8515		
	Polychlorinated Biphenyls in Soil	EPA 9078		
	Polychlorinated Biphenyls in Trans. Oil	EPA 9079		

Plant and Animal Tissues

MISCELLANEOUS: Type in only the parameters and approved method(s) that the laboratory is seeking accreditation to perform.

Office Use Only	Parameter	Methodology			
		EPA	Standard Methods	Other	Extraction/Prep. Method
	Metals				
	Inorganics				
	Volatiles				
	Semivolatiles				
	Pesticides				
	Other				

CLEAN AIR ACT METHODOLOGY AND OTHER AIR METHODS

Air Toxics Methods: Check the parameter and circle the method(s) that the laboratory is seeking certification to perform. **NIOSH & OSHA Methods:** In the space below, Type in the number of the NIOSH or OSHA method that the laboratory is seeking accreditation to perform. **Other EPA Methods:** In the space below, Type in the number of the EPA-approved methods the laboratory is seeking accreditation to perform. (Examples: EPA 15; EPA 23; EPA 114; R-1 to R-64)

Select by Check	Parameter	Method
	Air Toxics Methods	
	Volatile Organic Compounds in Air	TO-1
		TO-2
		TO-3
		TO-6
		TO-7
		TO-12
		TO-14
		TO-15
		TO-17
	Carbonyls in Air	TO-5
		TO-11
	Pesticides & PCB's in Air	TO-4
		TO-10
	Semi-volatiles & Dioxins in Air	TO-8
		TO-9
		TO-13
	Open-Path monitoring in air	TO-16
	NIOSH & OSHA Methods	
	NIOSITA SOLIA MOLIOGO	
	Other EPA Methods	

RADIOLOGICAL METHODOLOGY AND EQUIPMENT

Check the parameter that the laboratory is seeking certification to perform. Mark (X) the matrix and list only the method(s) that the laboratory is seeking certification to perform.

Select by Check	Parameter		N	1atrix		Method
000		Air	Liquid	Solids I	Biota	
	Au-198		1		1	
	C-14			1	-	
	Co-57					
	Co-58					
	Co-60	-		1	1	
	Cr-51			1	-	
	Cs-129		1	1	1	
	Cs-134			1	-	
	Cs-137					
	Fe-55		1	1	1	
	Fe-59					
	Ga-67					
	Gross Alpha	1	1			
	Gross Alpha Radium	1	1	1		
	Gross Beta	\dashv	1	1	1	
	Hg-197	1	1			
	Hg-203					
	I-123			1	-	
	I-131			1	-	
	In-113	-		1	1	
	Ir-192	-		1	1	
	Isotopic Americium	-		1	1	
	Isotopic Plutonium (Pu-238, Pu-239/240)					
	Isotopic Thorium (Th-232, Th-228, Th-230)	-		1	1	
	Isotopic Uranium (U-238, U-234, U-235)	-		1	1	
	K-40	-		1	1	
	Na-22	-		1	1	
	Natural Uranium (Total)		1	1	1	
	Pb-210		1	1	1	
	Ra-226			1	-	
	Ra-228			1	-	
	Radon 222			1	-	
	Sc-46		1	1	1	
	Se-75					
	Sr-85			1	-	
	Sr-89					
	Sr-90	1	1	1		
	Tc-99		1	1		
	Total Americium	1	1	1		
	Total Curium	1	1	1		
	Total Neptunium		1	1		
	Total Plutonium	1	1	1		
	Total Thorium	1	1	1		
	Tritium	1	1			
	Yb-169	1	1			
	Gamma-Spec	1	1	1		
	Other	1	1			

Proportional Counter

Instrume Numbe		Manufacturer	Mod	lel	Year			Sample Cha	nging		
							Manual	Automat	ic	C	apacity
Туре	W	indow Density	Countin	g Gas			Instrument E	Background			
						Alpha			Ве	eta	
					Operating Voltage	е	СРМ	Operating Vo	oltage		СРМ
	Daily	Check Standard	ds				Standards	Supplier			
Alpha		Beta	Gam	ma	Alpha		Ber	ta		Gam	ıma
	Calib	ration Standard	ls				Standards	Supplier			
Alpha		Beta	Gam	ma	Alpha		Bet	ta		Gam	ıma
	Calibration	Frequency (1)			Service Maintenan	ce Freque	ncy (2)		Condi	ition (3)	
D	W	М	Other	Q	S	Α	Other	G		R	N
Note 1: Daily,	weekly, mon	thly Note 2: Qua	rterly, semianr	nually, ann	ually Note 3:	Good, oper	rating but needs	repair, not ope	rating		
Are calibration Is calibration in	protocols ava	ly available to the operally also be a	rator? rator?	systems:	Yes No Yes No Yes No Yes No						

Alpha Scintillation Counter

Instrume Numbe		Manufacturer	Mod	del	Year			Sample Cha	nging		
							Manual	Automat	ic	(Capacity
	Alp	oha Scintillation C	ells				Instrument Ba	ackground			
Manufact	urer	Model	Volu	me	Opera	ting Voltag	je –		Ci	PM	
	Da	ily Check Standar	ds				Standards	Supplier			
Alpha		Beta	Gam	ma	Alpha		Beta	a		Gan	nma
	Ca	alibration Standar	ds				Standards	Supplier			
Alpha	ı	Beta	Gam	ma	Alpha		Beta	a		Gan	nma
	Calibrati	on Frequency (1)			Service Maintenan	ce Frequer	ncy (2)		Cond	ition (3)	
D	W	M	Other	Q	S	Α	Other	G		R	N
Are operating Are calibration is calibration in	manuals re protocols	nonthly Note 2: Quandally available to the available to the operavailable to the operaintenance records	e operator? rator? erator?	·	Yes No Yes No Yes No Yes No Yes No	Good, opera	ating but needs r	epair, not ope	rating		

Liquid Scintillation Counter

Instrume Numbe		Manufacturer	Mod	del	Year			Sample Chang	ging	
						Ma	anual	Automatic	; (Capacity
Disc	riminator (Channels	D	ata Reado	ut Channel Printout		Externa	Standard	Refriç	jeration
1	2	3	Visual	1	2	3	Yes	No	Yes	No
	Da	ily Check Standar	ds				Standards	Supplier		
Alpha	ı	Beta	Gam	ma	Alpha		Bet	a	Gar	nma
	Ca	alibration Standard	ls				Standards	Supplier		
Alpha		alibration Standard Beta	ds Gam	ma	Alpha		Standards Bet		Gar	nma
Alpha				ma	Alpha				Gar	nma
Alpha	l			I	Alpha Service Maintenanc	e Frequenc	Bet		Gar Condition (3	
Alpha	l	Beta		I		e Frequenc	Bet			
	Calibratio	Beta on Frequency (1)	Gam		Service Maintenanc		Bet	a	Condition (3)
D	Calibratio	Beta on Frequency (1)	Gam	Q	Service Maintenanc	A	Bet y (2) Other	a	Condition (3)

Alpha Spectrometer System

Instrum	ent Numbei	r				Analyzer S	System			
		Ма	nufacturer		Model		Year		Chanı	nels
1	Гуре					Detector S	System			
		Ма	nufacturer		Model		Year		Siz	е
					1					
	Daily	Check Standa	rds				Standards S	Supplier		
Alpha	a	Beta	Gam	ma	Alpha	a	Beta	l	Gam	ma
	Calik	oration Standar	rds				Standards S	Supplier	1	
Alpha	а	Beta	Gam	ma	Alpha	a	Beta	l	Gam	ma
	Calibration	Frequency (1))	S	Service Maintena	nce Frequ	iency (2)		Condition (3))
D	W	M	Other	Q	S	Α	Other	G	R	N
Are calibration Is calibration	g manuals re on protocols information	nonthly Not eadily available available to the available to the naintenance rec	to the operator operator?	or?	Yes _ Yes _	Note 3: G	Good, operating b	ut needs rep	pair, not operati	ng

Gamma Spectrometer System

Instrum	ent Numbe	r				Analyzer S	ystem			
		Ma	nufacturer		Model		Year		Chanı	nels
						<u>'</u>				
1	уре					Detector Sy	ystem			
		Ma	nufacturer		Model		Year		Siz	е
					I					
	Daily	/ Check Standa	ards				Standards S	Supplier		
Alpha	a	Beta	Gam	ma	Alpha	a	Beta		Gam	ıma
	Cali	bration Standa	rds				Standards S	Supplier	T	
Alpha	а	Beta	Gam	ma	Alpha	a	Beta		Gam	ıma
	0 111 41	F (4)	<u> </u>				(0)		0 1111 (0)	
	Calibration	n Frequency (1)	S	ervice Maintena	nce Freque	ency (2)		Condition (3))
D	D	M	Other	Q	S	Α	Other	G	R	N
Are calibration ls calibration	g manuals r in protocols informatior	monthly No eadily available available to the available to the naintenance rec	to the operator? operator?	or?	Yes _	No No No	ood, operating bu	ut needs rep	pair, not operati	ng

MISCELLANEOUS METHODOLOGIES

This table is for parameters and methods which are not found in previous sections in this application appendix. Type or write in the method(s) that the laboratory is seeking certification to perform.

Parameter	Method	Other

Quality Control: Mark (X) the quality control practices below that apply to your laboratory with the frequency performed.

Quality Control	Yes	No	Frequency	Comments
Quality Assurance Plan*				
Standard Operating Procedures*				
Initial Demonstration of Precision and Accuracy for each Method, each Instrument, and each Analyst Method Detection Limit Study				
Chain of Custody				
Sample Identification System				
Use of Unknown Performance Evaluation Standards				
Documented Standard Curve for each Method and Analyte				
Standard Curve Checked Prior to each Sample Set				
Verify Curve Every Ten Samples or as by Method Laboratory Reagent Blanks				
Use of Spiked Samples for Recovery Data				
Use of Known Reference Samples				
Use of Duplicate Samples				
QC Charts or Tabulations				
Service Schedule on Balances and Thermometers				
Use of NIST Class S or S-1 or ASTM Class 1, 2, or 3 Weights				
Dating of Chemicals upon Receipt, Opening, etc.				
Chemical Inventory Log				
Standard Preparation and Training Records				
Column Inventory Log				
GC, GC/MS Maintenance Log				
Use of Field and/or Trip Blanks				
Use of Field Duplicates				
Use of Laboratory Control Samples				
Electronic Data Management				
Management Review of Data				
QA Manager Review of Data				
Update of Standard Operating Procedures				
Update of Quality Assurance Plan				
Instrument Service Contracts				
Oven and Refrigerator Temperature Records				

• Quality Assurance Plan and a List of Standard Operating Procedures Must accompany completed Application Form.

Instructions for Application for Accreditation of Environmental Laboratories Under 1 VAC 30, Chapter 46

The application form is in Word 97. You may fill the application form in with ink or may fill it in using Word 97 or a more recent version of Word. You will need to complete and return the entire application form.

Boxes on Page 1.

Please use only the box on the left side of the page. Use this box to indicate what your application is for.

1. Laboratory Identification

For initial applications, you will not have a laboratory identification number. Please enter the legal name of the laboratory in the line provided.

Laboratory Physical Address

Please provide the street address of the laboratory as well as the city, state and zip code. Provide driving directions to the laboratory if the laboratory's location is difficult to find.

3. Laboratory Mailing Address

Please provide the mailing address if it is different than the physical address.

4. Laboratory Ownership

Please provide the name of the owner of the laboratory. The laboratory's owner may be a company, local government, or other organization. Please provide the organization name here and the name of the responsible official at the organization under number 6. Please provide the mailing address for the laboratory owner in this section.

Operator of Laboratory

If the laboratory is operated by an organization other than the owner's organization, please provide the name of the operator and mailing and contact information in this section.

6. Responsible Official

Please review the definition of "responsible official" in Chapter 45 to determine the name of the responsible official for the laboratory. Please include this person's name in this section, along with his or her contact information.

7. Technical director

Please provide the name, mailing address, phone number and other contact information for the technical director

Quality Assurance Officer

Please provide the name, mailing address, phone number and other contact information for the quality assurance officer.

9. Laboratory Contact

Please list the name and phone number of the contact person at the laboratory who may be called to answer questions about the laboratory's application or operations.

10. Laboratory Description

Please check one of the types of laboratories listed. If your laboratory type is not listed, please provide it in "other."

11. Hours of Operation

Please provide the laboratory's schedule of operation here. Show both the days of the week and the hours during the day the laboratory operates.

12. Mobile laboratories

Fill in this section if the laboratory is mobile. Otherwise skip the section.

13. Additional Documentation

This section lists the additional documents the laboratory must file with this application. Applications that do not include this information will be deemed incomplete. Please call the program staff if you have questions. Only initial application documentation is included in this draft application form.

14. Fields of Accreditation and Method Selection

The fields of accreditation, methods and analytes can be found in the Fields of Accreditation Appendix to this application form. The laboratory must use this appendix to select the fields of testing, methods and analytes for which it wishes to be accredited. The appendix contains directions for selection.

15. Fee Calculation

This section explains the calculation laboratories need to make to calculate the fee to be paid. Please call the program staff if there is any question about how to calculate the fee. Provide a check for the fee with your application package. This fee is good for the term of the certification, when issued, which is two years.

16. Certificate of Compliance

Please read carefully the certificate before signing. The Quality Assurance Officer, Technical Director, and Responsible Official must all sign and date this certificate.

17. Application submittal

This section provides the address where the laboratory must send the application package.

Virginia Environmental Laboratory Certification Program **Application**

Application For Accreditation of Environmental Laboratories Under 1 VAC 30, Chapter 46

DATE RECEIVED

Please check one:

	New Primary Application	New Reciprocal Accred. Appl.	Action Initial Date
	Primary Renewal	Reciprocal Accred. Appl. Renewal	Complete
	Application for Re-accredita	tion Change of Address	Fees Rcvd
	Application to add to or moscope of accreditation	odify Change of ownership	OFFICE USE ONLY
١.	Laboratory Identifica	tion	
	VA Laboratory Identification (not for initial application)		
	Laboratory Name:		
	(Legal name of the laboratory	as it will appear on the certificate)	
2.	Laboratory Physical	Address	
	(Number and Street)		
	(City)	(State) (Zip	code)
	Driving Directions to Facilit	y and/or description of location:	
3.	Laboratory Mailing A	address	
	(P.O. Box or Number and Stre	eet)	
	(City)	(State)	(Zipcode)

(Name of Owner)	(Phone)	(
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode
Operator of Laboratory (if different th	an owner)	
(Name of Operator)	(Phone)	
(P.O. Box or Number and Street)		
(City)	(State)	(Zipcode
Responsible Official		
Responsible Official (Name of Responsible Official)	(Phone)	
(Name of Responsible Official)		
(Name of Responsible Official) (P.O. Box or Number and Street)	(Phone)	
(Name of Responsible Official) (P.O. Box or Number and Street) (City)	(Phone)	
(Name of Responsible Official) (P.O. Box or Number and Street) (City) (E-mail address)	(Phone)	(Zipcode
(Name of Responsible Official) (P.O. Box or Number and Street) (City) (E-mail address) Technical Director	(Phone)	

(E-mail address)

(State)	(Zipcode)
	Phone)
	Phone)
	Phone)
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which the labor	atory is associated
willen the labor	alory is associated
)	
s of the week a	and hours of
_	number is the ve

13. Additional Documentation

The Virginia Environmental Laboratory Certification Program also requires that you provide the following documentation as part of your application:

Initial Application for Certification

Current copy of Laboratory Quality Manual
All Analytical Method Standard Operating Procedures (SOPs)/analytical procedures for each method for which certification is sought
Demonstration of Capability for each method for which certification is sought
Results of the three most recent proficiency test studies. These must be sent by the PT provider.
List of personnel including description of each person's position or title and the methods each performs.
Current resum— of the technical director of the laboratory and of the quality assurance officer.

Initial Application for Reciprocal Accreditation (Secondary)

- € Current copy of Laboratory Quality Manual
- € The last on-site assessment report from the Primary Accrediting Authority, Corrective Action Plan, and subsequent responses.
- € A copy of the laboratory's current accreditation certificate. This must be sent from the Primary Accrediting Authority.

14. Fields of Accreditation and Method Selection

Please use the Fields of Accreditation Appendix to select Fields of Accreditation, methods, and analytes.

15. Fee Calculation

The base fee is \$2100. The category fees are as follows:

TEST CATEGORY	FEE
Oxygen demand (BOD or COD)	\$300
Bacteriology	\$300
Inorganic chemistry, fewer than four methods	\$300
Inorganic chemistry, four or more methods	\$600
Chemistry metals, fewer than four methods	\$300
Chemistry metals, four or more methods	\$600
Organic chemistry, fewer than four methods	\$350
Organic chemistry, four or more	\$700
Whole effluent toxicity, acute methods only	\$300

Whole effluent toxicity, acute and chronic methods	\$600
Radiochemical	\$900
Physical	\$300

Add the base fee to the sum of the category fees. For example, if applying for certification for BOD, several bacteriology [microbiology] methods, and four inorganic chemistry methods, the sum of your category fees will be as follows: \$300 + \$300 + \$300 = \$900. Your total fee will be as follows: \$2100 + \$900 = \$3000. If the sum of your base fee and category fees exceeds \$4200, you will pay the maximum fee of \$4200.

Please include a check for the total fee made out to the Virginia Division of Consolidated Laboratory Services as part of your application package.

16. Certificate of Compliance

The applicant understands and acknowledges that the laboratory is required to be continually in compliance with the Virginia environmental laboratory accreditation program regulation (1 VAC 30, Chapter 46 and is subject to the provisions of 1 VAC 30-46-100 in the event of noncompliance. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the laboratory or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. Submitting false information or data shall result in denial of certification or decertification. I hereby further certify that I am authorized to sign this application.

	Date:
(Responsible official)	
	Date:
(Technical director)	
	Date:
(Quality assurance officer)	Date.

17. Application Submittal

Please include this application, filled out completely, all additional documentation listed under number 13 above, and a check for your fee in your application package.

Please mail your application package to:

Virginia Division of Consolidated Laboratory Services Attn: Environmental Laboratory Certification Program – Chapter 46 Application 600 North 5th Street Richmond, VA 23219



CLEAN WATER ACT METHODOLOGY:

INORGANIC - TRACE METAL: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Digestion Methods	AA/I	Direct	GFAA/	Furnace	AA/H	lydride		ICP	Cold	Vapor		Other
			EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM/Other
	Aluminum		202.1	3111 D	202.2	3113 B			200.7	3120 B				
	Antimony		204.1	3111 B	204.2	3113 B			200.7	3120 B				
	Arsenic				206.2	3113 B	206.3	3114 B	200.7	3120 B			206.4	3500-As C
	Barium		208.1	3111 D	208.2	3113 B			200.7	3120 B				
	Beryllium		210.1	3111 D	210.2	3113 B			200.7	3120 B				3500-Be D
	Boron								200.7	3120 B			212.3	4500-B B
	Cadmium		213.1	3111 B 3111 C	213.2	3113 B			200.7	120 B				
	Calcium		215.1	3111 B					200.7	3120 B				215.2 3500-Ca D
	Chromium		218.1	3111 B	218.2	3113 B			200.7	3120 B				
	Chromium VI		218.4	3111 C										3500-Cr D
	Cobalt		219.1	3111 B 3111 C	219.2	3113 B			200.7	3120 B				
	Copper		220.1	3111 B 3111 C	220.2	3113 B			200.7	3120 B				3500-Cu D, E HACH 8506
	Gold		231.1	3111 B	231.2									
	Iridium		235.1	3111 B	235.2									
	Iron		236.1	3111 B 3111 C	236.2	3113 B			200.7	3120 B				3500-Fe D HACH 8008
	Lead		239.1	3111 B 3111 C	239.2	3113 B			200.7	3120 B				3500-Pb D
	Magnesium		242.1	3111 B					200.7	3120 B				3500-Mg D
	Manganese		243.1	3111 B	243.2	3113 B			200.7	3120 B				3500-Mn D HACH8034

INORGANIC - TRACE METAL (CONT'D): Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Digestion Methods	AA/	Direct	GFAA	/Furnace	AA/H	lydride		ICP	Cold	Vapor		Other
			EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM	EPA	SM/Other
	Mercury										245.1 245.2	3112 B		
	Molybdenum		246.1	3111 D	246.2	3113 B			200.7	3120 B				
	Nickel		249.1	3111 B	249.2	3113 B			200.7	3120 B				3500-Ni D
	Osmium		252.1	3111 D	252.2									
	Palladium		253.1	3111 B	253.2									
	Platinum		255.1	3111 B	255.2									
	Potassium		258.1	3111 B					200.7	3120 B				3500-K D
	Rhodium		265.1	3111 B	265.2									
	Ruthenium		267.1	3111 B	267.2									
	Selenium				270.2	3113 B		3114 B	200.7	3120 B				070.4
	Silica								200.7	3120 B				370.1 4500-Si D
	Silver		272.1	3111 C 3111 B	272.2	3113 B			200.7	3120 B				
	Sodium		273.1	3111 B					200.7	3120 B				3500-Na D
	Thallium		279.1	3111 B	279.2				200.7	3120 B				
	Tin		282.1	3111 B	282.2	3113 B			200.7					
	Titanium		283.1	3111 D	283.2									
	Vanadium		286.1	3111 D	286.2				200.7	3120 B				3500-V D
	Zinc		289.1	3111 C 3111 B	289.2				200.7	3120 B				3500-Zn E 3500-Zn F HACH8009

MICROBIOLOGY: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology					
		EPA	Standard Methods	Other			
	Coliform (MF) Fecal	EPA/600/8-78- 017, p. 124	SM 9222 D				
	Fecal Coliform (MPN) EC	EPA/600/8-78- 017, p. 132	SM 9221 E1				
	Fecal Coliform (MPN) A-1	EPA/600/8-78- 017, p. 132	SM 9221 E2				
	Total Coliform (MF)	EPA/600/8-78- 017, p. 108	SM 9222 B				
	Total Coliform (MPN)	EPA/600/8-78- 017, p. 108	SM 9221 B				
	Fecal Streptococci (MF)	EPA/600/8-78- 017, p. 136	SM 9230 C				
	Fecal Streptococci (MPN)	EPA/600/8-78- 017, p. 136	SM 9230 B				

TOXICITY TESTING: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform. Type or write in the information on the specific method or publication used where necessary.

Select by check	Parameter	Methodolog	у	
		EPA	Standard Methods	Other
	Freshwater Acute Tests (EPA/600/4-90/027)			
	Definitive Toxicity using Daphnia pulex			
	Definitive Toxicity using Ceriodaphnia dubia			
	Definite Toxicity using <i>Pimephales</i> promelas			
	Saltwater Acute Tests (EPA/600/4-90/027)			
	Definitive Toxicity using Mysidopsis bahia			
	Definitive Toxicity using Cyprinodon variegatus			
	Definitive Toxicity using Menida beryllina			

Select by check	Parameter	Methodolog	у	
		EPA	Standard Methods	Other
	Freshwater Chronic Tests (EPA/600/4-			
	91/002)			
	Ceriodaphnia dubia Survival and	EPA		
	Reproduction	1002.0		
	7-day Pimephales promelas (fathead	EPA		
	minnow)	1000.0		
	Larval Survival and Growth			
	Saltwater Chronic Tests (EPA/600/4-91/003)			
	7-day Mysidopsis bahia Survival and	EPA		
	Growth	1007.0		
	7-day Cyprinodon variegatus Larval	EPA		
	Survival and Growth Test	1004.0		
	7-day Menida beryllina Larval Survival and	EPA		
	Growth Test	1006.0		

INORGANIC - BIOLOGICAL EXAMINATIONS: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Biomass (Plankton, Dry Weight)		SM 10200 I-5	
	Biomass (Plankton, Biovolume)		SM 10200 I-2	
	Biomass (Plankton, Displ. Volume)		SM 10200 I-4	
	Biomass (Periphyton, Dry Weight)		SM 10300 C-5	
	Chlorophyll a (Spectrophotometric)		SM 10200 H-2	
	Chlorophyll a (Fluorometric)		SM 10200 H-3	

INORGANIC - DEMAND: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Biochemical Oxygen Demand	EPA 405.1	SM 5210 B	
	Carbonaceous BOD		SM 5210 B	
	Chemical Oxygen Demand	EPA 410.1 EPA 410.2 EPA 410.3 EPA 410.4	SM 5220 C SM 5220 D	HACH 8000
	Total Organic Carbon (TOC)	EPA 415.1	SM 5310 B SM 5310 C SM 5310 D	415.2
	Dissolved Oxygen	EPA 360.2 EPA 360.1	SM 4500-O C SM 4500-O G	

INORGANIC - MINERAL: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Acidity	EPA 305.1	SM 2310 B		
	Alkalinity	EPA 310.1 EPA 310.2	SM 2320 B		
	Chloride	EPA 325.1 EPA 325.2 EPA 325.3	SM 4500-Cl ⁻ E SM 4500-Cl ⁻ C SM 4500-Cl ⁻ B		
	Fluoride (Manual distillation required)	EPA 340.1 EPA 340.2 EPA 340.3	SM 4500-F ⁻ B SM 4500-F ⁻ D SM 4500-F ⁻ C SM 4500-F ⁻ E		
	Hardness, Total (CaCO ₃)	EPA 130.1 EPA 130.2	SM 2340-F ⁻ B SM 2340 C SM 3111 B		
	Hydrogen-Ion Concentration (pH)	EPA 150.1 EPA 150.2	SM 4500-H B		
	Specific Conductance	EPA 120.1	SM 2510 B		
	Sulfate	EPA 375.1 EPA 375.3 EPA 375.4	SM 4500-SO ₄ ²⁻ C SM 4500-SO ₄ ²⁻ D		

INORGANIC - MISCELLANEOUS: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Bromide	EPA 320.1			
	Color – ADMI (Tristimulus) - Visual - Spectrophotometric (Tristimulus) - Spectrophotometric (Plat. Cobalt)	EPA 110.1 EPA 110.2 EPA 110.3	SM 2120 E SM 2120 B SM 2120 C		
	Cyanide - (Manual distillation with MgCl required)	EPA 335.3 EPA 335.2	SM 4500-CN ⁻ D SM 4500-CN ⁻ E SM 4500-CN ⁻ C		
	Cyanide Amenable to Chlor.	EPA 335.1	SM 4500-CN ⁻ G		
	Oil and Grease	EPA 413.1	SM 5520 B		
	Phenolics, Total Recoverable	EPA 420.1 EPA 420.2			
	Residual Chlorine	EPA 330.1 EPA 330.2 EPA 330.3 EPA 330.4 EPA 330.5	SM 4500-CI D SM 4500-CI C SM 4500-CI B SM 4500-CI F SM 4500-CI G		
	Sulfide	EPA 376.1 EPA 376.2	SM 4500-S ²⁻ E SM 4500-S ²⁻ D		
	Sulfite	EPA 377.1	SM 4500-SO ₃ ²⁻ B		
	Surfactants (MBAS)	EPA 425.1	SM 5540 C		
	Temperature	EPA 170.1	SM 2550 B		
	Turbidity	EPA 180.1	SM 2130 B		
	Unionized H₂S -		SM 4500-S ²⁻ F		

INORGANIC - NUTRIENT: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Ammonia-Nitrogen – (Distillation required unless alternate test approval is obtained)	EPA 350.1 EPA 350.2 EPA 350.3	SM 4500-NH ₃ H SM 4500-NH ₃ H SM 4500-NH ₃ C SM 4500-NH ₃ E SM 4500-NH ₃ F SM 4500-NH ₃ G	
	Kjeldahl Nitrogen	EPA 351.1 EPA 351.2 EPA 351.3	SM 4500-NH ₃ B SM 4500-NH ₃ C SM 4500-NH ₃ E SM 4500-NH ₃ F SM 4500-NH ₃ G	
	Nitrate-Nitrogen	EPA 352.1		NO ₃ -NO ₂ Minus
	Nitrate-Nitrite (NO ₃ NO ₂)	EPA 353.1 EPA 353.2 EPA 353.3	SM 4500-NO ₃ H SM 4500-NO ₃ F SM 4500-NO ₃ E	_
	Nitrite-Nitrogen	EPA 354.1	SM 4500-NO ₂ B	HACH 8507
	Total Organic Nitrogen	EPA TKN-NH3(N)		
	Orthophosphate	EPA 365.1 EPA 365.2 EPA 365.3	SM 4500-P F SM 4500-P E	
	Phosphorus	EPA 365.1 EPA 365.2 EPA 365.3 EPA 365.4	SM 4500-P F SM 4500-P E	

INORGANIC – RESIDUE [PHYSICAL]: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Residue, Total (TS)	EPA 160.3	SM 2540 B	
	Residue, Filterable (TDS)	EPA 160.1	SM 2540 C	
	Residue, Non-filterable (TSS)	EPA 160.2	SM 2540 D	
	Residue, Settleable (SS)	EPA 160.5	SM 2540 F	
	Residue, Volatile (VS)	EPA 160.4	SM 2540 G	

Select by Check	Parameter	Methodology		
		GC	GC/MS	HPLC
	Pesticides & PCBs			
	Organochlorine Pesticides	EPA 608		
	Organophosphate Pesticides	SM 6630 C		
	Polychlorinated Biphenyls	EPA 608		
	PCBs in Oil	EPA 600\4-81-045		
	Chlorophenoxy Acid Herb.	SM 6640 B		
	Volatile Organics			
	Acrolein	EPA 603		
	Acrylonitrile	EPA 603		
	Purgeable Aromatics	EPA 602		
	Purgeable Halocarbons	EPA 601		
	Purgeables (GC/MS)		EPA 624	
	VOC by Isotope (GC/MS)		EPA 1624	
	Semivolatiles			
	Base Neut. & Acids (GC/MS)		EPA 625	
	Benzidines	EPA 605		
	Chlorinated Hydrocarbons	EPA 612		
	Haloethers	EPA 611		
	Nitroaromatics & Isophorone	EPA 609		
	Nitrosamines	EPA 607		
	Phenols (Organics)	EPA 604		
	Phthalate Esters	EPA 606		
	Poly. Arom. Hydro (PAHs)	EPA 610		EPA 610
	SVO by Isotope (GC/MS)		EPA 1625	
	Dioxins & Furans			
	2,3,7,8-TCDD		EPA 613	

SOLID AND HAZARDOUS WASTE METHODOLOGY:

INORGANIC -TRACE METAL: Check the parameter and circle the method(s) that the laboratory is seeking

accreditation to perform.

Select by Check	Parameter	Digestion Methods	FLAA/ FLAE	GFAA	Hydride	ICP	ICP/ MS	Color	Cold Vapor	Other
	Aluminum		7020			6010B	6020			
	Antimony		7040	7041	7062	6010B	6020			
	Arsenic			7060A	7061A 7062	6010B	6020			
	Barium		7080A	7081	7002	6010B	6020			
	Beryllium		7090	7091		6010B	6020			
	Cadmium		7130	7131A		6010B	6020			
	Calcium		7140			6010B	6020			
	Chromium VI		7197					719A		7199
	Chromium		7190	7191		6010B	6020			
	Cobalt		7200	7201		6010B	6020			
	Copper		7210	7211		6010B	6020			
	Iron		7380	7381		6010B	6020			
	Lead		7420	7421		6010B	6020			
	Lithium		7430			6010B	6020			
	Magnesium		7450			6010B	6020			
	Manganese		7460	7461		6010B	6020			
	Mercury								7470A 7471A	
	Molybdenum		7480	7481		6010B	6020			
	Nickel		7520	7521		6010B	6020			
	Osmium		7550			6010B	6020			
	Potassium		7610			6010B	6020			
	Selenium			7740	7741A 7742	6010B	6020			
	Silica					6010B	6020			
	Silver		7760A	7761		6010B	6020			
	Sodium		7770			6010B	6020			
	Strontium		7780			6010B	6020			
	Thallium		7840	7841		6010B	6020			
	Tin		7870			6010B	6020			
	Vanadium		7910	7911		6010B	6020			
	Zinc		7950	7951		6010B	6020			

MICROBIOLOGY: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Total Coliform (MPN)	EPA 9131		
	Total Coliform (MF)	EPA 9132		
	Fecal Coliform (MF)		SM 9222 D	
	Fecal Coliform (MPN) EC		SM 9221 E1	
	Fecal Streptococci (MF)		SM 9230 C	
	Fecal Streptococci (MPN)		SM 9230 B	
	Salmonella (MPN)		SM 9260 D1	
	Salmonella (MF)		SM 9260 D2	

INORGANIC - DEMAND: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Total Organic Carbon (TOC)	EPA 9060			

INORGANIC - HAZARDOUS WASTE CHARACTERISTICS: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Corrosivity - towards steel	EPA 1110		
	Corrosivity - pH	EPA 9040B		
	Dermal Corrosion	EPA 1120		
	EP Toxicity Test	EPA 1310A		
	Ignitability (Pensky Martens)	EPA 1010		
	Ignitability (Setaflash)	EPA 1020A		
	Ignitability of Solids	EPA 1030		
	Liquid Release Test (LRT) Procedure	EPA 9096		
	Reactivity - Cyanide	SW-846 S.7.3		
	Reactivity - Sulfide	SW-846 S.7.3		

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Synthetic Precipitation Leaching Proc.	EPA 1312		
	TCLP - Tox. Char. Leach. Proc nonvolatile	EPA 1311		
	TCLP - Tox. Char. Leach. Proc Zero Head.	EPA 1311		

INORGANIC - MINERAL: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology			
		EPA	Standard Methods	Other	
	Chloride	EPA 9212 EPA 9250 EPA 9251 EPA 9253 EPA 9056			
	Fluoride	EPA 9214 EPA 9056			
	Hydrogen-Ion Concentration (pH)	EPA 9040B			
	pH - Solid & Hazardous Waste	EPA 9045C			
	Specific Conductance	EPA 9050A			
	Sulfate	EPA 9035 EPA 9036 EPA 9038 EPA 9056			

INORGANIC - NUTRIENT: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform.

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Nitrate-Nitrogen	EPA 9210 EPA 9056		
	Nitrite-Nitrogen	EPA 9056		
	Orthophosphate	EPA 9056		

INORGANIC - MISCELLANEOUS: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform. [*Must be accompanied with the distillation procedure.]

Select by Check	Parameter	Methodology		
		EPA	Standard Methods	Other
	Bomb Preparation Method	EPA 5050		
	Bromide (Ion Chromatography) Bromide (Electrode)	EPA 9056 EPA 9211		
	Comp. Test (Wastes & Mem. Liners)	EPA 9090A		
	Cyanide (Distillation)	EPA 9010B		
	Cyanide (Spectro., Automated)* Cyanide (Titrimetric & Man. Spectro.)* Cyanide (Electrode)*	EPA 9012A EPA 9014 EPA 9213		
	Cyanide Amenable to Chlor. (Distillation)	EPA 9010B		
	Cyanide Amen. to Chlor. (Spectro., Automated)* Cyanide Amen. to Chlor. (Titri. & Man. Spectro.)* Cyanide Amen. to Chlor. (Electrode)*	EPA 9012A EPA 9014 EPA 9213		
	Cyanide Extraction for Solids and Oils	EPA 9013		
	Extract Proc. for Oily Wastes	EPA 1330A		
	Extract. Organic Halides in Solids (EOX)	EPA 9023		
	Intrinsic Permeability	EPA 9100		
	Multiple Extraction Procedure	EPA 1320		
	Oil and Grease Oil and Grease (Sludge & Sediment)	EPA 9070 EPA 9071A		
	Paint Filters Liquid Test	EPA 9095A		
	Phenolics, Total Recoverable (Man. Spectro.) Phenolics, Total Recoverable (Color., Auto.) Phenolics, Total Recoverable (Spectro., MBTH)	EPA 9065 EPA 9066 EPA 9067		
	Purgeable Organic Halides (POX)	EPA 9021		
	Saturated Hydraulic Conductance	EPA 9100		
	Saturated Leachate Conductance	EPA 9100		
	Sulfides, Extractable	EPA 9031		
	Sulfides, Acid Soluble & Insoluble (Distillation)	EPA 9030B		
	Sulfides, Acid Soluble & Insoluble (Titrimetric)* Sulfides, Acid Soluble & Insoluble (Electrode)*	EPA 9034 EPA 9215		
	Test Method for Total Chlorine in New and Used Petroleum Products by X-Ray Fluorescence Spectrometry (XRF)	EPA 9075		
	Test Method for Total Chlorine in New And Used Petroleum Products by Oxidative Combustion and Microcoulometry (OCM)	EPA 9076		
	Test Method for Total Chlorine in New and Used Petroleum Products (Field Test Kit Methods)	EPA 9077		
	Total Organic Halides (TOX) BTU	EPA 9020B		
	Viscosity			

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Pesticides and PCBs			
	Organochlorine Pesticides (GC)	EPA 8081A EPA 8270C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3620B EPA 3630C EPA 3640A EPA 3660B
	Organophosphorus Pesticides (GC)	EPA 8141A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3580A	EPA 3620B
	Polychlorinated Biphenyls (GC)	EPA 8082 EPA 8270 C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580	EPA 3620B EPA 3630C EPA 3640A EPA 3660B EPA 3665A
	PCBs in Oil (GC)	EPA 600/4-81-045		
	Chlorophenoxy Acid Herbicides	EPA 8151A		
	Volatiles			
	Acrylamide, Acrylonitrile, & Acrolein (HPLC)	EPA 8316		
	Acrylamide (GC)	EPA 8032A		
	Acrylonitrile (GC)	EPA 8031		
	Nonhalogenated Vol. Organics (GC)	EPA 8015B	EPA 5021 EPA 5031 EPA 5032 EPA 3585	
	Purgeable Halo. & Aromatics (GC)	EPA 8021B	EPA 5021 EPA 5030B EPA 5032 EPA 5035 EPA 3585	

Select by Check	Parameter	EPA Methodology	Extraction/ Preparation Method	Sample Clean- Up Procedure
	Volatiles Purgeables - GC/MS	EPA 8260B	EPA 5021 EPA 5030B EPA 5031 EPA 5032 EPA 5035 EPA 3585	
	TPH-Low Boiling Point (Gas.)	EPA 8015B (Mod.)	EPA 5021 EPA 5030 EPA 5031 EPA 5032 EPA 5035	
	Semivolatiles EDB & DBCP (GC)	EPA 8011		
	Base Neutrals & Acids (GC/MS)	EPA 8270C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3561 EPA 3580A	EPA 3610B EPA 3611B EPA 3620B EPA 3630C EPA 3640A EPA 3650B
	PAHs & PCBs (TE/GC/MS)	EPA 8275A		
	Base Neutrals & Acids (GC/FT-IR)	EPA 8410	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3561 EPA 3580A	EPA 3640A
	Carbonyl Compounds (HPLC)	EPA 8315A		

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Chlorinated Hydrocarbons (GC)	EPA 8121	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3550B EPA 3580A	EPA 3620B EPA 3640A
	Extractable Nonvolatiles (HPLC/TS/MS)	EPA 8321A	BASED ON ANALYTE	BASED ON ANALYTE
	Extractable Nonvolatiles (HPLC/PB/MS)	EPA 8325	BASED ON ANALYTE	BASED ON ANALYTE
	Haloethers	EPA 8111	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3550B	EPA 3620B EPA 3640A
	N-Methylcarbamates (HPLC)	EPA 8318		
	Nitroaromatics & Cyclic Ketones	EPA 8091	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3620B EPA 3640A
	Nitroglycerine (HPLC)	EPA 8332		
	Nitroaromatics, Nitramines (HPLC)	EPA 8330		
	Nitrosamines	EPA 8070A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B	EPA 3610B EPA 3620B EPA 3640A
	Phenols	EPA 8041A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3630C EPA 3640A EPA 3650B EPA 8041A

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Phthalate Esters	EPA 8061A	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A	EPA 3610B EPA 3611B EPA 3620B EPA 3640A
	Polynuclear Aromatic Hydrocarbons (GC)	EPA 8100	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3561 EPA 3580	EPA 3610B EPA 3611B EPA 3630C EPA 3640A EPA 3650B
	Polynuclear Aromatic Hydrocarbons (HPLC)	EPA 8310	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3561 EPA 3580	EPA 3610B EPA 3611B EPA 3630C EPA 3640A EPA 3650B
	Tetrazine Reverse Phase (HPLC)	EPA 8331		
	TPH-High Boiling Point (Diesel)	EPA 8015B (Mod.)	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560	EPA 3611B
	Diania 9 Dilementone			
	Dioxin & Dibenzofurans PCDDs/PCDFs	EPA 8280A		
	PCDDs/PCDFs PCDDs/PCDFs-HRGC/HRMS	EPA 8280A EPA 8290		

Select by Check	Parameter	EPA Methodology	Extraction/Preparation Method	Sample Clean-Up Procedure
	Infrared Methods			
	Fourier Transform Infrared (GC)	EPA 8410		
	Bis(2-chloroethyl) Ether & Hydrolysis (GC)	EPA 8430		
	Tot. Recoverable Petro. Hydrocarbons	EPA 8440		
	Immunoassay Methods			
	Immunoassay	EPA 4000		
	Pentachlorophenol by Immunoassay	EPA 4010A		
	2,4-Dichlorophenoxyacetic Acid by Imm.	EPA 4015		
	Polychlorinated Biphenyls by Imm.	EPA 4020		
	Soil Screening for TPH by Imm.	EPA 4030		
	Soil Screening for PAHs by Imm.	EPA 4035		
	Soil Screening for Toxaphene by Imm.	EPA 4040		
	Soil Screening for Chlordane by Imm.	EPA 4041		
	Soil Screening for DDT by Imm.	EPA 4042		
	TNT Explosives in Soil by Imm.	EPA 4050		
	Hexahydro-1,3,5-trinitro-1,3,5-triazine	EPA 4051		
	Miscellaneous Screening Methods			
	Headspace	EPA 3810		
	Hexadecane Ext. & Screening of Purg.	EPA 3820		
	Trinitrotoluene (TNT) in Soil (Color.)	EPA 8515		
	Polychlorinated Biphenyls in Soil	EPA 9078		
	Polychlorinated Biphenyls in Trans. Oil	EPA 9079		

Plant and Animal Tissues

MISCELLANEOUS: Type in only the parameters and approved method(s) that the laboratory is seeking accreditation to perform.

Office Use Only	Parameter	Methodology						
		EPA	Standard Methods	Other	Extraction/Prep. Method			
	Metals							
	Inorganics							
	Volatiles							
	Semivolatiles							
	Pesticides							
	Other							

CLEAN AIR ACT METHODOLOGY AND OTHER AIR METHODS

Air Toxics Methods: Check the parameter and circle the method(s) that the laboratory is seeking accreditation to perform. **NIOSH & OSHA Methods:** In the space below, Type in the number of the NIOSH or OSHA method that the laboratory is seeking accreditation to perform. **Other EPA Methods:** In the space below, Type in the number of the EPA-approved methods the laboratory is seeking accreditation to perform. (Examples: EPA 15; EPA 23; EPA 114; R-1 to R-64)

Select by Check	Parameter	Method
	Air Toxics Methods	
	Volatile Organic Compounds in Air	TO-1
		TO-2
		TO-3
		TO-6
		TO-7
		TO-12
		TO-14
		TO-15
	Ocale and in Air	TO-17
	Carbonyls in Air	TO-5
	Pesticides & PCB's in Air	TO-11 TO-4
	Pesticides & PCB's in Air	TO-10
	Semi-volatiles & Dioxins in Air	TO-10
	Semi-volatiles & Dioxins in All	TO-9
		TO-13
	Open-Path monitoring in air	TO-16
	Open-r aut monitoring in an	10-10
	NIOCII 9 OCIIA Mathada	
	NIOSH & OSHA Methods	
	Other EDA Methodo	
	Other EPA Methods	

RADIOLOGICAL METHODOLOGY AND EQUIPMENT

Check the parameter that the laboratory is seeking accreditation to perform. Mark (X) the matrix and list only the method(s) that the laboratory is seeking accreditation to perform.

198 4 57 58 60 51 129 134 137 55 59 -67 oss Alpha oss Alpha Radium oss Beta -197 -203	Air	Liquid	Solids B	iota	
4					
4					
57 58 60 51 129 134 137 55 59 67 ss Alpha ss Alpha Radium ss Beta 197					
58 60 51 129 134 137 55 59 67 ss Alpha ss Alpha Radium ss Beta 197					
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59 -67 -bss Alpha -bss Alpha Radium -bss Beta -197 -203					
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203	1		-	-	
203					
23					
			-		
31					
13					
92					
topic Americium					
topic Plutonium (Pu-238, Pu-239/240)					
topic Thorium (Th-232, Th-228, Th-230)					
topic Uranium (U-238, U-234, U-235)					
0					
-22					
210					
·226					
-228					
don 222					
46					
75					
85					
89					
90					
99					
al Plutonium					
			1	 	
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			-		
		-	-	-	1
	22 ural Uranium (Total) 210 226 228 on 222 66 75 5	22 ural Uranium (Total) 210 226 228 228 228 20 222 26 275 5 9 0 0 9 ul Americium al Curium al Neptunium al Plutonium al Thorium um 169 nma-Spec	22 ural Uranium (Total) 210 226 228 on 222 66 75 5 9 0 0 0 0 0 1 Americium al Curium al Neptunium al Plutonium al Thorium um 169 nma-Spec	Description	Description

Proportional Counter

Instrume Numbe	I	Manufacturer	Mod	lel	Year			Sample Changing			
							Manual	Automat	ic	С	apacity
Туре		Window Density	Countin	g Gas			Instrument B	ackground			
					Alpha				Ве	eta	
					Operating Voltag	•	СРМ	Operating Vo	oltage		СРМ
	Da	aily Check Standar	ds				Standards	Supplier			
Alpha Beta Gamma				ma	Alpha Be			ta Gamma			
	C	alibration Standard	ls				Standards	Supplier			
Alpha	1	Beta	Gam	ma	Alpha	Alpha Beta Gam				ma	
	Calibrati	on Frequency (1)			Service Maintenan	e Freque	ncy (2)		Cond	ition (3)	
D	W	М	Other	Q	S	Α	Other	G		R	N
ote 1: Daily	, weekly, m	nonthly Note 2: Qua	rterly, semianr	nually, ann	ually Note 3:	Good, oper	ating but needs r	epair, not ope	rating		
e calibration calibration ir	protocols nformation	eadily available to the available to the oper available to the oper asintenance records	rator? rator?	systems:	Yes No Yes No Yes No Yes No						

Alpha Scintillation Counter

Instrume Numbe		Manufacturer	Mod	lel	Year			Sample Cha	nging	
							Manual	Automat	ic	Capacity
	Al	pha Scintillation Cel	ls				Instrument B	ackground		
Manufact		Model	Volu	me	Opera	ting Volta		3	СРІ	M
					•					
		alle Oland Otavil I					Oten Inn I	O		
		aily Check Standard	S 				Standards	Supplier	<u> </u>	
Alpha	Alpha Beta			ma	Alpha		Beta		Gamma	
	C	alibration Standards	3				Standards	Supplier		
Alpha	1	Beta	Gam	ma	Alpha Be			eta Gamma		
	Calibrat	ion Frequency (1)			Service Maintenan	ce Freque	ency (2)		Condit	ion (3)
D	W	М	Other	Q	S	Α	Other	G	F	R N
Note 1: Daily	, weekly, r	monthly Note 2: Quar	erly, semianr	nually, ann	ually Note 3:	Good, ope	rating but needs r	epair, not ope	rating	
Are operating of Are calibration in the calibration	manuals r protocols nformation	eadily available to the available to the opera available to the opera naintenance records k	operator? ator? ator?		Yes No Yes No Yes No Yes No	, 1 -	Ç	. , 1	Ü	

Liquid Scintillation Counter

Instrume Numbe	-	Ma	nufacturer	Mod	lel	Year			nging		
								Manual	Automati	ic Capacity	
Disc	riminator	Chan	nels	D	ata Reado	ut Channel Printo	ut	Externa	I Standard	Refric	geration
1					1	2					
	D	aily C	heck Standar	ds				Standards	Supplier		
Alpha	Alpha Beta Gar			Gam	ma	Alpha		Bet	a	Gamma	
		Calibra	ntion Standard	ds				Standards	Supplier		
Alpha			Beta	Gam	ma	Alpha Beta Gamma					nma
	Calibrat	tion Fr	equency (1)			Service Maintena	nce Frequer	nev (2)		Condition (3	\
D	W		M	Other	Q	S	A	Other	G	R	N
			141	Other	Q.			Other		I N	14
Note 1: Daily Are operating and Are calibration in Are permanen	manuals r protocols nformatior	eadily availa availa	available to the operable to t	e operator? rator? rator?	·	ually Note 3 Yes No Yes No Yes No Yes No	·	ating but needs I	repair, not oper	ating	1

Alpha Spectrometer System

Instrument Number			Analyzer System								
		Ma	Manufacturer		Model		Year		Channels		
	Туре					Detector Sy	stem				
			Manufacturer		Model		Year		Size		
	Daily C	heck Standa	rds				Standards S	upplier			
Alph	Alpha		Gamma		Alpha		Beta		Gamma		
	Calibra	tion Standar	ds				Standards S	upplier			
Alph	Alpha		Gamma		Alpha		Beta		Gamma		
	Calibration Frequency (1)				ervice Maintenance Frequency (2)			Condition (3)			
D	W	M	Other	Q	S	Α	Other	G	R	N	
Are operatir Are calibrati s calibratior	ily, weekly, mor g manuals read on protocols av n information av ent service mail	dily available to the ailable to the ailable to the	to the operator operator?	or?	ually, annually Yes _ Yes _ Yes _ Yes _ ems: Yes _	No No No	od, operating bu	it needs re	pair, not operat	ing	

Gamma Spectrometer System

Instrument Number			Analyzer System								
		Mar	ufacturer		Model		Year		Channels		
1	Гуре					Detector Sy	stem				
· ·		Mar	ufacturer		Model		Year		Size		
	Daily Cl	neck Standar	ds				Standards S	Supplier			
Alpha		Beta	Gamm		Alpha		Beta		Gamma		
	Calibra	tion Standard	ds				Standards S	Supplier			
Alpha		Beta	Gamma		Alpha		Beta		Gamma		
Calibration Frequency (1) So				Se	ervice Maintenance Frequency (2)			Condition (3)			
D	D	М	Other	Q	S	Α	Other	G	R	N	
ote 1: Dail	y, weekly, mor	nthly Note	e 2: Quarterly	, semiann	ually, annually	Note 3: Go	od, operating b	ut needs rep	pair, not operat	ing	
e calibratio	g manuals read on protocols ava	ailable to the o	operator?	or?	Yes _						
calibration	information av	ailable to the	operator?	hese syste	Yes _	No					

MISCELLANEOUS METHODOLOGIES

This table is for parameters and methods which are not found in previous sections in this application appendix. Type or write in the method(s) that the laboratory is seeking accreditation to perform.

Parameter	Method	Other

Quality Control: Mark (X) the quality control practices below that apply to your laboratory with the frequency performed.

performed.	-			
Quality Control	Yes	No	Frequency	Comments
Quality Assurance Plan*				
Standard Operating Procedures*				
Initial Demonstration of Precision and Accuracy for each Method, each Instrument, and each Analyst Method Detection Limit Study				
Chain of Custody				
Sample Identification System				
Use of Unknown Performance Evaluation				
Standards				
Documented Standard Curve for each Method and Analyte				
Standard Curve Checked Prior to each Sample Set				
Verify Curve Every Ten Samples or as by Method				
Laboratory Reagent Blanks				
Use of Spiked Samples for Recovery Data				
Use of Known Reference Samples				
Use of Duplicate Samples				
QC Charts or Tabulations				
Service Schedule on Balances and Thermometers				
Use of NIST Class S or S-1 or ASTM Class 1, 2, or 3 Weights				
Dating of Chemicals upon Receipt, Opening, etc.				
Chemical Inventory Log				
Standard Preparation and Training Records				
Column Inventory Log				
GC, GC/MS Maintenance Log				
Use of Field and/or Trip Blanks				
Use of Field Duplicates				
Use of Laboratory Control Samples				
Electronic Data Management				
Management Review of Data				
QA Manager Review of Data				
Update of Standard Operating Procedures				
Update of Quality Assurance Plan				
Instrument Service Contracts				
Oven and Refrigerator Temperature Records				
				1

• Quality Assurance Plan and a List of Standard Operating Procedures Must accompany completed Application Form.