

A126 – TOXICOLOGY CHECKLIST

Revision #1.3
January 3, 2020

Laboratory Name: _____

Appendix Name: _____

Appendix Number: _____

Assessor: _____

Date: _____



CALA
Trust, measured accurately

ASSESSOR NOTES:

Clause 17025:2017	Requirement	Document Review			Implementation		
		1	2	3	1	2	3
	SELECTION, VERIFICATION AND VALIDATION OF METHODS						
7.2.1.1	All necessary successive steps in the test procedure (including details on reagents, test organisms, etc.) are appropriate.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
7.2.1.2	The current authorized test method and supporting work instructions are available to the analyst	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
7.2.1.3	The test method is based on the latest valid edition of a published reference method. The test method is supplemented with additional details to ensure consistent application. (If this is an Environment Canada method, supplemental checklists are available to verify these steps).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
7.2.1.5	For standard reference methods, there is verification data to demonstrate that the lab can perform the method.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

Clause 17025:2017	Requirement	Document Review			Implementation		
		1	2	3	1	2	3
7.2.2	Where reference methods have been modified or use outside their intended scope, or where an in-house method is being used, there is method validation data and a statement that the method is fit for its intended use.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	SAMPLE HANDLING						
7.4	The laboratory has appropriate procedures for sample handling and storage, so as to protect the integrity of the samples. Instructions include, but are not limited to:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	field filtration;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	chemical preservation;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	sample containers;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	storage conditions and holding time.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	Sampling and Sub-sampling						

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7.3	Sampling plans for samples are based on appropriate statistical methods and that the sampling process addresses the factors to be controlled to ensure the validity of the results; i.e.,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sampling/sub-sampling methods are available and followed;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sampling plans are statistically based;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Appropriate drying temperature is used (for solid matrices);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Dust loss and cross-contamination are minimized (for solid matrices);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sample size reduction generates a representative portion for subsequent work;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Uncertainty of sample size reduction steps is known through the introduction of random duplicates;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Field sampling generates representative samples, and duplicates are routinely taken.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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6.4.1	Test organism history requirements are: 1) appropriate; 2) documented; and 3) implemented; e.g.,	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	culture and/or holding conditions (i.e., temperature, water quality and associated variables, illumination, loading density);	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	quarantine requirements;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	acclimation requirements;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	feeding requirements;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	disease control and treatment.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	METHOD QUALITY CONTROL						
7.7	Method quality control is: 1) appropriate; 2) documented; and 3) implemented; e.g.,	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	replicates to monitor precision;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	reference toxicant;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	lab control;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

Clause 17025:2017	Requirement	Document Review			Implementation		
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	control culture to monitor biological response;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	control sample to monitor toxic response;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	trend analysis (e.g. control charting - see P07);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	criteria to identify method non-conformances;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	procedures to evaluate interference (see P07);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	culture health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	taxonomic verification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PT, as per P02-03; lab follows up on any unsatisfactory results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	TEST METHOD CONTENT						
7.2.1.2	Other Work Instructions/Procedures All necessary supporting work instructions are current and readily available; e.g.,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	glassware cleaning procedures;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	supporting test methods;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Clause 17025:2017	Requirement	Document Review			Implementation		
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	equipment instruction manuals;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	requisite reference texts;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	computer software related procedures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Clause11 7025: 2017	Requirement	1	2	3
CONDUCT OF TESTING				
7.2.1.1	The test procedure and all supporting work instructions are performed as documented.	□ □ □	_____	_____
EQUIPMENT				
6.4.1	All instruments required for the test procedure are available, functioning properly, capable of achieving the required accuracy, compliant with specifications, checked and calibrated before use, uniquely identified, and safeguarded from adjustments that would invalidate results.	□ □ □	_____	_____
6.4.1	All support equipment* required for the test procedure is available and functioning properly. * includes computers.	□ □ □	_____	_____
6.4.9	Out of service equipment is clearly isolated or clearly labeled or marked as being out of service, and equipment is checked and validated before return to service.	□ □ □	_____	_____
SUPPLIES				
6.4.1	All supplies required for the test procedure are available and meet requisite requirements and/or specifications. * * includes test organisms, reagents, reference materials, cultures and feed materials.	□ □ □	_____	_____

Clause 11 7025: 2017	Requirement	1	2	3
6.3	All supplies are stored under appropriate conditions (e.g., 1-4 degrees C) and in a manner that satisfies requirements for safety, security, separation of incompatible materials, and ease of retrieval.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
6.4.8	All reagents and media are labeled with material, concentration or purity, date prepared and/or expiry date and that all information required to properly identify test organisms appears on their vessels/containers.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
RECORD KEEPING				
	Records related to the performance of the test method are retained; e.g.,	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
7.5	analyst worksheet or notebook ¹ ;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	record of non-conformances and actions taken ² ;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	reagent preparation log ³ ;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	equipment maintenance log ⁴ ;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

1 includes, as appropriate, calibration data, test data (including QC data), experimental variables (e.g., temperature, etc.); analyst ID; sample ID; equipment ID; test organism lot no.; test method ID; date and time of test.

2 includes, as appropriate, non-conformances related to: test method variances; sample history; method performance; interferences; and data validation.

3 includes, as appropriate, supplier, grade, batch no.; dates of preparation or verification; measurement of weights, volumes, time intervals, temperatures and related calculations; relevant processes (e.g., pH adjustment, sterilization); verification results; discard date.

4 includes, as appropriate, identity of the item of equipment and its software; manufacturer, model, serial no.; checks that equipment complies with lab specifications; date commissioned; repair and maintenance history; calibration history; any damage, malfunction or modification to the equipment; location.

Clause 11 7025: 2017	Requirement	1	2	3
	test organism maintenance log ⁵ ;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	records of gravimetric traceability ⁶ ;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	records of volumetric traceability ⁷ ;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	records of temperature traceability ⁸ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5 includes, as appropriate, species, age, source, lot no.; arrival date; arrival condition; vessel ID; acclimation history; culture and/or holding history including loading density, temperature, illumination and water quality; feeding history; health history including disease, treatment and mortality; disposal date.

6 includes, as appropriate, traceability of balance and/or weights to a national standard, and daily or as-used checks (see A61- 01 CALA Traceability Policy).

7 includes, as appropriate, traceability of auto pipettes, dilutors, etc., that play a defining role in analytical accuracy, and daily or as-used checks (see A61-01 – CALA Traceability Policy).

8 includes, as appropriate, traceability of working thermometers to a national standard for those thermometers that measure temperatures that play a defining role in analytical uncertainties (see A61-01 - CALA Traceability Policy)