Request for Proposals (RFP):
Course Programmer for Laboratory Curriculum Framework Courses

July 1, 2020

Submissions due to Robyn Randolph (Robyn.Randolph@aphl.org)

via: The Association of Public Health Laboratories, Inc.
8515 Georgia Avenue, Suite 700
Silver Spring, MD 20910

The development of, and the projects anticipated in, this RFP are supported by a forthcoming Cooperative Agreement between the U.S. Food and Drug Administration (FDA) and the Association of Public Health Laboratories, Inc. The contents of this RFP are solely the responsibility of the authors and neither represent the official views of FDA nor reflect FDA’s endorsement of a product or procedure.

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# Table of Contents

Summary ............................................................................................................................................. 2  
Background.......................................................................................................................................... 2  
Eligibility .............................................................................................................................................. 3  
Anticipated RFP Schedule .................................................................................................................... 3  
Response Submittal ............................................................................................................................. 3  
  Confirmation of Intent to Respond ........................................................................................................ 3  
  Final Response .................................................................................................................................... 4  
  Questions ........................................................................................................................................ 4  
Scope and Approach ............................................................................................................................ 5  
Project Term and Award ....................................................................................................................... 5  
Proposal Submission ............................................................................................................................. 6  
  Guidelines and Required Information ................................................................................................. 6  
  Cost Proposal .................................................................................................................................. 7  
Evaluation ........................................................................................................................................... 7  
  Initial Review .................................................................................................................................. 7  
  Evaluation Process ............................................................................................................................ 7  
  Evaluation Team ............................................................................................................................... 8  
  Conflicts of Interest .......................................................................................................................... 8  
  Evaluation Criteria ............................................................................................................................ 8  
Post Evaluation Procedures .................................................................................................................. 9  
Conditions of Award Acceptance ........................................................................................................ 9  
General Considerations ....................................................................................................................... 9  
Appendix A – Waste Management Course Design Document .......................................................... 11  
Appendix B – Project Approach ......................................................................................................... 46  
Appendix C – Frequently Asked Questions ...................................................................................... 46  
Appendix D– Course Programmer RFP Scorecard ............................................................................. 51
Summary

The Association of Public Health Laboratories, Inc. (APHL or the Association), in collaboration with the US Food and Drug Administration (FDA) Office of Training Education and Development (OTED), the Association of Food and Drug Officials (AFDO), and the Association of American Feed Control Officials (AAFCO) is developing a Human and Animal Food Laboratory Professionals Curriculum Framework. APHL and its partners are creating courses based on the competencies developed on the curriculum framework. APHL is seeking a course programmer(s) for the development of online courses in Lectora Inspire 18.

Through this Request for Proposals (RFP), APHL seeks to identify a company or individual who can create a web-based course that meets the following requirements:

• Built in Lectora Inspire 18
• Meets 508 compliance standards
• Includes interactivities as indicated in storyboard
• Meets SCORM (Sharable Content Object Reference Model) compliance

Background

APHL is a non-profit organization that works to safeguard the public’s health by strengthening public health laboratories (PHLs) in the United States and globally. APHL is organized under the laws of the United States of America’s District of Columbia, with its headquarters office in Silver Spring, MD. The Association’s members include state and local laboratories, state environmental and agricultural laboratories and other government laboratories that conduct testing of public health significance. APHL is recognized as tax exempt in the United States under Section 501(c)(3) of the U.S. Internal Revenue Code. Its work on behalf of public health labs spans more than 60 years.

In collaboration with its members, APHL advances laboratory systems and practices and promotes policies that support healthy communities globally. The Association serves as a liaison between the public health laboratories and federal and international agencies. It ensures that the network of public health laboratories has current and consistent scientific information in order to be ready for outbreaks and other public health emergencies.

The APHL Food Safety Program currently implements workforce development projects for human and animal food testing laboratories in the United States. APHL supports this initiative through a forthcoming Cooperative Agreement with the FDA. APHL will provide more details about this Cooperative Agreement when a Notice of Award is issued. APHL is working in coordination with other member-based organizations to develop a comprehensive, career-spanning curriculum framework for human and animal laboratory professionals, as well as develop training materials to deliver this information to laboratorians.
Eligibility

Interested parties must submit a proposal to APHL that provides all of the information specified in the Proposal Submission section below. In order to be considered for funding, an applicant must ensure APHL has its complete proposal by no later than the Proposal Due Date specified in the Anticipated RFP Schedule section below. Applicants will find proposal submission information in the Response Submittal section below.

Anticipated RFP Schedule

Applications are due to the individual(s) specified in the Final Response section of this RFP by 5:00 pm Eastern Standard Time (EST) on August 3, 2020. APHL anticipates the following schedule for the entire competitive bidding process:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, 2020</td>
<td>APHL issues RFP</td>
</tr>
<tr>
<td>July 10, 2020</td>
<td>Letter of Intent due to APHL by 5:00 pm EST</td>
</tr>
<tr>
<td>July 17, 2020</td>
<td>Last day to submit questions (exceptions may be granted at APHL’s sole discretion)</td>
</tr>
<tr>
<td>August 3, 2020</td>
<td>Complete RFP responses due to APHL by 5:00 pm EST</td>
</tr>
<tr>
<td>August 6, 2020</td>
<td>APHL completes the evaluation process and contacts winning/selected applicant(s)</td>
</tr>
<tr>
<td>August 7, 2020</td>
<td>APHL publicly announces the names of the selected applicant(s) on its procurement website, <a href="http://www.aphl.org%5Crfp">www.aphl.org\rfp</a></td>
</tr>
<tr>
<td>September 10, 2020</td>
<td>Anticipated start date of LCF course programming project</td>
</tr>
</tbody>
</table>

Response Submittal

Confirmation of Intent to Respond

APHL requests that prospective applicants submit a brief email statement indicating intent to submit a proposal by no later than 5:00 PM EST on July 10, 2020. The letter of intent should be emailed to Robyn.Randolph@aphl.org. While the letter of intent is not binding and does not enter into the review of the RFP, the information that it contains allows APHL’s evaluation team to plan the contract development and review process. Potential applicants must include the name of the organization or individual that will submit the proposal in their email.
Final Response

APHL must receive a complete proposal by no later than 5:00 PM EST on August 3, 2020. Applicants may send proposals by the following methods:

Via email to robyn.randolph@aphl.org; or

Via certified, registered or express mail through the postal service or via trackable mail delivery services provided by DHL, FedEx, and UPS, addressed to:

    c/o Robyn Randolph
    The Association of Public Health Laboratories, Inc.
    8515 Georgia Avenue, Suite 700
    Silver Spring, MD 20910

APHL will send an email acknowledging the receipt of your application. If you do not receive an acknowledgement within 48 hours, please email the points of contact below to confirm receipt.

Regardless of the delivery method, APHL must receive all responses by 5:00 PM EST. It is the applicant’s responsibility to ensure that the proposal is received at APHL by this deadline.

APHL may terminate or modify the RFP process at any time during the response period.

Questions

Please direct all questions regarding this RFP or its application requirements via email to Robyn Randolph at robyn.randolph@aphl.org, with a copy to Catherine Johnson at catherine.johnson@aphl.org. A table of Frequently Asked Questions is included as Appendix C.

A member of APHL’s Food Safety staff will respond directly to the questions on an individual basis as questions are received. While APHL will endeavour to answer questions within one business day of receipt, additional time may be needed depending on the issue raised.

APHL should receive all questions by 5:00 pm EST on July 17, 2020. APHL is unlikely to answer any question received after this deadline, but it will have discretion to do so if APHL’s Food Safety staff reasonably feel that the question raises a substantial issue that could affect multiple applicants, and may be answered without impacting the application submission and review process. Should APHL opt to answer any late questions, APHL will post the question and answer to APHL’s procurement website and will not respond directly to the sender.
Scope and Approach

The organization or individual engaging in this project must provide the capabilities to work from the early stages of the course design through full development, including implementation and evaluation strategies.

APHL has included a sample Course Design Document (CDD) upon which this course will be based. The selected applicant(s) will program an online course, Waste Management. Additional opportunities to complete programming for extra courses, may exist as budget and time allow. A draft project approach is also included in this RFP and provides initial learning objectives and content overview. This material may be found in the following RFP attachments:

- Appendix A: Waste Management Course Design Document
- Appendix B: Draft project approach

The applicant(s) will be expected to do the following for the Waste Management Course:

1. Develop asynchronous, web-based courses based on APHL-supplied materials. The courses should meet the following requirements:
   a. Be built in Lectora Inspire 18 (desktop). Note: Online Lectora will not be accepted.
   b. Meet 508 compliance standards
   c. Include interactivities as indicated in storyboard
   d. Meet SCORM compliance

2. Develop courses that incorporate the following general layout.
   a. Introduction
   b. Pre-test (ungraded knowledge assessment) before each unit
   c. Main content, consisting of 4 units with ungraded knowledge checks
   d. Post-test (graded knowledge assessment) following each unit
   e. Evaluation

3. Describe the course programmer’s ability to program:
   a. Graded free response knowledge checks
   b. Animated demonstrations or narrated screenshot-walk through instructions

4. All materials must be developed within an FDA-branded Lectora file template. The course programmer will provide the Lectora file template.

APHL will provide all content for the courses and the applicant(s) will program the online courses based on provided materials.

Project Term and Award

APHL will deliver a written notice of award to the successful applicant(s). The successful applicant(s) will receive funding through a contract agreement with APHL up to a maximum amount of $30,000 for the Waste Management course. Programming for additional courses will be available as time and budget...
allow. This figure includes course programming and does not include images, graphics and animations, which should be budgeted out separately.

APHL has responsibility for validating the accuracy and completeness of the content of the final products and all materials created.

The course should be delivered to APHL by January 30, 2021, with a final invoice received by February 28, 2021.

Proposal Submission

Guidelines and Required Information

The applicant must ensure that APHL receives its letter of intent and its complete response by the due dates set out in the Anticipated RFP Schedule above. APHL’s evaluation team will not review incomplete applications.

No designated response format or outline exists for responding to this RFP. However, regardless of the chosen format, an applicant’s proposal must be limited to 15 pages of narrative and visuals. If an application exceeds this 15-page limit, only the first 15 pages will be sent to the evaluation team and scoring will be based solely on the portion of the proposal submitted for review. An application should have a font size of 11 points or larger and page margins of at least 0.5 inches. Appendix B: Project Approach has been included to assist applicants in understanding the level of detail that APHL and partners have discussed in relation to this project.

Note: Neither the Cost Proposal described below nor anything included as an appendix will count as part of the 15-page count (material included as an appendix will only be used as reference material and will not be reviewed as part of the evaluation process).

The applicant must include the following in their 15-page response:

1. A company profile;
2. A description of two (2) past learning/development activities that best reflect the applicant’s work and relevancy to this project. Examples of course materials, including links to active courses, may be included as an appendix. Activities should be linked to prior work experience rather than part of an educational requirement for a degree/education;
3. Reference information from two (2) former or current clients. Include company name; contact person’s name; contact person’s phone number and/or email address; and description of product delivered;
4. A description of the applicant’s experience in programming web-based courses in Lectora Inspire 18 (desktop version) (examples may be included as an appendix);
5. A description of what type of team will be assigned to this project, including a description of each person’s role (resumes or CVs should be provided as an appendix); and
7. A brief description of the applicant firm’s project management and instructional development processes.

Cost Proposal

The applicant should provide a detailed cost proposal and explanation/justification of costs. The cost proposal must be no longer than three (3) pages. No required format exists for the cost proposal and the cost proposal should be submitted in the format of the applicant’s choice.

The cost proposal should include the number of contract hours estimated to complete an online, web-based course, as described above. The costs should be broken into 1) course programming costs, including the hours required to develop the course and the hourly rate and 2) costs for purchasing and/or developing images, graphics and animations. The cost should include interactivities as indicated in the storyboard, but at least three interactivities per unit. The applicant should provide estimates of several types of interactivities (e.g. drag & drop). The interactivities must be developed by the applicant and not subcontracted out to another entity. APHL may require additional edits to be made after the course is delivered; applicants should include a line item in the budget proposal that includes an hourly rate to incorporate final edits. APHL has allocated up to $30,000 for the course programming and additional funds may exist for interactivities. Development of animations should be quoted on an individual basis as a supplement to the programming of the course. The cost of animation development (simple animations v. complex animations) should be submitted with the cost for proposal.

Appendix B: Project Approach has been included to assist applicants in understanding the level of detail that APHL and partners have discussed in relation to this project. Note: Applicants are not required to use or reference anything outlined in Appendix B unless they would like to. APHL only provides this Appendix as supporting documentation.

Evaluation

Initial Review

APHL staff members or consultants under contract with APHL will conduct an initial review of all proposals for completeness. APHL will not consider any incomplete applications by the proposal due date specified in the Anticipated RFP Schedule section above. Incomplete proposals will not receive a formal evaluation.

Evaluation Process

APHL will conduct reviews via a combination of teleconference and email communications between the evaluation team described below. APHL’s Food Safety Senior Specialist will coordinate the review process and the evaluation sessions.
The reviewers may request follow-up interviews with all or some of the applicants and, following these interviews, may request supplemental information on an applicant’s proposal. These interviews and any supplemental information will clarify an applicant’s capacity or experience in one or more of the evaluation criteria, or will help to explain other information contained in an applicant’s proposal.

Evaluation Team

An evaluation team will be assembled to evaluate competitive proposals and then assess their relative qualities based on the Evaluation Criteria outlined below. This evaluation team will consist of four APHL staff.

Conflicts of Interest

APHL will ask potential reviewers to complete and sign APHL’s Conflict of Interest Disclosure Statement in order to disclose any real or perceived conflict of interest prior to the start of the evaluation process and to affirm that they have no conflict of interest that would preclude an unbiased and objective review of the proposals received. APHL will not select reviewers with a perceived or potential conflict of interest. Once potential reviewers have been identified, APHL’s Director of Food Safety will have final approval over the review team’s composition.

Evaluation Criteria

The evaluation team will use the following criteria as a general overall framework in which to evaluate proposals:

- **Suitability of the Proposal** – The proposed solution meets the needs and criteria set forth in the RFP.
- **Course Programmer Expertise** – The applicant shows knowledge of the subject by recommending and communicating appropriate technical and aesthetic solutions as evidenced by the proposal and references.
- **Course Programmer Organizational Capacity** – Applicant has successfully completed similar projects and has the qualifications necessary to undertake this project. The applicant firm has appropriate staff to devote to the project within the timeframe needed.
- **Project Management** – The applicant shows experience and resources related to successful completion of a similar project.
- **Value/Pricing Structure and Price Levels** – The price is commensurate with the value offered by the applicant.

Each member of the evaluation team will evaluate proposals against the 13 questions or criteria found in Appendix D: Instructional Designer RFP Scorecard and will assign a numeric score from zero (0) (indicating a ‘poor’ response) to four (4) (indicating an ‘outstanding’ response) to reflect that reviewer’s assessment of the responsiveness of a proposal to each question or criterion. The evaluators will assign scores using the following categorizations:
• **Poor** (0 points) – The respondent’s proposed approach neither meets the baseline requirements set out in this RFP nor demonstrates more than a minimal understanding of the subject matter.

• **Fair** (1 point) – The respondent’s proposed approach does not meet the baseline requirements set out in this RFP but does demonstrate a baseline understanding of the subject matter.

• **Good** (2 points) – The respondent’s proposed approach meets the baseline requirements set out in this RFP and demonstrates the necessary understanding of the subject matter.

• **Excellent** (3 points) - The respondent’s proposed approach exceeds the baseline requirements set out in this RFP and demonstrates a deep understanding of the subject matter.

• **Outstanding** (4 points) - The respondent’s proposed approach greatly exceeds the baseline requirements set out in this RFP and demonstrates a thorough and comprehensive understanding of, or an expertise in the subject matter.

The raw scores will be weighted in such a manner so that the 52 maximum possible raw score points will be converted into a maximum possible weighted score of 100 points.

### Post Evaluation Procedures

APHL staff will notify the selected course programmer(s) within ten (10) business days of completion of the evaluation. Unsuccessful applicants will receive notification of these results by e-mail or by U.S. mail within 30 days of the date that the winning/successful vendor is selected. Note: Once selected, the applicant must be approved by the federal funding agency.

All applicants will be entitled to utilize APHL’s Appeals Process to formulate a protest regarding alleged irregularities or improprieties during the procurement process. Specific details of the policy are listed on the procurement website.

### Conditions of Award Acceptance

The eligible applicants must be able to contract directly with APHL or have an existing relationship with a third party organization that can contract directly with APHL on behalf of the applicant. Applicants must agree to comply with expectations outlined in the appendices.

### General Considerations

This RFP is neither an agreement nor an offer to enter into an agreement with any respondent. Once application evaluation is complete, APHL may choose to enter into a definitive contract with the selected applicant(s) or it may decline to do so.

APHL must ensure that the selected respondent is neither suspended nor debarred from receiving federal funds and that the respondent meets any other funding eligibility requirement imposed by the Cooperative Agreement. APHL’s determination of whether the respondent is eligible to receive
Cooperative Agreement funding will be definitive and may not be appealed. In the event that APHL determines that the selected respondent is ineligible to receive Cooperative Agreement funding, APHL will nullify the contract or will cease negotiation of contract terms.

Each respondent will bear its own costs associated with or relating to the preparation and submission of its application. These costs and expenses will remain with the respondent, and APHL will not be liable for these or for any other costs or other expenses incurred by a respondent in preparation or submission of its application, regardless of the conduct or outcome of the response period or the selection process.
Appendix A – Waste Management Course Design Document

<table>
<thead>
<tr>
<th>Title</th>
<th>Laboratory Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed ID</td>
<td>Course Code TBD</td>
</tr>
<tr>
<td>Date and Version</td>
<td>03/20/20 version 1</td>
</tr>
</tbody>
</table>

**Description**

This is an overview course which provides the analyst with an awareness of waste streams and how those waste streams are managed by the laboratory. This course will identify various types of waste generated by the laboratory, identify possible treatment schemes, and discuss short term and long term storage limits. This course will discuss general in-lab requirements for handling waste and discuss the underlying regulatory requirements. The course will describe the various tools and equipment used in the laboratory to safely handle waste. The analyst will gain an understanding of their role in the waste management system, and learn the importance of properly handling waste as a means to prevent the accidental discharge of toxic chemicals and biological agents.

**Delivery Method(s)**

Online

**Learning Objectives**

The following is a complete listing of the Terminal Learning Objectives (TLOs) and Enabling Learning Objectives (ELOs), which will be broken out by module/lesson in the course design details section that follows.

<table>
<thead>
<tr>
<th>Terminal Objectives</th>
<th>Enabling Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Upon completion of the unit, participants will recognize elements of waste management in a laboratory.</td>
<td>1a: Upon completion of the unit, participants will recognize the importance of waste management.</td>
</tr>
<tr>
<td></td>
<td>1b: Upon completion of the unit, participants will recall biological waste management procedures.</td>
</tr>
<tr>
<td></td>
<td>1c: Upon completion of the unit, participants will recall chemical waste management procedures.</td>
</tr>
<tr>
<td></td>
<td>1d: Upon completion of the unit, participants will identify types of waste.</td>
</tr>
<tr>
<td>Terminal Objectives</td>
<td>Enabling Objectives</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2: Upon completion of the unit, participants will select legal and regulatory</td>
<td>2a: Upon completion of the unit, participants will identify standard laboratory waste management requirements.</td>
</tr>
<tr>
<td>requirements related to waste management.</td>
<td>2b: Upon completion of the unit, participants will recall waste management regulatory requirements.</td>
</tr>
<tr>
<td></td>
<td>2c: Upon completion of the unit, participants will identify the roles and responsibilities to comply with waste management regulations.</td>
</tr>
<tr>
<td></td>
<td>2d: Upon completion of the unit, participants will recognize the use of SDS and pathogen SDS.</td>
</tr>
<tr>
<td>3: Upon completion of the unit, participants will recognize the actions the</td>
<td>3a: Upon completion of the unit, participants will define transportation of waste.</td>
</tr>
<tr>
<td>laboratory analyst takes for the disposal of biological and chemical waste.</td>
<td>3b: Upon completion of the unit, participants will define waste disposal.</td>
</tr>
<tr>
<td></td>
<td>3c: Upon completion of the unit, participants will recognize the importance of labeling waste.</td>
</tr>
<tr>
<td></td>
<td>3d: Upon completion of the unit, participants will differentiate among waste streams.</td>
</tr>
<tr>
<td></td>
<td>3e: Upon completion of the unit, participants will recognize waste storage limits.</td>
</tr>
<tr>
<td>4: Upon completion of the unit, participants will select items and tools used</td>
<td>4a: Upon completion of the unit, participants will identify documentation used in laboratory waste management.</td>
</tr>
<tr>
<td>in laboratory waste management.</td>
<td>4b: Upon completion of the unit, participants will identify safety tools used in laboratory waste management.</td>
</tr>
<tr>
<td></td>
<td>4c: Upon completion of the unit, participants will select the proper container for the type of waste.</td>
</tr>
</tbody>
</table>
## Course Design Details

### Unit Number and Title: Unit 1: Foundations

**Description:** This unit will discuss foundational knowledge related to the storage, treatment, transport, and disposal of biological and chemical waste.

<table>
<thead>
<tr>
<th>TLOs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLO 1: Upon completion of the unit, participants will recognize elements of waste management in a laboratory.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELOs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELO 1a: Upon completion of the unit, participants will recognize the importance of waste management.</td>
</tr>
<tr>
<td>ELO 1b: Upon completion of the unit, participants will recall biological waste management procedures.</td>
</tr>
<tr>
<td>ELO 1c: Upon completion of the unit, participants will recall chemical waste management procedures.</td>
</tr>
<tr>
<td>ELO 1d: Upon completion of the unit, participants will identify types of waste.</td>
</tr>
</tbody>
</table>

**Estimated Time:** 0.25 hrs

### Unit Number and Title: Unit 2: Laws and Regulations

**Description:** This unit will describe legal and regulatory requirements related to laboratory waste management.

<table>
<thead>
<tr>
<th>TLOs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLO 2: Upon completion of the unit, participants will select legal and regulatory requirements related to waste management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELOs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELO 2a: Upon completion of the unit, participants will identify standard laboratory waste management requirements.</td>
</tr>
<tr>
<td>ELO 2b: Upon completion of the unit, participants will recall waste management regulatory requirements.</td>
</tr>
<tr>
<td>ELO 2c: Upon completion of the unit, participants will identify the roles and responsibilities to comply with waste management regulations.</td>
</tr>
<tr>
<td>ELO 2d: Upon completion of the unit, participants will recognize the use of SDS and pathogen SDS.</td>
</tr>
</tbody>
</table>
**Unit Number and Title:** Unit 3: Laboratory Waste Disposal

**Description:** This unit will describe the actions a laboratory analyst takes for the disposal of biological and chemical waste. It includes following SOPs (Standard Operating Procedures) for disposal, utilizing appropriate PPE (Personal Protective Equipment) for waste disposal, and following waste labeling and tracking requirements in the laboratory.

**TLOs:**

TLO 3: Upon completion of the unit, participants will recognize the actions the laboratory analyst takes for the disposal of biological/chemical waste.

**ELOs:**

ELO 3a: Upon completion of the unit, participants will define transportation of waste.
ELO 3b: Upon completion of the unit, participants will define waste disposal.
ELO 3c: Upon completion of the unit, participants will recognize the importance of labeling waste.
ELO 3d: Upon completion of the unit, participants will differentiate among waste streams.
ELO 3e: Upon completion of the unit, participants will recognize waste storage limits.

**Estimated Time:** 0.25 hours

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**Unit Number and Title:** Unit 4: Equipment and Supplies

**Description:** This unit will describe the equipment and supplies used for laboratory waste management.

**TLOs:**

TLO 4: Upon completion of the unit, participants will select items and tools used in laboratory waste management.

**ELOs:**

ELO 4a: Upon completion of the unit, participants will identify documentation used in laboratory waste management.
ELO 4b: Upon completion of the unit, participants will identify safety tools used in laboratory waste management.

ELO 4c: Upon completion of the unit, participants will select the proper container for the type of waste.

**Estimated Time:** 0.25 hours

---

**Lesson/Module Number and Title:** Foundations

**Description:** This unit will discuss foundational knowledge related to the storage, treatment, transport, and disposal of biological and chemical waste.

**Lesson/Module TLO 1:** Upon completion of the unit, participants will recognize elements of waste management in a laboratory.

**Pre-Post Module Lesson Work:** N/A

**Learning Environment:** web based

**Need, Content, Description or Purpose – N/A** (No Training Needs Assessment Performed)

<table>
<thead>
<tr>
<th>Lesson/Module ELOs</th>
<th>Time Estimate</th>
<th>Instructional Methodology - Level of Participant Interactivity/Engagement</th>
<th>Instructional Materials</th>
<th>Assessment Method and Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon completion of the course, participants will:</td>
<td>.25 hr</td>
<td>Asynchronous, online with knowledge checks</td>
<td>Computer with web browser, internet connection and a learning management system account</td>
<td>Multiple choice/check all that apply knowledge check quiz (** indicates a correct answer)</td>
</tr>
<tr>
<td>• recognize the importance of waste management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• recall biological waste management procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• recall chemical waste management procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• identify types of waste</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1a. A Safety Data Sheet (SDS) is used in the laboratory to provide the following information: a) The chemical and physical properties of reagents and chemicals used in the laboratory.***
|   |   |   | b) The potential hazards, protective measures and safety precautions for handling, storing, transport and disposal of chemicals and reagents. ***  
|   |   |   | c) The first aid measures required for treatment from exposure. ***  
|   |   |   | d) Proper method for containment and clean-up***  
|   |   |   | e) All of the above*****  

1a. How should sensitive waste, such as confidential medical records, be handled?  
a) intermix with other papers to disguise anything confidential and place in recycling  
b) shred before disposal*  
c) place in a general public trash bin  
d) place in a satellite waste area in a labeled biohazard bag  

1a. Select all that apply. Laboratory waste management reduces:  
a) Costs***  
b) Environmental impacts***  
c) Pollution***  
d) Analyst safety  
e) Community safety
1b. Laboratory waste management is important for the following reasons:
a) It ensures the safety of the laboratory staff who may be potentially exposed to dangerous chemicals or biological wastes if not handled, treated, or stored appropriately.*** 
b) It reduces the risk and spread of potential infections of the laboratory staff and the community.***
c) It ensures that contaminated wastes (chemical, biological, radiological) are neutralized or decontaminated properly..***
d) It ensures compliance of the laboratory to local, state, and federal regulations involving handling, storage, and disposal of hazardous wastes and protects the laboratory from penalties for non-compliance.***
e) All of the above

1b. Autoclaving can be used to decontaminate which of the following types of waste?
a. *Clostridium botulinum* spores
b. *Listeria monocytogenes*
c. sodium oxybate
d. Both a. and b.*

1b. Biological wastes generated in the laboratory must be:

a) Decontaminate according to your laboratory SOP before they are disposed of.

b) Cultures, Petri dishes and other solid biological wastes should be placed in appropriate autoclave bags before autoclaving.

c) Bleach is the ONLY chemical that can be used to decontaminate liquid biological waste.

d) Needles, scalpels, lancets, glass slides and cover slips, razors, and broken glassware that are contaminated with biological materials should be collected in puncture-proof, rigid sharps containers.

e) It is not necessary to autoclave needles, scalpels, lancets, glass slides and cover slips, razors, and
broken glassware that are contaminated with biological materials as long as they are labeled and in biohazard containers.

1c. Which of the following are elements of a good chemical laboratory waste management procedure:
   a. accurate inventory, proper decontamination, and segregation of chemicals
   b. location of current SDSs, accurate inventory, and dosimeter use
   c. current SDSs, proper decontamination, and accurate labeling of chemicals

1c. Chemical SDSs are useful references regarding chemical laboratory waste management, because they contain information about:
   a. who to call to dispose of the unused chemical
   b. proper storage*
c. expiration of the chemical*
how to clean up spills

1c. Labeling of chemical laboratory waste is critical for safety and is required by law. Which of the following is items must be included on chemical laboratory waste labels:
a. pH
b. hazardous properties*
c. expiration date
contact information for the responsible party*

1c. You are transferring a broth culture of Brucella suis and you drop the tube on the floor. You performed the spill response with appropriate PPE. What are the steps in handling the contaminated spill response materials:

a) Dispose of contaminated materials in a red biohazard bag.*
b) Place the towels used to clean the spill in a red biohazard bag.*
c) Place PPE in a general waste bin
d) Label the biohazard bags and place them in a bin for autoclaving.*
e) Document the incident according to your laboratory policy.*
f) Since you have completed clean-up, you no longer need to report it to the supervisor.

1d. Which of the following is the best example of a type of laboratory waste?
a. Instrument  
b. Spill response  
c. Chemical*  
d. Liquid

1d. Match the laboratory waste example with the correct laboratory waste type:
1. Biological (a)  
2. Chemical (c)  
3. Radiological (e)  
4. Recycling (b) *if laboratory participates in recycling  
5. Trash (d)

a. Absorbent pad used to clean up leaking stool sample in the biosafety cabinet  
b. Decontaminated, broken, plastic carboy used for storing buffers  
c. Instrument waste containing mercury  
d. Paper towels used to clean up excess water at the dishwashing sink
e. Pipet tips used to aliquot 121I standards

1d. Which of the following are examples of biological laboratory waste?
a. unused culture of Salmonella*
b. leftover phosphate buffer
c. benchcoat containing human stool sample*
paper towel containing animal stool sample*

d. Which of the following are elements of a good chemical laboratory waste management procedure:
d. accurate inventory, proper decontamination, and segregation of chemicals
e. location of current SDSs, accurate inventory, and dosimeter use
f. current SDSs, proper decontamination, and accurate labeling of chemicals
   current SDSs, accurate inventory, segregation of like chemicals, and accurate labeling of chemicals*
**Lesson/Module Number and Title: Laws and Regulations**

**Description:** This unit will describe legal and regulatory requirements related to laboratory waste management.

**Lesson/Module TLO:** Upon completion of the unit, participants will select legal and regulatory requirements related to waste management.

**Pre-Post Module Lesson Work:** N/A

**Learning Environment:** web based

**Need, Content, Description or Purpose – N/A** (No Training Needs Assessment Performed)

<table>
<thead>
<tr>
<th>Lesson/Module ELOs</th>
<th>Time Estimate</th>
<th>Instructional Methodology - Level of Participant Interactivity/Engagement</th>
<th>Instructional Materials</th>
<th>Assessment Method and Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon completion of the course, participants will:</td>
<td>.25 hr</td>
<td>Asynchronous, online with knowledge checks</td>
<td>Computer with web browser, internet connection and a learning management system account</td>
<td>Multiple choice/check all that apply knowledge check quiz</td>
</tr>
</tbody>
</table>
|   • Identify standard laboratory waste management requirements. |  |  |  | 2a. Which statements describe good laboratory waste management practices?  
|   • Recall waste management regulatory requirements. |  |  |  |   a. Labeling of waste containers***  
|   • Identify the roles and responsibilities to comply with waste management regulations |  |  |  |   b. Use of proper PPE ***  
|   • Recognize the use of SDS and pathogen SDS. |  |  |  |   c. Applying training***  
|  |  |  |  |   d. Disposing of wastes without regard to volume |

2b. Select the accurate statements about waste disposal.

a) Violations of waste disposal regulations can lead to fines or loss of certification for the laboratory.***
b) The analyst is not responsible for following waste labeling guidelines—only the Waste Custodian is.
c) Crossing different waste streams is encouraged to minimize waste volumes.
d) Disposal requirements help protect analysts from injury or loss or life.***

2b. A laboratorian is deciding how she/he should dispose of acetone waste used in a chemistry method. They should:
a. Ask a senior chemist for advice on the proper means of disposal.
b. Access the method SOP and find out the proper means of disposal.
c. Pour the acetone waste in the sink and run water. ***
d. Locate the correct waste disposal container for acetone.

2b. Which statement does not fit regarding laboratory waste management practices?
a. Labeling of waste containers
b. Proper PPE to use
c. Applying training
d. Dispose of wastes without regard to volume.

2c. Who has primary responsibility for laboratory waste disposal?
   a. Lab Director
   b. Senior Analyst
   c. Lab Waste Custodian
   d. Support technician

2c. What are the major roles and responsibilities of a Laboratory Analyst in Waste disposal?
   a. Take training
   b. Proper labelling of waste
   c. Proper use of PPE
   d. Formulate own waste disposal plan if necessary.
   e. Support others in following waste disposal policies.

2c. Waste custodian duties include:
   a. Ensure waste disposal training
occurs for laboratory analysts.***
b. Audit for waste disposal compliance.***
c. Provide all instrument training
d. Track waste volume and disposition for collection.***

2b. What are prudent practices for waste disposal.
b. Understand that violations of waste disposal regulations can lead to fines or loss of certification.***
c. The ability to access and apply different waste disposal streams for each method and performed.***
d. It is proper in most situations to cross different waste streams.

2d. When is the best time to review a SDS or pathogen safety data sheet?
a. anytime; all relevant information is in the method SOP
b. prior to work with a chemical or pathogen*
c. when an exposure to the chemical or pathogen occurs
d. when there is a spill of the chemical or culture of the pathogen
What does SDS stand for?
a. Sodium Dodecyl Sulfate
b. Safety Data Sheet***
c. State Disposal System
d. Sequence Detection System

2d. The OSHA Hazard Communication Standard mandates that chemical manufacturers must communicate a chemical's hazard information to chemical handlers by providing:
a. a YouTube video on safe handling of the chemical
b. a Safety Data Sheet that contains occupational safety and health data***
c. only a label with all the information on the side of the chemical container
d. a skull and crossbones symbol on poisons

2d. The SDS includes information such as:
a. the properties of each chemical***
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</table>
| b. the physical, health, and environmental health hazards***  
c. protective measures***  
d. safety precautions for handling, storing, and transporting the chemical***  
2d. A chemical SDS contains the following sections:  
  a. Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., firefighting).  
  b. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision.  
  c. The SDS must also contain Sections 12 |
through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals, but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

d. All the above***

2d. To ensure that the SDSs are readily accessible to employees for all hazardous chemicals in their workplace, employers can:

a. keep the SDSs in a binder***

b. on computer with a password that only the office manager knows so that the employees don’t review them unnecessarily and waste time

c. on a computer as long as the employees have immediate access to the information without leaving their work area when needed and a back-up is available in the case of a power outage or other emergency.***

d. designate a person(s) responsible
for obtaining and maintaining the SDSs.

2d. Pathogen Safety Data Sheets are:
a. technical documents that describe the hazardous properties of a human pathogen and provide recommendations for work involving these agents in a laboratory setting
b. produced by the Public Health Agency of Canada
c. official OSHA documents
d. provide useful information and are used in microbiology laboratories in the United States even though the documents are produced in Canada

2d. A Pathogen Safety Data Sheet includes:
a. the name of the infectious agent
b. pathogenicity/toxicity and epidemiology
c. the specific waste disposal procedure for your laboratory
d. handling and storage
**Lesson/Module Number and Title:** Laboratory Waste Disposal

**Description:** This unit will describe the actions a laboratory analyst takes for the disposal of biological and chemical waste. It includes following SOPs (Standard Operating Procedures) for disposal, utilizing appropriate PPE (Personal Protective Equipment) for waste disposal, and following waste labeling and tracking requirements in the laboratory.

**Lesson/Module TLO:** Upon completion of the unit, participants will recognize the actions the laboratory analyst takes for the disposal of biological/chemical waste.

**Pre-Post Module Lesson Work:** N/A

**Learning Environment:** web based

**Need, Content, Description or Purpose – N/A (No Training Needs Assessment Performed)**

<table>
<thead>
<tr>
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<tr>
<td>• Define transportation of waste</td>
<td></td>
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<tr>
<td>• Define waste disposal terms</td>
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<tr>
<td>• Recognize the importance of labeling waste</td>
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<tr>
<td>• Differentiate among waste streams</td>
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<tr>
<td>• Recognize waste storage limits</td>
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</tbody>
</table>

3b. Which of the following best defines a “satellite waste accumulation area?”
   a. an area at or near the generation of where hazardous waste initially accumulates*
   b. an area in the biosafety cabinet used to collect biological hazardous waste
   c. an area in the chemical fume hood used to store pipet tips
that have come into contact with hazardous chemicals
d. an area where biohazardous and chemical wastes can safely be combined prior to transport

3a. When transporting waste from one location to another within your laboratory, which of the following is/are good laboratory practices to apply?
   a. only transport waste in plastic containers
   b. transport large or multiple containers using a cart with tall side-rails*
   c. carry bottles with two hands: with one hand on the handle and the other hand supporting the bottom*
   d. separate incompatible waste types*

3a. Who is the best person to transport waste
from the laboratory?

a. anyone can transport waste from the laboratory
b. the most senior person in the laboratory
c. an individual specifically trained in the safe transport of laboratory waste
   the laboratory’s safety officer

3a. When preparing waste for transport from your laboratory, which of the following tasks should be performed?

a. label all containers properly with a description of the contents and concentration, as appropriate
b. verify that the transport containers are not more than ¾ full
   c. color-code biological and chemical wastes to aid the transport team in sorting the waste
      color-code acidic and basic chemical waste to
aid the transport team in sorting the waste

3b. Which of the following best defines a “waste stream” in the laboratory?
a. a description of the flow of waste from sample receipt to disposal down the sink
b. a term applied to any liquid waste generated in the laboratory
c. a description of all waste types and volumes generated during a lab process, from creation through disposal*
a description of environmental waste samples received in the laboratory that can be reintroduced to the environment after decontamination

3b. Isolating laboratory waste from other materials in the laboratory is important, because:
a. it may be forgotten long enough that I don't have to deal with it
b. it may eventually evaporate, saving the laboratory money and time
c. it may prevent accidental use as a qualified solvent*
it may prevent accidental exposure, spill, or sample contamination*

3c. Documentation of waste disposition is:
a. only required by certain types of laboratories
b. used by regulatory agencies to ensure compliance with law*
c. necessary for traceability after it leaves the laboratory* applicable to chemical waste only

3c. OSHA’s Hazard Communication Program requires
proper labeling of wastes to ensure that:

a) Hazardous waste (chemical, biological, radiological) are disposed off appropriately (landfills, incinerated).***
b) The laboratory staff and the community are not exposed to potentially hazardous materials.***
c) The hazardous waste generated can be stored indefinitely.
d) The laboratory can choose the cheapest disposal company.

3d. Which of the following information are needed when labeling laboratory waste for storage:

a) The full chemical name of the material ***
b) Total volume of waste in the container ***
c) The dates when the waste was added to the container

d) The date when the material was purchased

e) The name of the disposal company

3d. It is important to segregate waste streams because:

a) It reduces cost of disposal

b) Ensures safety of the laboratory staff by ensuring that incompatible materials are stored separately.

c) Waste containers such as aerosol cans and gas cylinders can be stored together when empty to save space.

d) It is part of your job description.

3d. You have generated a lot of disposable inoculating loops after an outbreak. One of your co-workers decided
to discard these loops in a cardboard box labeled “Broken Glassware.” What do you do?

a) Let your co-worker know that these contaminated loops should go in a sharps container.***

b) Let the supervisor know to correct the disposal error.***

c) There is nothing wrong with this practice.

d) It is appropriate to use this box if your sharps container is already full.

e)

3d. Wastes (hazardous and non-hazardous) generated in your laboratory facility are stored temporarily in a designated area until they can be transported from your facility for final disposition. Why is it necessary to understand your laboratory’s storage limits?
a) The landfill can only take so much waste and if they exceeded their capacity it may result in potential environmental issues.***
b) Exceeding the storage limits may result in potential safety issues.***
c) The Environmental Protection Agency (EPA) requires some quantity limitations in the storage of hazardous chemicals.****
d) It reduces cost for transporting hazardous chemicals for disposal.***
e) All of the above***

3c. OSHA’s Hazard Communication Program requires proper labeling of wastes to ensure that:
e) Hazardous waste (chemical, biological, radiological) are disposed of appropriately
(taken to landfills, incinerated).***
f) The laboratory staff and the community are not exposed to potentially hazardous materials.***
g) The hazardous waste generated can be stored indefinitely.
h) The laboratory can choose the cheapest disposal company.

3c. Which of the following information are needed when labeling laboratory waste for storage:
f) The full chemical name of the material ***
g) Total volume of waste in the container ***
h) The dates when the waste was added to the container ***
i) The date when the material was purchased
j) The name of the disposal company
k) Always label hazardous waste at its point of generation where it can still be easily identified.

**Lesson/Module Number and Title: Equipment and Supplies**

**Description:** This unit will describe the equipment and supplies used for laboratory waste management.

**Lesson/Module TLO:** Upon completion of the unit, participants will select items and tools used in laboratory waste management.

**Pre-Post Module Lesson Work:** N/A

**Learning Environment:** web based

**Need, Content, Description or Purpose – N/A (No Training Needs Assessment Performed)**

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<tr>
<td>• Identify documentation used in laboratory waste management</td>
<td></td>
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<td></td>
<td>4a. The following are necessary documentation for laboratory waste disposal:</td>
</tr>
<tr>
<td>• Identify safety tools used in laboratory waste management</td>
<td></td>
<td></td>
<td></td>
<td>a. Waste inventory***</td>
</tr>
<tr>
<td>• Select the proper container for the type of waste</td>
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<td></td>
<td></td>
<td>b. disposal record***</td>
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<td></td>
<td>c. Material pickup charts/schedules**</td>
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<td></td>
<td></td>
<td></td>
<td>* preventative maintenance schedule</td>
</tr>
</tbody>
</table>
4b. Sharps containers are used for disposal in the laboratory of:
   a. pipette tips***
   b. unbroken glass slides***
   c. needles ***
   d. plastic microcentrifuge tubes
   1 a. Red plastic sharps containers labeled “biological waste”
   2 b. Puncture proof container resistant to the chemical present
   3 c. Rigid cardboard container labeled “broken glass”
   4 d. Polyethylene container
   5 e. Steel container
   6 f. Red autoclave bag with biohazard symbol
   7 g. Safety can for flammable waste

   1. needles potentially contaminated with Salmonella
   2. chemically contaminated pipet tips
   3. uncontaminated broken glass
   4. corrosive chemical
5. non-corrosive, oil-based, and flammable liquids
6. Petri dishes with bacterial colonies
7. Flammable waste

4b. Containment of hazardous materials is required for:
   a. the protection of the environment from contamination***
   b. the protection of employees who work in areas where hazardous materials are stored and used***
   c. making sure the laboratory is neat and professional for an external auditor
   d.

4b. Safety tools necessary for laboratory waste management include:
   a. PPE
   b. Spill kits
   c. Signs and labels
   d. All the above***

4a. The following are necessary documentation for laboratory waste disposal:
   a. Waste inventory***
   b. disposal record***
Material pickup charts/schedules**
*
preventative maintenance schedule

4c. Sharps containers are used for disposal in the laboratory of:
   a. pipette tips***
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<td>uncontaminated broken glass</td>
<td>4.</td>
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<td>5.</td>
<td>non-corrosive, oil-based, and flammable liquids</td>
<td>6.</td>
<td>Petri dishes with bacterial colonies</td>
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<tr>
<td>7.</td>
<td>Flammable waste</td>
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4b. Containment of hazardous materials is required for:

- a. the protection of the environment from contamination

- b. the protection of employees who work in areas where hazardous materials are stored and used

- c. making sure the laboratory is neat and professional for an external auditor

- d.  

4b. Safety tools necessary for laboratory waste management include:

- a. PPE

- b. Spill kits

- c. Signs and labels

- d. All the above

4a. The following are necessary documentation for laboratory waste disposal:
a. Waste inventory
b. Disposal record
c. Material pickup charts/schedules

*preventive maintenance schedule
Appendix B – Project Approach

To help frame the required level of detail, respondents should be thinking about this information as they provide their estimates on cost, deliverables and proper staffing.

NOTE: RESPONDENTS DO NOT HAVE TO USE OR REFERENCE THIS INFORMATION, IT IS ONLY INCLUDED AS A GUIDANCE RESOURCE.

1. Review of course design document and supporting materials:

   As is apparent in Appendix A, APHL and partners have created a course design document that outlines the flow of the to-be-developed course. Storyboards are in development for the course, and the course programmer should be prepared to review these materials.

2. Creation of a project plan and timeline:

   With enough information generated from task #1, the course programmer should prepare a plan and timeline for the programming and delivery. Minor adjustments in the proposed costs and resources can occur at this time.

3. Program and deliver the Course:

   The course programmer will undertake development of the course with APHL provided content and input.

Appendix C – Frequently Asked Questions

<table>
<thead>
<tr>
<th>Category</th>
<th>Question</th>
<th>APHL Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDD / Storyboard</td>
<td>Will the CDD and/or Storyboard have been approved by the FDA prior to</td>
<td>The CDD has been approved by FDA. The SMEs have produced content for APHL and</td>
</tr>
<tr>
<td></td>
<td>course development? Have the SMEs produced content for APHL and FDA</td>
<td>FDA reviewers in the past.</td>
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<tr>
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<td>reviewers in the past?</td>
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<tr>
<td>CDD / Storyboard</td>
<td>Appendix B, section 1 indicates that your team is currently developing a</td>
<td>If necessary, the storyboard will contain the desired narration scripting.</td>
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<tr>
<td></td>
<td>storyboard for this course. Will the approved storyboard contain the</td>
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<td>desired narration scripting, or will the programming team be expected to</td>
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<td>work</td>
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<tr>
<td>Category</td>
<td>Question</td>
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<td>with your team to develop and draft a narration script?</td>
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<tr>
<td>CDD / Storyboard</td>
<td>Are the storyboards basically text in Word format or are they chunked out by slide as in PowerPoint?</td>
<td>Word format</td>
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<tr>
<td></td>
<td>It’s mentioned in Appendix B that “storyboards are in development …”</td>
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<tr>
<td></td>
<td>a. What form are the storyboards in – PPT, Word or ? Word</td>
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<td>b. In addition to the content text, what will the storyboards contain?</td>
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<tr>
<td></td>
<td>i. Images, graphics with associated alternative text to use? Yes</td>
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<td></td>
<td>ii. Narration scripts for professional narrations? Yes (if applicable)</td>
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<tr>
<td></td>
<td>iii. Descriptions of interactivities for programmer to create? Yes</td>
<td></td>
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<td></td>
<td>c. If some of these are not contained w/in the storyboard, is the programmer expected to develop them? No</td>
<td></td>
</tr>
<tr>
<td>CDD / Storyboard</td>
<td>Do the storyboards include all of the content text, images and/or descriptions of images, and any voice over script that is in addition to the text on the slide? Yes.</td>
<td></td>
</tr>
<tr>
<td>CDD / Storyboard</td>
<td>The CDD would seem to indicate a linear learning experience without branching or role-specific differentiation, is that an accurate assumption? Yes</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Question</td>
<td>APHL Response</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CDD / Storyboard</td>
<td>Is the team open to possibly breaking up the 1-hour learning program into 3 or 4 shorter, more digestible modules?</td>
<td>The storyboard will include a set number of units.</td>
</tr>
<tr>
<td>Compliance for 508 / Templates</td>
<td>Can describe your approach to meeting 508 compliance? For example, do you require true closed captioning or display of slide-level scripting in a viewable pane?</td>
<td>Closed captioning is required for all videos. When making any course, the developer should be following section 508 standards. For additional information, link is below. Section 508 Standards for Electronic and Information Technology: <a href="https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/section-508-standards">https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/section-508-standards</a></td>
</tr>
<tr>
<td>Compliance for 508 / Templates</td>
<td>Please confirm that APHL will be providing a Lectora 18 template that already meets Section 508 standards.</td>
<td>No, APHL expects that the awardee will provide a Lectora 18 template that meets Section 508 standards.</td>
</tr>
<tr>
<td>Compliance for 508 / Templates</td>
<td>Will the Lectora template need to be appropriately sized for use on tablets?</td>
<td>At this time, the answer is yes</td>
</tr>
<tr>
<td>Compliance for 508 / Templates</td>
<td>Will APHL also be providing a style guide containing appropriate branding elements which meet Section 508 standards?</td>
<td>Yes, APHL will provide this.</td>
</tr>
<tr>
<td>Course assets</td>
<td>Are there assets you would like designed and developed that learners can download during or after the course (e.g. job-aids, quick reference cards, etc)?</td>
<td>Not at this time.</td>
</tr>
<tr>
<td>Category</td>
<td>Question</td>
<td>APHL Response</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Deliverables</td>
<td>Please provide an overview of the review or approval cycle of any deliverables we provide. Can you provide typical or average deliverable review times so we may take them into consideration?</td>
<td>We have built a one-week review on our end for beta-testing the course. We will then send it for FDA review. If additional edits are needed past the deliverable deadline, we will allow for a No Cost Extension on the contract to make those edits.</td>
</tr>
<tr>
<td>Delivery system / LMS</td>
<td>Does APHL have an intended learning management system in mind for hosting the eLearning course?</td>
<td>We plan on this course running on FDA’s LMS. We are to have the course programmed in Lectora 18 Inspire (desktop version). We want individual SCORM files. As of this date, the course would be programmed modularly, where the major components (introduction, pre course assessment, content, post course assessment, evaluation, etc.), are individual SCORM files.</td>
</tr>
<tr>
<td>Images</td>
<td>Is the programmer expected to research and find appropriate stock images? Or will APHL provide them?</td>
<td>The programmer is expected to find appropriate stock images which APHL will approve.</td>
</tr>
<tr>
<td>Interactions / Animations</td>
<td>Please clarify the difference between interactivity and animation. For example, we consider an interaction depending on a user response, whereas an animation is passively watched. Is that your definition as well?</td>
<td>Yes, that is how we are distinguishing the two terms.</td>
</tr>
<tr>
<td>Interactions / Animations</td>
<td>To help with the clarification, please share examples of interactions and animations you think are particularly effective.</td>
<td>We are interested in seeing some of your examples, as stated in the RFP.</td>
</tr>
<tr>
<td>Interactions / Animations</td>
<td>Under cost proposal, it’s stated, “The cost should include up to three interactivities.” Is this referring to the programming cost proposal?</td>
<td>Yes—the interactivities should be included in the programming cost.</td>
</tr>
<tr>
<td>Category</td>
<td>Question</td>
<td>APHL Response</td>
</tr>
<tr>
<td>------------------------------------</td>
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</tr>
<tr>
<td>Interactions / Animations</td>
<td>Can you please clarify? Are up to 3 interactivities part of the funds up to $50K, or additional?</td>
<td>There are to be up to 3 interactivities in the course as part of the cost. Animations will be charged out separately</td>
</tr>
<tr>
<td>Interactions / Animations</td>
<td>Will the storyboard call for live-action video to be filmed and produced? If so, can you describe what kind of scenes and their estimated duration? Will pre-existing video assets be embedded?</td>
<td>There may be short videos, 15-30 seconds. The video would be in the course and not a link to an external site.</td>
</tr>
<tr>
<td>Review / Quality assurance</td>
<td>Based on verbiage in the RFP, we assume that the course content will be complete – the developer would not be responsible for review/quality assurance of the content – correct?</td>
<td>The developer would not be responsible for review of the content. The developer would be responsible for ensuring that spelling and punctuation is correct in the course. E.g. If the spelling and punctuation is placed in the course in the same state as in the storyboard.</td>
</tr>
<tr>
<td>Review / Quality assurance</td>
<td>Will input/feedback/approval by an individual, for example the project manager, or will it be via a committee conveyed through the project manager?</td>
<td>Feedback will come from the project manager who will compile the comments/edits from the SME workgroup. Final approval will be from APHL project manager based on OTED approvals.</td>
</tr>
<tr>
<td>Subject matter experts (SME)</td>
<td>What is the availability of APHL’s SME? Would that person be available for one or two meetings of one to two hours each?</td>
<td>We are contracting with 7 SMEs that developed this content and will be available for meetings as you outlined here.</td>
</tr>
<tr>
<td>Translation</td>
<td>Will the course need to be translated?</td>
<td>No.</td>
</tr>
</tbody>
</table>
Appendix D– Course Programmer RFP Scorecard

The following table is a copy of the scorecard that will be used to evaluate RFP responses.

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Suitability of the Proposal:</strong> Does the applicant's proposal demonstrate an understanding of the operational need of the project and follow application instructions?</td>
<td>To what degree did the applicant’s proposal meet the overall objectives of the project?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Did the applicant follow instructions - i.e., stay in page count, include required information?</td>
<td></td>
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<tr>
<td></td>
<td>Is the information presented in a clear, logical manner and is well organized?</td>
<td></td>
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<td></td>
<td>Did the applicant provide references for two former or current clients?</td>
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<tr>
<td><strong>Section Total</strong></td>
<td></td>
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<tr>
<td><strong>Course Programmer Expertise:</strong> Does the applicant's proposal demonstrate sufficient experience in course design and development to serve as the instructional designer?</td>
<td>Did the applicant list and articulate two past learning and development activities they produced that best reflect their work and relevancy to this project? Are the activities articulated at a quality level that APHL seeks?</td>
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<tr>
<td></td>
<td>Did the applicant thoroughly explain and have experience in programming web-based courses?</td>
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<tr>
<td></td>
<td>Is the applicant’s existing knowledge and experience in this field as described in the proposal relevant to the project? (provided company profile, length of time in business and experience)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Section Total</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Course Programmer Organizational Capacity:</strong> Does the applicant have the appropriate staff to develop the product in the time frame needed?</td>
<td>Does the applicant have organizational capacity to produce the web-based courses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Did the applicant outline an appropriate team to work on this project?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Section Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Management:</strong> Does the applicant have experience in project management?</td>
<td>Does the applicant demonstrate project management experience relevant to completion of international program of this magnitude?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does the applicant have instructional development processes in place to achieve program goals according to a set schedule?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Section Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value/Pricing Structure and Price Levels:</td>
<td></td>
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</tr>
<tr>
<td>Is the price commensurate with the value offered by the applicant?</td>
<td>Did the applicant hold some level of reasonable accuracy for time and cost based on the provided course design document and course layout?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
</tr>
</tbody>
</table>