

LABORATORY SERVICES CHECKLIST

EVALUATION NUMBER: _____

DATE: _____

EVALUATOR: _____

FACILITY: _____

RESULT KEY

S = SATISFACTORY U = UNSATISFACTORY N/A = NOT APPLICABLE NE = NOT EVALUATED

Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
A-1		<p>RADIOANALYTICAL LICENSING</p> <p>Confirm current nuclear material license has not lapsed.</p> <p>Provide a copy of your current nuclear material licenses.</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
A-2		<p>What regulatory actions or amendment requests are pending with respect to any licenses, permits, certifications, or authorizations that the laboratory possesses which might impact the ability of the laboratory to receive or process these samples?</p>		<hr/> <hr/> <hr/>

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A-3		What other federal/state/local licenses, certifications, permits, does the laboratory possess?		<hr/> <hr/> <hr/> <hr/>
A-4		What regulatory actions, violations, or amendment requests are pending with respect to any licenses, permits, certifications, or authorizations that the laboratory possesses which might impact the ability of the laboratory to receive or process these samples?		<hr/> <hr/> <hr/> <hr/>
A-5		What was the outcome of the most recent regulatory inspection? Obtain a copy of the report(s).		<hr/> <hr/> <hr/>

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A-6		What restrictions does the laboratory have on the activity of nuclear material?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
A-7		How does the facility assure that radioactive material limitations contained in the nuclear material license are not exceeded when samples are delivered to the facility?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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A-8		Is real-time inventory of the quantity of radiological materials within the laboratory maintained?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
A-9		Describe the tracking system used to monitor the movement of nuclear material through the laboratory.		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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B-1		<p>Preventive Maintenance</p> <p>What laboratory instruments are covered under a preventive maintenance program?</p>		<hr/> <hr/> <hr/> <hr/>
B-2		<p>Examine the logbooks and SOP's pertaining to preventative maintenance activities.</p>		<hr/> <hr/> <hr/> <hr/>

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B-3		Describe the tracking system used to insure that instruments do not exceed the maintenance frequencies.		<hr/> <hr/> <hr/> <hr/>
B-4		Are laboratory personnel permitted to use instruments that have missed scheduled preventative maintenance?		<hr/> <hr/> <hr/> <hr/>

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B-5		How are environmental conditions controlled for temperature, humidity, etc.? Are these monitored in the sample preparation, standards, and counting areas?		<hr/> <hr/> <hr/> <hr/>
B-6		What restrictions does the laboratory have on the activity of nuclear material?		<hr/> <hr/> <hr/> <hr/>

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B-7		How does the facility assure that radioactive material limitations contained in the nuclear material license are not exceeded when samples are delivered to the facility?		<hr/> <hr/> <hr/>
B-8		Is real-time inventory of the quantity of radiological materials within the laboratory maintained?		<hr/> <hr/> <hr/>
B-9		Describe the tracking system used to monitor the movement of nuclear material through the laboratory.		<hr/> <hr/> <hr/>

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C-2		Does the analyst have access to all the approved procedures in the laboratory? Is the analyst working from the written approved procedures?		_____ _____ _____ _____ _____
C-3		Do SOP's contain precision and accuracy statements for known samples?		_____ _____ _____ _____ _____

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C-4		What SOP's exist regarding the handling of computer data? Changes? Backups? Correctness of hand entered data?		<hr/> <hr/> <hr/> <hr/>
C-5		Explain how any deviations from the procedures are incorporated in the final analytical report (i.e., the case narrative).		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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C-6		Examine procedures to ensure they are current and approved by the applicable laboratory management personnel.		<hr/> <hr/> <hr/> <hr/>
C-7		Have the radioanalytical procedures for this project been validated for analytes and matrices prior to use?		<hr/> <hr/> <hr/> <hr/>

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C-8		<p>How are the analysts trained on the procedures and how is that training documented?</p> <p>Is retraining performed and what is its frequency?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
C-9		<p>Describe the process in place to update and revise procedures?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

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C-10		<p>For each analyte, does the laboratory have a technical basis department for sample preparation and counting?</p> <p>What is described in the technical basis document requirements (i.e., sample preparation, sample counting, background subtraction, SAF's, QC preparation, etc.)?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
C-11		<p>If deviations from the SOP's occur, how are they documented and how does the laboratory assure that these deviations do not affect the data?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

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C-12		Does the SOP for glassware washing prescribe an adequate amount of acid treatment of the glassware? YES ___ NO ___		_____ _____ _____ _____ _____ _____ _____ _____ _____

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D-1		<p>CHAIN OF CUSTODY/ SAMPLE RECEIPT/SURVEY</p> <p>Are records available documenting the condition of the shipping and sample containers and sample preservation?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
D-2		<p>Is the internal laboratory chain-of-custody form or other tracking form utilized to track samples?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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D-3		Is a computerized system used to track samples? YES ___ NO ___		_____ _____ _____ _____ _____

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D-4		<p>What actions are taken when samples are delivered to the facility? (i.e. How are nonconformances notified to clients?)</p> <p>SOP in place?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
D-5		<p>How is the screening process performed when the samples are delivered to the facility?</p>		<hr/> <hr/> <hr/> <hr/>

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D-6		Is the pH of liquid samples monitored and recorded prior to taking sample aliquots for analysis? If the pH is not less than 2, are the samples acidified and stored for the required 16 hours and is this documented?		<hr/> <hr/> <hr/> <hr/>
D-7		Are records available from the radiological survey of sample shipping containers?		<hr/> <hr/> <hr/> <hr/>

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D-8		Were the proper radiation survey instruments used for receiving samples?		<hr/> <hr/> <hr/> <hr/>
D-9		Is designated work space allocated for the following functions: <ul style="list-style-type: none"> ● Sample receipt and login ● Sample storage ● Sample preparation ● Sample processing ● Sample counting 		<hr/> <hr/> <hr/> <hr/> <hr/>

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D-10		In the storage area(s), is space allocated to the storage of environmental activity level samples and elevated activity level samples?		<hr/> <hr/> <hr/> <hr/>
D-11		Have contamination surveys been conducted at the specified frequency?		<hr/> <hr/> <hr/> <hr/>

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D-12		Were the laboratory areas where radioactive materials were stored, handled, or analyzed, covered by surveys?		<hr/> <hr/> <hr/> <hr/>
D-13		What actions are taken when samples are delivered to the facility? (i.e. How are nonconformances notified to clients?) SOP in place?		<hr/> <hr/> <hr/> <hr/>

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D-14		Are the sample receipt/storage and temperature logbooks completed in a manner consistent with the laboratory's SOP? YES ___ NO ___		_____ _____ _____ _____ _____
D-15		Are adequate facilities provided for storage of samples, including cold storage? YES ___ NO ___		_____ _____ _____ _____ _____

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D-16		Are the sample receipt/storage and temperature records maintained in a manner consistent with good laboratory practice (GLP)? YES ___ NO ___		_____ _____ _____ _____ _____
D-17		What corrective action is taken when temperature excursions occur?		_____ _____ _____ _____ _____

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D-18		Are volatile samples stored separately from semivolatile samples? YES ___ NO ___		_____ _____ _____ _____ _____
D-19		Are VOA holding blanks present in the volatile sample storage facility? (one per case) YES ___ NO ___		_____ _____ _____ _____ _____

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D-20		What method is used to track: 1. Sample receiving for sample preparation? 2. Original sample to sample receiving?		<hr/>

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E-1		<p>CROSS CONTAMINATION CONTROL</p> <p>How is reagent contamination identified and addressed?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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E-2		<p>What are the criteria for segregating samples with significantly different levels of activity?</p> <p>How are segregated samples stored?</p> <p>What procedures are in place to prevent cross contamination among samples in storage and in the laboratory preparation of samples?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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E-3		Have contamination surveys been conducted at the specified frequency?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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E-4		Were the laboratory areas where radioactive materials were stored, handled, or analyzed, covered by these surveys?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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E-5		Are shipping containers opened in a contamination free area? Is the sample receiving fume hood functional?		_____ _____ _____ _____ _____ _____

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E-6		Was the instrumentation used for counting smears or other samples collected during the surveys adequate and did it have a current calibration?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
E-7		Were the results of these surveys documented, as well as, corrective actions necessitated by any conditions determined to be above acceptable limits?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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E-8		Are dedicated ovens used for the radiological analysis?		<hr/> <hr/> <hr/> <hr/>
E-9		How does the laboratory assure that sample security is maintained?		<hr/> <hr/> <hr/> <hr/>

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E-10		What is the policy for cleaning glassware to prevent contamination to laboratory personnel and work space?		<hr/> <hr/> <hr/> <hr/>
E-11		Does the laboratory have a source of distilled/demineralized water and is the water quality routinely checked and documented?		<hr/> <hr/> <hr/> <hr/>

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F-1		<p>STANDARDS/TRACERS</p> <p>How does the laboratory assure that radiological standards and tracers are NIST traceable?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
F-2		<p>How does the laboratory determine the expiration date of radiological standards and tracers?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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F-3		<p>How are these expiration dates monitored by the analysts? (Are the standards labelled with expiration dates?)</p> <p>How do you determine when standards/tracers become unusable?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
F-4		<p>When standards/tracers become unusable, what action is taken?</p>		<hr/> <hr/> <hr/> <hr/>

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F-5		<p>Are standards preparation sheets or logbooks utilized and do these records show the following:</p> <ul style="list-style-type: none"> ● dilution calculations ● preparer's signature or initials ● dates of preparations. 		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
F-6		<p>Do dilution calculations used in the preparation of standards undergo secondary review prior to the standards being released for use?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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F-7		Are prepared dilutions properly labeled with the <ul style="list-style-type: none"> ● specific activity ● preparation date ● preparer's initials or signature? 		_____ _____ _____ _____
F-8		How are backgrounds included with sample results? Are backgrounds traceable to sample results?		_____ _____ _____ _____ _____

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F-9		<p>What is included in the MDC calculation (background)?</p> <p>Are all errors propagated in determining the standard deviation of the sample results?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
F-10		<p>What Radiochemical Intercomparison Laboratory Studies does your laboratory participate in?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
F-11		What are the acceptance criteria for QC samples?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
F-12		Are QC samples prepared representative of same geometry as the samples? Are they counted in the same kind of detectors as the samples?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
F-13		List standards used for calibrations, QC, and tracers. (The laboratory may have a list that can be attached.)		<hr/> <hr/> <hr/> <hr/>
F-14		How does the laboratory determine the expiration date of radiological standards and tracers?		<hr/> <hr/> <hr/> <hr/>

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
F-15		How does the laboratory control cross contamination of standards, reagent, and tracers?		<hr/> <hr/> <hr/> <hr/>
F-16		Does the laboratory use radiological standards and tracers that are traceable to recognized standards?		<hr/> <hr/> <hr/> <hr/>

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F-17		If there is known contamination in the reagents or tracers, how is this addressed in a sample, blank, and QC results?		<hr/>

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G-1		<p>CALIBRATION</p> <p>When are counting instruments calibrated and calibration checks performed?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
G-2		<p>What criteria are used to indicate that an instrument requires calibration, and how does the analyst know when a calibration is due? Evaluate by examining control charts.</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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G-3		Are calibration expiration dates located on or in close proximity to instruments?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
G-4		How are out-of-service or out-of-calibration instruments tagged so as to be recognized by the analyst? What steps must occur before they are returned to service?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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G-5		What is the frequency, criteria, etc, for calibrating general laboratory instruments? (at least once annually is acceptable.) <ul style="list-style-type: none"> ● balances ● auto pipets ● thermometers ● conductivity meters ● other (list) 		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
G-6		Are records available to show that the balances have been routinely checked with class S weights and the results have been recorded in a logbook during the past year?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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G-7		What parameters does the laboratory routinely control chart from these calibrations and calibration checks?		<hr/> <hr/> <hr/> <hr/>
G-8		Is the analytical balance located away from drafts and areas subject to rapid temperature changes? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/>

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G-9		Are survey instruments calibrated by a certified technician and are calibration records available for review?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
G-10		What does the laboratory include in the initial calibration, recalibration, and counting calibration checks?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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G-11		What actions are taken in the event that an instrument does not meet the acceptance criteria for a continuing calibration check? A recalibration?		_____ _____ _____ _____ _____
G-12		Are calibration standards made from a ready made stock standard? YES ___ NO ___ Manufacturer: _____ _____		_____ _____ _____ _____ _____

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G-13		Are the calibration standards prepared on a regular basis (at least monthly)? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
G-14		How will calibration intensity and gains be kept?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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G-15		Will calibration results (i.e., sensitivity) be kept in a permanent record so that instrument performance can be measured over time? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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H-2		How are control charts evaluated?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
H-3		Were the control charts routinely reviewed by supervisory personnel during the previous year and are the appropriate signatures present?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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H-4		Were control charts maintained and checks performed on all counting instrumentation during the previous year? ● Source ● Background		_____ _____ _____ _____
H-5		Did the calibration data, source, and background check data, routinely receive secondary review during the previous year and are the appropriate signatures present?		_____ _____ _____ _____

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H-7		<p>What is your contingency plan for counting samples in the event that the primary counting instrument(s) are out of service?</p> <p>How do you ensure capacity needs are met?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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I-1		<p>QUALITY CONTROL</p> <p>Are the QC samples prepared in various glassware and are they counted in various instruments?</p> <p>How is glassware for blanks selected?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
I-2		<p>How are duplicates processed and counted?</p> <p>Does the preparation of duplicates of solid samples begin with a second aliquot of the sample?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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I-3		What actions are taken in the event that one or more of the QC samples do not meet the applicable acceptance criteria?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
I-4		The Auditor should review the Intercomparison Laboratory Studies Reports to evaluate the laboratory's performance in these studies. (If possible complete during pre-audit preparation.)		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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I-5		Explain how percent recovery calculations are performed for the following: <ul style="list-style-type: none"> ● Duplicates ● LCS ● Matrix Spikes ● Tracers ● Carriers 		_____ _____ _____ _____
I-6		What types and at what frequencies are QC samples run with radiological samples?		_____ _____ _____ _____

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I-7		Were source checks taken for each detector according to the established schedule?		<hr/> <hr/> <hr/> <hr/>
I-8		Were the results of these checks documented in calibration logbooks and were acceptance criteria for these checks documented in the logbooks?		<hr/> <hr/> <hr/> <hr/>

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I-9		How are efficiency checks performed for each system? Use site specific.		_____ _____ _____ _____
I-10		Were backgrounds taken for each detector according to the established schedule?		_____ _____ _____ _____

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I-11		Are tracer percent recoveries determined for each sample?		<hr/> <hr/> <hr/> <hr/>
I-12		Are the results for EML interlaboratory comparison program available for the previous year?		<hr/> <hr/> <hr/> <hr/>

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I-13		Are the results for other interlaboratory comparison programs available? (List in comments.)		<hr/> <hr/> <hr/> <hr/>
I-14		What actions are taken in the event that one or more of the QC samples does not meet the applicable acceptance criteria?		<hr/> <hr/> <hr/> <hr/>

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I-15		The Auditor should review the Intercomparison Laboratory Studies Reports to evaluate the laboratory's performance in these studies.		<hr/> <hr/> <hr/> <hr/>
J-1		<p>LOGBOOKS/RECORDS</p> <p>Does the laboratory have adequate logbooks present for the following tasks:</p> <ul style="list-style-type: none"> ● Sample receipt ● Data acquisition/reduction ● QA/QC results ● Sample preparation ● Spike/tracer preparation ● Calibration standard preparation ● Calibrations and maintenance 		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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J-2		What system is in place for the review of logbooks? Are they signed and dated?		<hr/> <hr/> <hr/> <hr/>
J-3		Do laboratory notebooks/bench sheets show traceability to samples analyzed?		<hr/> <hr/> <hr/> <hr/>

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J-4		Select one or two logbooks for review. List logbooks examined and comments made.		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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J-5		<p>Is there a system in place to insure that the Certificate of Analysis is accurate in regard to the reported results.</p> <p>Who is responsible for verifying that the reported results in the Certificate of Analysis match the actual results?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
J-6		<p>Did sample spectra reviewed receive secondary review prior to calculation of sample results?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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J-7		How are calibration and maintenance frequencies monitored (logbooks, control charts, etc.)?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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J-8		Is there evidence of a secondary review of all documents and logbooks by someone other than the person generating the documents? YES ___ NO ___		_____ _____ _____ _____ _____
K-1		<p style="text-align: center;">SOFTWARE QUALITY ASSURANCE</p> Does the laboratory have a software QA procedure?		_____ _____ _____ _____ _____

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K-2		Do in-house programs/software/macros get verified and validated? Examine documentation to support this.		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
K-3		How do you maintain traceability of software? i.e., revisions, document control		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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K-4		Identify the designated person who maintains control?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
K-5		Is a written software test and acceptance plan available for installation of system changes?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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L-1		<p>SAMPLE PREPARATION General Facilities</p> <p>Is the laboratory maintained in a clean and organized manner?</p> <p align="center">YES ___ NO ___</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
L-2		<p>Does the laboratory appear to have adequate workspace (6 linear feet of unencumberred benchtop per analyst)?</p> <p align="center">YES ___ NO ___</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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L-3		Is sample prep lab separate from counting instruments?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
L-4		Are laboratory benches made of suitable impervious materials or are they covered with absorbent materials? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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L-5		Are contamination-free areas provided for trace level analytical work? YES ___ NO ___		_____ _____ _____ _____ _____
L-6		Are contamination-free work areas provided for the handling of toxic materials? (Glove box or isolated hood) YES ___ NO ___		_____ _____ _____ _____ _____

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L-7		Are exhaust hoods provided to allow contamination-free work with volatile materials? YES ___ NO ___		_____ _____ _____ _____ _____
L-8		Are hoods equipped with HEPA filters? At what frequency are these checked?		_____ _____ _____ _____ _____

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L-9		Is documented organic-free water available for preparation of standards and blanks?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
L-10		Is correct aqueous sample preservation checked prior to analysis?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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L-11		Is the deionized/distilled water source same as lab-wide supply?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
L-12		Are solvent storage cabinets vented or located in such a way as to prevent possible laboratory contamination? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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L-13		<p>Does the laboratory use automatic pipets for preparing their standards?</p> <p style="text-align: center;">YES ___ NO ___</p> <p>If yes, are these pipets calibrated on a routine basis?</p> <p style="text-align: center;">YES ___ NO ___</p>		<hr/>

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L-14		Are analytical reagents dated upon receipt and used on a first-in, first-out basis? YES ___ NO ___		_____ _____ _____ _____ _____
L-15		Is the purity of the analytical reagents verified before use? (Confirm by reagent blank data) YES ___ NO ___		_____ _____ _____ _____ _____

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
L-16		Is the Sample Preparatin SOP available in the area? Do the procedures followed by the analysis agree with those in the SOP? YES ___ NO ___		_____ _____ _____ _____ _____
L-17		How will the digestion logbooks/benchsheets be organized?		_____ _____ _____ _____ _____

LABORATORY SERVICES CHECKLIST (continued)

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L-18		How are the samples to be measured and transferred to the beakers for digestion?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
L-19		Will the samples be filtered before analysis or allowed to settle? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-1		<p>DATA REVIEW</p> <p>How does the laboratory ensure that procedures do not change over the course of the project?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
M-2		<p>Are the sample and background spectra for samples stored either physically or electronically, and are they easily retrievable?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-3		How is the internal laboratory chain-of-custody or other tracking form utilized to track samples?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
M-4		What review process does the data go through after it is generated by an analyst or an instrument? Is any type of peer review performed?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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M-5		<p>Describe the verification process for Electronic Data Transfer if this procedure is used.</p> <p>How had the integrity of the data been maintained?</p> <p>What system is in place to ensure integrity of the data when manually entered?</p>		<hr/>
M-6		<p>Is the data reduction computerized or is it manual? Are any of the steps manual? How are these steps controlled?</p>		<hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-7		Explain how the following criteria are checked: <ul style="list-style-type: none"> ● Required samples and analyses have been performed ● Complete records exist for each analyte and QC sample ● Specific procedures have been implemented ● Electronic data packages are complete ● Additional information 		_____ _____ _____ _____ _____
M-8		Is there secondary data review by laboratory quality control personnel or equivalent before data is sent to the customer?		_____ _____ _____ _____

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-9		Does reported data contain uncertainties and define confidence limits?		<hr/> <hr/> <hr/> <hr/>
M-10		On what basis are uncertainties calculated; just Poisson or Poisson and systematic?		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-11		Does reported data contain lab calculated MDA? On what basis is this calculated?		<hr/> <hr/> <hr/> <hr/>
M-12		Are data reduction and manipulation techniques well documented in the SOP's?		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-13		What is the corrective action that will be taken when analytical results fail to meet QC criteria?		<hr/> <hr/> <hr/> <hr/>
M-14		How will data packages be reviewed for completeness?		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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M-15		Is CLP forms generation software used? YES ___ NO ___ Manufacturer: _____ _____		_____ _____ _____ _____ _____
M-16		IBM PC-compatible computer make and model number: 		_____ _____ _____ _____ _____

LABORATORY SERVICES CHECKLIST (continued)

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M-17		2400 baud synchronous modem make and model number:		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
M-18		Is there a user's manual for operation of the software? YES ___ NO ___		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-19		Will data file access be controlled? YES ___ NO ___		_____ _____ _____ _____ _____
M-20		Will accuracy and completeness of hardcopy and electronic deliverables be checked?		_____ _____ _____ _____ _____

LABORATORY SERVICES CHECKLIST (continued)

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M-21		Is a person responsible for electronic data transfer?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
M-22		Is date of electronic transfer recorded?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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Checklist Item Number	Reference Document <small>(Include No., Sect/Para)</small>	Verification Requirements	Result Key	Verification Conducted <small>Describe documents reviewed, Personnel interviews and activities observed.</small>
M-23		Is the person to whom data was electronically transferred recorded?		_____ _____ _____ _____ _____
M-24		Is status of electronically transferred data (e.g., draft final, etc.) recorded?		_____ _____ _____ _____ _____

LABORATORY SERVICES CHECKLIST (continued)

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M-25		What will be the process for inspecting resubmitted deliverables?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
M-26		When changes to deliverables are required, are the changes properly documented? (rationale, review, initials)		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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M-27		Are documents maintained in a secured area?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
M-28		Is shipment of deliverables to clients documented?		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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N-1	SW-846, 8260; CLP SOW	<p>PERFORMANCE VALIDATION OF VOLATILE ORGANICS BY GC/MS ANALYSIS; SW-846 & CLP SOW CRITERIA</p> <p>Does analytical procedure contain quality control requirements of SW-846 & CLP SOW and are limits specified or referenced?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>
N-2		<p>Provide documentation of ion abundance pattern (LAP) evaluations to meet SW-846 & CLP SOW requirements. Is corrective action (retuning) frequency documented?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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N-3	SW-846, 8260; CLP SOW	Provide documentation of initial calibrations (IC) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) frequency documented?		<hr/> <hr/> <hr/> <hr/>
N-4		Provide documentation of continuing calibration verifications (CCV) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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N-5	SW-846, 8260; CLP SOW	Provide documentation of laboratory control sample analyses (LCS) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) documented?		<hr/> <hr/> <hr/> <hr/>
N-6		Provide documentation of method blank (MB) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (reanalysis) documented?		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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N-7	SW-846, 8260; CLP SOW	Provide documentation of matrix spike/matrix spike duplicates to demonstrate compliance with CLP SOW requirements. Is corrective action documented?		<hr/> <hr/> <hr/> <hr/>
N-8		Provide documentation of surrogate standard addition to all samples to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (reanalysis) frequency documented?		<hr/> <hr/> <hr/> <hr/>

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N-9	SW-846, 8260; CLP SOW	Provide documentation of internal standards to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (reanalysis) frequency documented?		<hr/> <hr/> <hr/> <hr/>
N-10		Provide documentation that sample holding times are tracked and evaluated for compliance with SW-846 & CLP SOW requirements. Is non-compliance documented and corrective action taken?		<hr/> <hr/> <hr/> <hr/>

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N-11	SW-846, 8260; CLP SOW	Provide documentation of standard certifications and method of maintaining traceability. Are storage and control requirements adequate?		<hr/> <hr/> <hr/> <hr/>
N-12		Provide documentation of calculation and validation methods.		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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O-1	SW-846, 8080; CLP SOW	<p>PERFORMANCE VALIDATION OF PESTICIDE/PCB GC/MS ANALYSIS TO SW-846 & CLP SOW CRITERIA</p> <p>Review analytical procedure to verify quality control requirements of SW- 846 & CLP SOW are met. Are quality control limits specified or referenced?</p>		<hr/> <hr/> <hr/> <hr/>
O-2		<p>Provide documentation of degradation check sample analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (reanalysis) frequency documented?</p>		<hr/> <hr/> <hr/> <hr/>

LABORATORY SERVICES CHECKLIST (continued)

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O-3	SW-846, 8080; CLP SOW	Provide documentation of initial calibrations (IC) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) frequency documented?		<hr/> <hr/> <hr/> <hr/>
O-4		Provide documentation of continuing calibration verifications(CCV) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) documented?		<hr/> <hr/> <hr/> <hr/>

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O-5	SW-846, 8080; CLP SOW	Provide documentation of laboratory control sample analyses (LCS) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) documented?		<hr/> <hr/> <hr/> <hr/>
O-6		Provide documentation of method blank (MB) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective actin (reanalysis) documented?		<hr/> <hr/> <hr/> <hr/>

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O-7	SW-846, 8080; CLP SOW	Provide documentation of matrix spike/matrix spike duplicates to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action documented?		<hr/> <hr/> <hr/> <hr/>
O-8		Provide documentation of surrogate standard addition to all samples to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (reanalysis) frequency documented?		<hr/> <hr/> <hr/> <hr/>

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O-9	SW-846, 8080; CLP SOW	Provide documentation that sample holding times are tracked and evaluated for compliance with SW-846 & CLP SOW requirements. Is non-compliance documented and corrective action taken?		<hr/> <hr/> <hr/> <hr/>
O-10		Provide documentation of standard certifications and method of maintaining traceability. Are storage and control requirements adequate?		<hr/> <hr/> <hr/> <hr/>

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O-11	SW-846, 8080; CLP SOW	Provide documentation of calculation and validation methods.		<hr/> <hr/> <hr/> <hr/>
P-1	SW-846, 6010; CLP SOW	<p>PERFORMANCE VALIDATION OF METALS ANALYSIS BY ICP-AES METHOD TO SW-846 & CLP SOW CRITERIA</p> <p>Review analytical procedure to verify quality control requirements of SW-846 & CLP SOW. Are quality control limits specified or reference?</p>		<hr/> <hr/> <hr/> <hr/>

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P-2	SW-846, 6010; CLP SOW	Provide documentation of initial calibration verification standards (ICVS) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) frequency documented?		<hr/> <hr/> <hr/> <hr/>
P-3		Provide documentation of continuing calibration verification standards (CCVS) to demonstrate compliance with SW-846 & CLP SOW requirements? Is corrective action (recalibration) frequency documented?		<hr/> <hr/> <hr/> <hr/>

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P-4	SW-846, 6010; CLP SOW	Provide documentation of method blank (MB) analyses too demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (redigestion) frequency documented?		<hr/> <hr/> <hr/> <hr/>
P-5		Provide documentation of initial calibration blank and continuing calibration blank (ICB/CCB) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration/reanalysis last 10) frequency documented?		<hr/> <hr/> <hr/> <hr/>

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P-6	SW-846, 6010; CLP SOW	Provide documentation of interference check standard (ICS) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (reexamine background/reanalyze) frequency documented?		<hr/> <hr/> <hr/> <hr/>
P-7		Provide documentation of laboratory control sample (LCS) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (redigestion) documented?		<hr/> <hr/> <hr/> <hr/>

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P-8	SW-846, 6010; CLP SOW	Provide documentation of matrix spike (MS) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (redigest or post digestion - spike or MSA) documented?		<hr/> <hr/> <hr/> <hr/>
P-9		Provide documentation of duplicate (DUP) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (DQO driven) documented?		<hr/> <hr/> <hr/> <hr/>

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P-10	SW-846, 6010; CLP SOW	Provide documentation of establishing detection limits to demonstrate compliance with SW-846 & CLP SOW requirements. If limits do not meet DQO requirements, is corrective action documented?		<hr/> <hr/> <hr/> <hr/>
P-11		Provide documentation of standard certifications and method of maintaining traceability. Are storage and control requirements adequate?		<hr/> <hr/> <hr/> <hr/>

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P-12	SW-846, 6010; CLP SOW	Provide documentation of calculation and validation methods.		<hr/> <hr/> <hr/> <hr/>
P-13		Provide documentation that sample holding times are tracked and evaluated for compliance with SW-846 & CLP SOW requirements. Is non-compliance documented and corrective action taken?		<hr/> <hr/> <hr/> <hr/>

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Q-1	SW-846, 7471; CLP SOW	<p>PERFORMANCE VALIDATION OF MERCURY ANALYSIS BY COULD VAPOR AAS METHOD TO SW-846 & CLP SOW CRITERIA</p> <p>Review analytical procedure to verify quality control requirements of SW-846 & CLP SOW. Are quality control limits specified or reference?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>
Q-2		<p>Provide documentation of continuing calibration verification standards (CCVS) to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration) frequency documented?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

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Q-3	SW-846, 7471; CLP SOW	Provide documentation of method blank (MB) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (redigestion) frequency documented?		<hr/> <hr/> <hr/> <hr/>
Q-4		Provide documentation of initial calibration blank and continuing calibration blank (ICB/CCB) analyses demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (recalibration/reanalysis last 10) frequency documented?		<hr/> <hr/> <hr/> <hr/>

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Q-5	SW-846, 7471; CLP SOW	Provide documentation of laboratory control sample (LCS) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (redigestion) documented?		<hr/> <hr/> <hr/> <hr/> <hr/>
Q-6		Provide documentation of matrix spike/matrix spike duplicate (MS/MSD) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (redigest or M.S.A) documented?		<hr/> <hr/> <hr/> <hr/> <hr/>

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Q-7	SW-846, 7471; CLP SOW	Provide documentation of duplicate (DUP) analyses to demonstrate compliance with SW-846 & CLP SOW requirements. Is corrective action (DQO driven) documented?		<hr/> <hr/> <hr/> <hr/> <hr/>
Q-8		Provide documentation of establishing detection limits to demonstrate compliance with SW-846 & CLP SOW requirements. If limits do not meet DQO requirements, is corrective action documented?		<hr/> <hr/> <hr/> <hr/> <hr/>

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Q-9	SW-846, 7471; CLP SOW	Provide documentation of initial calibration verification standard (ICVS) analysis to demonstrate compliance with SW-846 & CLP SOW requirements. If analysis does not meet requirements, is corrective action documented?		<hr/> <hr/> <hr/> <hr/> <hr/>
Q-10		Provide documentation of standard certifications and method of maintaining traceability. Are storage and control requirements adequate?		<hr/> <hr/> <hr/> <hr/> <hr/>

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Q-10	SW-846, 7471; CLP SOW	Provide documentation of calculation and validation methods.		<hr/> <hr/> <hr/> <hr/>
Q-11		Provide documentation that sample holding times are tracked and evaluated for compliance with SW-846 & CLP SOW requirements. Is non-compliance documented and corrective action taken?		<hr/> <hr/> <hr/> <hr/>

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R-1	CLP SOW	<p>PERFORMANCE VALIDATION OF VOLATILE ORGANICS BY GC/MS ANALYSIS - REQUIREMENTS OF DQO C & D EXCEEDING DQO B REQUIREMENTS</p> <p>Provide documentation target compound identification (TCI) evaluations to demonstrate compliance with CLP SOW. Is corrective action frequency documented?</p>		<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
R-2		<p>Provide documentation tentatively identified compounds (TIC) to demonstrate compliance with CLP SOW.</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

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R-3	CLP SOW	Provide documentation of system performance evaluations to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		<hr/> <hr/> <hr/> <hr/>
R-4		Provide documentation of an overall assessment of sample data for a case to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		<hr/> <hr/> <hr/> <hr/>

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S-1	CLP SOW	<p>PERFORMANCE VALIDATION OF PESTICIDES/PCB BY GC-ECD ANALYSIS - REQUIREMENTS OF DQO C & D EXCEEDING DQO B CRITERIA</p> <p>Provide documentation of compound identification evaluations to demonstrate compliance with CLP SOW. Is corrective action frequently documented?</p>		<hr/>

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S-2		Provide documentation of an overall assessment of sample data for a case to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		<hr/> <hr/> <hr/> <hr/>
S-3	CLP SOW	Provide documentation of system performance evaluations to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		<hr/> <hr/> <hr/> <hr/>

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S-4		Provide documentation of an overall assessment of sample data for a case to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		<hr/> <hr/> <hr/> <hr/> <hr/>
T-1	CLP SOW	<p>PERFORMANCE VALIDATION OF PESTICIDES/PCB BY GC-ECD ANALYSIS - REQUIREMENTS OF DQO C & D EXCEEDING DQO B CRITERIA</p> <p>Provide documentation of compound identification evaluations to demonstrate compliance with CLP SOW. Is corrective action frequently documented?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

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T-2		Provide documentation of an overall assessment of sample data for a case to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		_____ _____ _____ _____
U-1	CLP SOW	<p>PERFORMANCE VALIDATION OF METALS BY ICP ANALYSIS - REQUIREMENTS OF DQO C & D EXCEEDING DQO B CRITERIA</p> <p>Provide documentation of serial dilution evaluations to demonstrate compliance with CLP SOW. Is corrective action frequency documented?</p>		_____ _____ _____ _____

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U-2		Provide documentation of an overall assessment of sample data for a case to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?		<hr/> <hr/> <hr/> <hr/>
V-1	CLP SOW	<p>PERFORMANCE VALIDATION OF MERCURY BY CVAA ANALYSIS - REQUIREMENTS OF DQO C & D EXCEEDING DQO B CRITERIA</p> <p>Provide documentation of an overall assessment of sample data for a case to demonstrate compliance with CLP SOW. Were recommended actions addressed and documented?</p>		<hr/> <hr/> <hr/> <hr/>

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W-1		<p align="center">INTERLABORATORY QUALITY ASSURANCE PROGRAM PERFORMANCE</p> <p>Provide documentation of participation in interlaboratory programs and lists of attributes evaluated?</p>		<hr/> <hr/> <hr/> <hr/>
W-2	CLP SOW	Provide documentation of corrective actions for unacceptable items.		<hr/> <hr/> <hr/> <hr/>

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X-1	SW-846, 1311; CLP SOW	<p>PERFORMANCE VALIDATION OF METHOD 1311 TCLP PROTOCOL</p> <p>Provide documentation that sample holding times are tracked and evaluated for compliance with SW-846 requirements. Is non-compliance documented and corrective action taken?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>
X-2	SW-846, 1311; CLP SOW	Provide documentation of percent solids determinations.		<hr/> <hr/> <hr/> <hr/> <hr/>

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X-3		Provide documentation of extraction fluid selection determinations.		<hr/> <hr/> <hr/> <hr/>
X-4	SW-846, 1311; CLP SOW	Provide runsheets documenting compliance with SW-846 requirements.		<hr/> <hr/> <hr/> <hr/>

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X-5		Provide documentation of method blank analyses to demonstrate compliance with SW-846 requirements.		<hr/> <hr/> <hr/> <hr/>
Y-1	SW-846, 1311; CLP SOW	<p>PERFORMANCE VALIDATION OF TOTAL URANIUM ANALYSIS TO DQO LEVELS C & D PERFORMANCE SPECIFICATIONS</p> <p>Provide standard operating procedure addressing the required performance specifications.</p>		<hr/> <hr/> <hr/> <hr/>

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Y-2		Provide documentation of highest allowable minimum detectable concentration determinations to meet the required performance specification. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>
Y-3	SW-846, 1311; CLP SOW	Provide documentation of percent matrix spike recovery determinations to meet the required performance specifications. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>

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Y-4		Provide documentation of method blank evaluations to meet the required performance specifications. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>
Y-5	SW-846, 1311; CLP SOW	Provide documentation of laboratory control sample evaluations to meet the required performance specification. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>

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Y-6		Provide documentation of duplicate sample evaluations to meet the required performance specification. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>
Z-1	SCQ	<p>PERFORMANCE VALIDATION OF RADIOCHEMICAL (GROSS ALPHA) ANALYSIS; SCQ TABLE G-4, CRITERION 29</p> <p>Provide standard operating procedure addressing the required performance specifications.</p>		<hr/> <hr/> <hr/> <hr/>

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Z-2		Provide documentation of highest allowable minimum detectable concentration determinations to meet the required performance specification. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>
Z-3	SCQ	Provide documentation of percent matrix spike recovery determinations to meet the required performance specifications. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>

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Z-4		Provide documentation of method blank evaluations to meet the required performance specifications. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>
Z-5	SCQ	Provide documentation of laboratory control sample evaluations to meet the required performance specification. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>

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AA-1		<p>PERFORMANCE VALIDATION OF RADIOCHEMICAL (GROSS BETS) ANALYSIS; SCQ TABLE G-4, CRITERION 30</p> <p>Provide standard operation procedure addressing the required performance specifications.</p>		<hr/> <hr/> <hr/> <hr/> <hr/>
AA-2	SCQ	<p>Provide documentation of highest allowable minimum detectable concentration determinations to meet the required performance specification. Is corrective action frequency documented?</p>		<hr/> <hr/> <hr/> <hr/> <hr/>

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AA-3		Provide documentation of percent matrix spike recovery determinations to meet the required performance specifications. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>
AA-4	SCQ	Provide documentation of method blank evaluations to meet the required performance specifications. Is corrective action frequency documented.		<hr/> <hr/> <hr/> <hr/>

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AA-5		Provide documentation of laboratory control sample evaluations to meet the required performance specification. Is corrective action frequency documented?		<hr/> <hr/> <hr/> <hr/>