



Canadian Institute of Public Health Inspectors

BOARD OF CERTIFICATION

**Practicum Guideline
For Training Agency and Trainees**

BOARD OF CERTIFICATION PRACTICUM GUIDE

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PURPOSE OF THE GUIDE

The purpose of this guideline is to encourage a consistent approach to the delivery of practicum regardless of where in Canada it is offered.

The BOC is committed to ensuring that candidates entering the field of public health inspection are professionally competent, able to demonstrate ethical and professional behaviors in a practical setting and conduct themselves at all times in a manner worthy of their profession.

The practicum process is critical to producing candidates that will meet this objective. It needs to be emphasized that this is a national certification process and therefore the same competencies must be demonstrated regardless of where practicum training is obtained in Canada.

In order to be eligible to sit the Examination to obtain the Certificate in Public Health Inspection (Canada), every candidate must satisfactorily complete a twelve (12) week minimum practicum in a Health Unit/Agency or other accepted equivalent setting to complete the basic inspection programs.

While it is recognized that the mandate and priorities of health agencies and other training agencies will vary from province to province, the outcome of training is that the objectives of the BOC practicum be met.

It should be noted that an agency might be offering training as part of a contractual or other arrangement with a training institution to participate in practicum course delivery. This guide is not intended to provide direction on the delivery of practicum courses covered by these arrangements.

OBJECTIVES OF THE PRACTICUM

The objective of a practicum is to provide the trainee with a grasp of the practical application of their academic program by providing the trainee with opportunities to develop basic investigative skills and abilities required to become a Public Health Inspector.

In addition, it may provide an opportunity for trainees to obtain course credits other than those required for completion of academic training at an institution accredited by the BOC.

ROLES AND RESPONSIBILITIES OF TRAINING AGENCY

COORDINATION

The objective of this section is to ensure that the person who is charged with the establishment and ongoing delivery of a practicum program in an agency has the authority to do so. This is the person who enables the practicum program to exist within the agency's mandate. This is the 'high level' coordination. It has been noted that this person may not be a CPHI (C) in some agencies.

The coordinator is responsible for the establishment of a practicum program within the training agency that includes the following components:

- ❑ Compliance with the Board of Certification of Public Health Inspectors Administrative Policy #3 (Appendix A).
- ❑ Provide opportunities for the trainee to become exposed to the various program areas in the Training Schedule (Appendix D). It is realized that not all agencies will be able to provide experience in all of the fields listed. However, to the extent that each item is available, it is expected that the student will receive adequate practical training in regular daily work. BOC Instructional Objectives and Guidelines (Appendix B) are provided as an outline of the learning objectives covered by the academic programs accredited by the BOC and provide greater detail of the program areas covered in the training schedule.
- ❑ On-going commitment from the agency over the course of the training period.
- ❑ Assignment of a Public Health Inspector/Environmental Health Officer with the CPHI (C) designation to be a mentor for the trainee.
- ❑ Assignment of additional staff and agency resources necessary to support the trainee in meeting training objectives.
- ❑ Ensuring standards of conduct for employees of the agency including professional code of ethics as presented in the *Code of Ethics for the Canadian Institute of Public Health Inspectors* (Appendix C).
- ❑ A Letter of Introduction for the trainee that confirms their role with the health agency.
- ❑ An Established procedure to evaluate the performance of the trainee on an ongoing process throughout the practicum and at the conclusion of the practicum. A new updated

Form F for evaluation is provided as Appendix I & J. Feedback to the BOC following the use of the attached evaluation form is appreciated.

- An established protocol to allow the trainee the opportunity to grieve the practicum experience (Appendix K).

MENTORING

After the coordinator has established the practicum program and the agency is committed to accepting practicum students, the mentor is the person who does the day-to-day mentoring of the trainee, including orientation, training and evaluation. This is the “hands on” level.

Mentoring of the trainee must be undertaken by an experienced Certified Public Health Inspector (Canada) employed by the training agency. The Mentor is responsible for monitoring the activities of the trainee and providing opportunities that enable a trainee to become familiarized with the day to day work of a Public Health Inspector/Environmental Health Officer and with those intangibles which form an essential part of inspection procedure.

A mentor should be able to perform the following tasks effectively:

1. Planning

These are the activities that the mentor should undertake before the trainee is on site to ensure the agency is prepared and resources are in place.

- Review BOC practicum requirements including, training schedule, instructional objectives, guidelines and forms provided in appendices.
- Review training documentation and requirements if provided by the trainee's learning institution.
- Develop a tentative training schedule (use of a 12-week calendar is beneficial), which will provide the trainee with a wide range of experience appropriate to the BOC practicum objectives (appendix D)
- Confirm the cooperation of other agency personnel to ensure the trainee receives the necessary mentoring and program experience to meet the objectives of the practicum.
- Provide appropriate identification, work space and other appropriate supplies for the trainee to be used while working within the jurisdiction of the training agency.

- ❑ Organize the introductions and materials needed for the trainee's orientation session.

2. Orientation

These are the activities that should occur during the first week of the practicum to assist the trainee to understand their role in the agency for the course of the practicum.

- ❑ Introduce the trainee to the organizational layout, functions, personnel, relevant policies and standards of conduct and confidentiality and other administrative information.
- ❑ Provide an overview of the health region functions and organizational chart.
- ❑ Review environmental health program mandate and regional priorities including relevant regulations and regional policies.
- ❑ Provide clear direction on reporting relationships within the agency and how the trainee will be supervised and evaluated.
- ❑ Obtain feedback from the trainee as to what their needs and objectives are for this practicum.
- ❑ Review the training schedule with trainee and revise where necessary to make sure objectives of both parties are met.

3. Training

These are the ongoing responsibilities and tasks of the mentor during the course of the practicum.

- ❑ Assign tasks based on established schedules, keeping in mind that response to unforeseen demands or conditions is a reality and can provide valuable experience.
- ❑ Assign the trainee the task and provide appropriate advice regarding procedure and desired outcomes.
- ❑ Provide regular contact with the trainee (initial daily meetings is recommended).
- ❑ Assess the student during the performance of their assignment to determine the level of independence they are able to work at.
- ❑ Give clear, constructive feedback following assessment.
- ❑ Allow trainees some responsibility to build confidence and experience.

- ❑ Continue to increase the level of independence keeping in mind that a trainee must always be under some degree of supervision by a practicing CPHI (C).
- ❑ Identify opportunities for trainees to participate in field trips, public meetings, court prosecutions, etc. and support inspections that will enhance technical expertise and experience.
- ❑ Provide trainee with opportunities to perform the inspections required to meet the criteria for an acceptable field inspection report (Appendix H)

4. Evaluation

This section outlines the ongoing responsibility of the mentor to ensure that the trainee has adequate constructive feedback and performance reviews throughout the course of the practicum in addition to the final evaluation required by the BOC.

The objective of the evaluation is to provide the following:

- a) provide the trainee with an opportunity to improve performance through feedback and coaching
- b) ensure evaluation of performance submitted to the BOC is accurate and fair

- ❑ Review work performance (including hours and comfort level with each section in the training schedule) on a regular basis throughout the training period to ensure objectives are being met.
- ❑ Provide suggestions to address areas in which the trainee needs improvement in a timely and appropriate manner (for example during or after an inspection).
- ❑ Motivate and encourage the trainee by providing praise and feedback on jobs well done.
- ❑ Review written reports for accuracy, appropriateness, the presence of confidential information and to verify that the reports were based on the inspections completed by the trainee. The end result should reflect the candidate's report writing abilities and not that of the mentor.
- ❑ Process and sign off the BOC documentation package as provided by the trainee and return to the trainee within the required timeframe.
- ❑ Arrange to provide the trainee with an opportunity to participate in a mock oral examination (example question provided in Appendix L).
- ❑ Schedule a performance review of the trainee at the conclusion of the 12-week practicum in collaboration with the Coordinator. A new updated Form F for evaluation is provided as Appendix I & J. Feedback to the BOC following the use of the attached evaluation form is appreciated. For students from BCIT who complete their practicum at a B.C. training agency the ENVH 8600 final evaluation form will be accepted as an equivalent to Form F".

- Provide feedback to the BOC on the practicum guideline (Appendix K) if desired.

ROLES AND RESPONSIBILITIES OF TRAINEE

The objective of this section is to make it clear to trainees that they have a role in ensuring that the practicum is successful. It provides a formal mechanism for the trainee to :

- address issues or concerns that arise from the conditions or procedures associated with their practicum.
- ensure their practicum is in keeping with the training schedule.
- resolve issues that ultimately could affect the outcome of their application for certification.

- Provide feedback to mentor as to what your objectives are for this practicum
- Review and plan the training schedule with mentor (Appendix D).
- Understand and follow the training agencies instructions, protocols and policies.
- Ask for clarification and feedback promptly when required.
- Participate in the evaluation process by accepting constructive feedback and discussing progress related to practicum objectives. A new updated Form F for evaluation is provided as Appendix I & J. Feedback to the BOC following the use of the attached evaluation form is appreciated. For students from BCIT who complete their practicum at a B.C. training agency the ENVH 8600 final evaluation form will be accepted as an equivalent to Form F”.
- Demonstrate an appropriate standard of conduct as an employee of the agency including the professional code of ethics as presented in the *Code of Ethics for the Canadian Institute of Public Health Inspectors* (Appendix C).
- Provide the necessary BOC documentation package to mentor for processing and sign off.
- Provide feedback to the BOC if you have any suggestions for improving the practicum process (Appendix K)

Canadian Institute Public Health Inspectors

BOC Practicum Guideline

APPENDICES

Appendix A

Board of Certification of Public Health Inspectors

Administrative Policy No. 3

Practicum Requirements for Candidates for the C.P.H.I.(C)

3.1 Definitions

3.1.1 In this Administrative Policy

- (a) “candidate” means a candidate for the Examination,
- (b) “course of instruction” means a course of academic instruction recognized in Board Administrative Policy No. 1
- (c) “Examination” means the Examination for the C.P.H.I.(C) which is composed of two segments (field inspection reports and oral examination),
- (d) “health agency” means
 - i. a federal, provincial, territorial, regional or municipal health department which meets the Board’s requirements
 - ii. any other agency approved by the Board
- (e) “week” means a calendar week

3.2 Duration of Practicum

- 3.2.1 (1) Every candidate shall complete a minimum of twelve (12) weeks of full time practicum to be eligible for examination.

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- (2) The twelve weeks of practicum is to be taken during or following the successful completion of the required academic program.
- (3) The candidate will be expected to carry out his / her practicum during whatever periods the health agency staff is engaged during the week. No allowance shall be made for overtime or for training during weekends or on statutory or declared holidays.

3.3 Supervision

- 3.3.1 (1) Except as provided in section 3.3.2, the practicum of the candidate shall be taken
- (a) in a health agency or agencies, and

- (b) under the supervision of a holder of the C.P.H.I.(C) who is employed by the health agency at the supervisory level.

3.3.2 A candidate may apply to the Board for recognition of time spent in an environmental health situation outside of a health agency (e.g. a department of environment)

3.4 Candidates with Qualifications Obtained Outside of Canada

3.4.1

- (1) A candidate who holds Public Health Inspector qualifications recognized by the Board obtained outside of Canada (see Administrative Policy No. 8) must apply to the Board for permission to commence the required practicum.
- (2) For candidates approved in section 3.4.1(1), the duration of practicum is twelve (12) weeks

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3.5 Canadian Forces

3.5.1 In order to be recognized by the Board, the practicum for Canadian Forces candidates shall be taken,

- (a) after the candidate has completed the Canadian Forces Preventive Medicine 716 Course (or equivalent);
- (b) after the candidate has achieved Canadian Forces Trade Qualification 6A and approval of the National Defense Head Quarters;
- (c) under the supervision of a holder of the C.P.H.I.(C) who has supervisory responsibilities

3.6 Documentation

3.6.1 (1) Every candidate shall provide to the Secretary of the Board on forms prescribed by the Board

- (a) a "Certificate of Practicum (form D)" (in duplicate) covering the required duration of practicum,
- (b) "Report on Practicum Programs, Session 1 (form C1)" (and others if completed) covering the minimum programs required by the Board for recognition of practicum, and
- (c) An "Evaluation Form – Student Public Health Inspectors (form F)"

- (2) The documents required by section 3.6.1(1) shall be signed
 - (a) where required by the candidates, and
 - (b) where required by the supervisor or the candidate's practicum

- (3) The documents required by sections 3.6.1(b) and 3.6.1(c) are not included in the material which is made available to the Examination Coordinator of the Examination Panel, but will be retained for the information of the Board.

3.6.2 Where the candidate completes his/her required practicum with more than one agency, separate documents as required by section 3.6.1 shall be submitted for the period of time spent in each agency.

3.6.3 All of the documents required by sections 3.6.1 and 3.6.2 must be received by the Secretary of the Board at least sixty (60) days before the Examination date.

3.7 Practicum Reports

3.7.1 Every candidate shall submit to the Secretary of the Board two (2) field inspection reports.

3.7.2 The field inspection reports referred to in section 3.7.1 shall be

- (a) Certified by the individual supervising the candidate as representing an actual inspection performed by the candidate in accordance with the provisions of this Administrative Policy, and
- (b) Prepared and submitted in accordance with the requirements of the Guidelines for the Submission of Written Inspection Reports and these Administrative Policies.

3.8 Field Training Program

3.8.1 As a guide in devising a practicum, every candidate should secure experience in all aspects of Public Health Inspection. See Guidelines for the Interpretation of Forms C and C1 and Examination Registration Form C for details.

3.9.1

- (1) The Board may refuse Examination to a candidate whose field training program, in the opinion of the Board, does not substantially meet the requirements of the Board.
- (2) The decision of the Board with respect to section 3.9.1 (1) is final.

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Appendix B

Instructional Objectives and Guidelines for the Interpretation of Forms C & C1

A total of 518 instructional objectives have been developed which are grouped under thirteen categories; 1 through 6 are the discipline specific Environmental Public Health Practice areas, 7 to 13 are general practice areas for public health professionals in Canada; (PHAC)

1. Safe Food,
2. Safe Water,
3. Health Hazard Management,
4. Disease and Injury,
5. Healthy Living and Healthy Community Environments,
6. Emergency Preparedness,
7. Assessment and Analysis,
8. Policy, Program Planning, Implementation and Evaluation,
9. Public Health Sciences,
10. Legal and Regulatory,
11. Partnership Collaboration and Advocacy,
12. Communication,
13. Leadership.

Each of the following instructional objectives is targeted to the individual student who will demonstrate proficiency under standard verbal or written testing conditions. Unless specifically stated in the objective, it is assumed that the student will have access to no resource materials when examined. All the objectives are required to be addressed by all programs. Numbering is for referencing purposes only and does not indicate the level of importance or priority.

Learning objectives are the certification requirements to sit the board of certification exam to attain the CPHI(C).

Discipline specific core competency statements are the essential knowledge, skills, and aptitudes necessary for continued development after receiving certification.

Canadian Institute of Public Health Inspectors
Instructional Objectives

Instructional Objective #1: Safe Food

1.0 Inspection**1.1 Food Establishments**

- 1.1.1 explain the principles underlying food regulations
- 1.1.2 explain the principles underlying *hazardous analysis*
- 1.1.3 define *critical control points* and delineate the principles underlying this concept
- 1.1.4 list the requirements in food preparation to prevent food-borne illness
- 1.1.5 list the requirements in food service to prevent food-borne illness
- 1.1.6 list the requirements in food storage to prevent food-borne illness
- 1.1.7 list the symptoms and incubation periods of the various food-borne illnesses
- 1.1.8 identify the types of food contamination, including adulterations
- 1.1.9 describe food equipment requirements
- 1.1.10 describe and demonstrate food sampling techniques
- 1.1.11 describe laboratory food analysis
- 1.1.12 explain the procedures involved in food-borne illness investigations
- 1.1.13 review the protocol and procedures involved in sampling body wastes of food-borne illness victims
- 1.1.14 identify and evaluate the records which should be kept in food-borne illness investigations
- 1.1.15 define *Aw* and describe its significance
- 1.1.16 define *pH* and describe its significance
- 1.1.17 name the primary sources of micro-organisms found in foods
- 1.1.18 name the secondary sources of micro-organisms found in foods
- 1.1.19 describe what is meant by the temperature “danger zone” in food storage
- 1.1.20 name and compare the effectiveness of common preservation methods for high risk foods
- 1.1.21 outline the methods used in an inspection of a food premises
- 1.1.22 discuss the difference between standards and guidelines used for the operation of food premises
- 1.1.23 define what is meant by a food recall
- 1.1.24 describe the process used in food recalls and name the origins of recalls
- 1.1.25 list the public health concerns to be noted when inspecting food processors such as abattoirs, dairies, fish plants, canneries, cereals, food warehouses and food transportation systems
- 1.1.26 name the common food additives and explain their public health significance
- 1.1.27 name the food types most often associated with food allergies
- 1.1.28 describe the health significance of allergic reactions
- 1.1.29 describe control measures to prevent allergic reactions
- 1.1.30 design a sampling program given a site and situation in a food operation

Instructional Objective # 2: Safe Water

2.0 Water Management

2.1 Potable Water Quality

- 2.1.1 identify the major water-borne diseases in Canada
- 2.1.2 describe the methods used to ensure that water provided for human consumption is adequately treated and is potable
- 2.1.3 list the equipment used in water treatment
- 2.1.4 explain *cross connections* and identify probable causes
- 2.1.5 describe water sampling techniques
- 2.1.6 demonstrate water sampling techniques given appropriate equipment
- 2.1.7 interpret the results for bacterial and chemical parameters given laboratory analysis reports and the Guidelines for Canadian Drinking Water Quality
- 2.1.8 list the tolerable limits for chemical parameters in drinking water according to the Guidelines for Canadian Drinking Water Quality
- 2.1.9 identify the sources of drinking water
- 2.1.10 list in sequence the procedures to be followed in the case of a water main break
- 2.1.11 describe the processes used in water treatment
- 2.1.12 describe water sampling procedures
- 2.1.13 define the *indicators used in water analysis*
- 2.1.14 list the potential causes of various water odours
- 2.1.15 list the potential causes of various discolorations in water
- 2.1.16 describe the effectiveness and the limitations of the various point-of-use water treatment equipment
- 2.1.17 explain the municipal distribution system for potable water and the breakdowns which may occur
- 2.1.18 design a sampling program given a site and situation in regards to potable water
- 2.1.19 describe some sampling techniques and standard analyses used in “*Standard Methods for the Examination of Water and Wastewater*”, latest edition
- 2.1.20 Explain the health significance of disinfection by-products in water treatment.
- 2.1.21 Explain the four barrier approach for drinking water systems.
- 2.1.22 Explain CT (contact time) and how it relates to water treatment.

2.2 Recreational Water Quality

- 2.2.1 define the *acceptable bacterial parameters for recreational water*
- 2.2.2 describe the *acceptable upper limits of chemical parameters for recreational water* as defined in the Guidelines for Canadian Recreational Water Quality
- 2.2.3 describe how to alter bacterial parameters in recreational water
- 2.2.4 describe how to alter chemical parameters in recreational water
- 2.2.5 describe the functions of the equipment used in the treatment of recreational water
- 2.2.6 describe the processes used in water treatment
- 2.2.7 describe laboratory procedures for water analysis
- 2.2.8 describe water sampling procedures
- 2.2.9 demonstrate water sampling techniques given the appropriate equipment

- 2.2.10 describe the problems associated with air in indoor pools
- 2.2.11 describe pool safety requirements and identify appropriate checkpoints
- 2.2.12 describe electrical hazards associated with pools
- 2.2.13 describe disinfection procedures for play equipment in pools
- 2.2.14 describe the operation of, and problems associated with, wave pools and water slides
- 2.2.15 describe how to overcome problems associated with wave pools and water slides
- 2.2.16 list the various types of natural outdoor swimming areas
- 2.2.17 identify the problems associated with the various types of natural outdoor swimming areas and how to control them
- 2.2.18 design a sampling program given a site and situation in regards to recreational water

2.3 Surface and Ground Water Quality

- 2.3.1 identify potential sources for the pollution of surface and ground water
- 2.3.2 describe factors influencing the leachability of various chemical and biological surface and ground water contaminants
- 2.3.3 develop plans for a community program to protect surface and ground water from contamination
- 2.3.4 describe algae control measures
- 2.3.5 list the potential sources of nutrients to surface and ground water
- 2.3.6 describe the effects of nutrients on surface and ground water
- 2.3.7 describe the effects of hazards of using drinking water treatment measures to control elevated levels of nutrients in surface and ground waters
- 2.3.8 list acceptable bacteriological parameters in surface and ground waters intended for human consumption
- 2.3.9 list acceptable chemical parameters in surface and ground waters intended for human consumption
- 2.3.10 describe a typical water system including hydrogeology, mechanical equipment, sanitary seals, screens and distribution lines
- 2.3.11 describe the operation of water softening and its advantages and disadvantages
- 2.3.12 name and explain the various types of point-of-use water systems and explain their effectiveness
- 2.3.13 design a sampling program given a site and situation in regards to surface water
- 2.3.14 Explain the cause and health concerns related to the effects of turbidity events.

Instructional Objective # 3: Health Hazard Management

3.0(a) Air Quality

3.1 Ambient Air Quality

- 3.1.1 select what information should be accessed to describe hazardous analysis determination and assessment related to air pollutants (toxic gases)
- 3.1.2 select what information should be accessed to describe risk analysis determination and assessment related to air pollutants (toxic gases)
- 3.1.3 categorize public health air pollutant (toxic gas) hazards
- 3.1.4 compare and contrast the strengths and weaknesses of the current method of monitoring gas emissions of each of the following gases: sulphur dioxide, hydrogen

- sulphide, nitrogen dioxide, carbon monoxide, ozone, benzene, ethylene, toluene, and xylene
- 3.1.5 compare and contrast the strengths and weaknesses of the current method of monitoring particulates
 - 3.1.6 evaluate the adequacy of regulations in controlling gaseous emissions of sulphur dioxide, hydrogen sulphide, nitrogen dioxide, carbon monoxide, ozone, benzene, ethylene, toluene, and xylene
 - 3.1.7 evaluate adequacy of regulations regarding particulate emissions
 - 3.1.8 review the information required to describe gas dispersion behaviours
 - 3.1.9 review the information required to describe gas dispersion modeling
 - 3.1.10 describe the data needed for ambient air quality monitoring
 - 3.1.11 propose environmental indicators of various air pollutants (toxic gases) (e.g. sulphur dioxide, hydrogen sulphide, nitrogen dioxide, carbon monoxide, ozone, benzene, ethylene, toluene, and xylene.)
 - 3.1.12 propose human health indicators of exposure to various toxic gases (e.g. sulphur dioxide, hydrogen sulphide, nitrogen dioxide, carbon monoxide, ozone, benzene, ethylene, toluene, and xylene.)
 - 3.1.13 describe how to compile ambient air quality standards from literature reviews
 - 3.1.14 assess the health risks and make recommendations on control measures at point of source based on field data provided
 - 3.1.15 assess the health risks and make recommendations on control measures for local area air sheds and/or larger regional zones based on field data provided
 - 3.1.16 design a risk communications plan to inform various publics (e.g. media, general public, politicians) on ambient air quality issues
 - 3.1.17 describe the technologies used to reduce air pollutants (toxic gas) emissions
 - 3.1.18 develop protocols for ambient air quality investigations
 - 3.1.19 identify the levels of indicator gases and make recommendations for monitoring levels of emission using actual field data
 - 3.1.20 assess and predict the effects of various emission gases based on actual field data
 - 3.1.21 describe, in both high and low pressure situations, the dispersion characteristics of various emission types of air pollutants (toxic gases)
 - 3.1.22 describe, giving both strengths and limitations, the types of air testing equipment currently used in the field
 - 3.1.23 describe the oxides of nitrogen and oxides of sulphur atmospheric cycles and their relationship to acid rain
 - 3.1.24 explain the carbon dioxide and methane atmospheric cycles and their relationship to the greenhouse effect
 - 3.1.25 explain hydrocarbon sources and cycles
 - 3.1.26 describe the variables associated with seasons on air quality
 - 3.1.27 describe the sources and contributory amounts of atmospheric contaminants from industries, residential communities and transportation systems
 - 3.1.28 describe air pollution monitoring stations and related sampling protocol identify the current methods used to reduce or eliminate air pollutants
 - 3.1.29 design a sampling program given a site and situation in regards to ambient air quality
 - 3.1.30 design a sampling program given a site and situation in regards to indoor air quality
 - 3.1.31 describe the human health effects of poor air quality and identify the susceptible populations

3.2 Indoor Air Quality

- 3.2.1 describe the types and sources of indoor air quality contaminants in private dwellings
- 3.2.2 describe the types and sources of indoor air quality contaminants in public places
- 3.2.3 describe the types and sources of indoor air quality contaminants in workplace settings
- 3.2.4 develop a protocol for indoor air quality investigations
- 3.2.5 design a survey to be used in indoor air quality investigations
- 3.2.6 describe, giving strengths and weaknesses, the various kinds of indoor air testing equipment in use today
- 3.2.7 make recommendations for a core resource base related to indoor air quality in terms of current literature, evidence, journals and equipment
- 3.2.8 identify and evaluate the kinds of evidence required for court proceedings related to indoor air quality concerns
- 3.2.9 calibrate, use and read indoor air quality testing equipment
- 3.2.10 identify the indicators used in indoor air quality monitoring for each of the following types of buildings: schools, day cares, care facilities, homes, workplaces, theatres, and private dwellings, ice arenas and pools
- 3.2.11 interpret continuous indoor air quality guidelines
- 3.2.12 identify levels of exposure limits for various air pollutants (gases)
- 3.2.13 explain acute and chronic health effects for various air pollutants and toxic gases
- 3.2.14 evaluate various sources of indoor air quality guidelines
- 3.2.15 list common indoor contaminants including particulates, CO₂, CO, VOC's, bio-aerosols, formaldehyde and asbestos (e.g. household products, building materials, second hand smoke)
- 3.2.16 explain acceptable indoor air quality with respect to temperature and humidity
- 3.2.17 describe the effect of yeast, molds and pollens on allergy sufferers
- 3.2.18 name aerosols associated with illness, e.g. legionnaire's disease
- 3.2.19 name the components of a ventilation system, and the factors required for decision making to adjust air flows (e.g. HEPA filters, HVAC systems)
- 3.2.20 describe air filtration systems and cleaning controls for gases, particulates and viable micro-organisms
- 3.2.21 define various types of heating systems including forced air, radiant, hot water, steam, and electric
- 3.2.22 describe heat pumps and associated problems
- 3.2.23 explain thermal comfort
- 3.2.24 identify and explain the operation of common instrumentation and data loggers to measure particulates, CO, CO₂, VOC, bio-aerosols, formaldehyde, radon, asbestos, temperature, relative humidity and thermal comfort
- 3.2.25 describe the nature and types of radiation
- 3.2.26 explain the *radioactive decay process*
- 3.2.27 identify the typical products of radioactive decay
- 3.2.28 list the exposure routes for radiation
- 3.2.29 compare and contrast man-made and natural radiation
- 3.2.30 calculate the ambient exposure to radiation of model individuals
- 3.2.31 calculate the indoor exposure to radiation of model individuals

3.0(b) Waste Management

3.3 Solid Waste Disposal

- 3.3.1 itemize the information required by a public health agency on both active and inactive waste management facilities
- 3.3.2 describe the various types of waste management facilities
- 3.3.3 Explain the public health requirements of sighting and developing a new waste management facility
- 3.3.4 identify the various sources and components/categories of the waste stream
- 3.3.5 describe the storage, transportation and disposal requirements of the various components of the waste stream
- 3.3.6 describe the monitoring techniques used to detect migrating gases, leachates and particulates from waste disposal sites.
- 3.3.7 define *the reasons for setback requirements*
- 3.3.8 propose an appropriate course of action where illegal land filling has occurred
- 3.3.9 describe the steps involved in inspecting the various types of waste management facilities (e.g. transfer stations, waste sorting stations, etc.)
- 3.3.10 describe the various techniques used in preventing off-site migration of micro-organisms, chemicals, leachates, particulates, gases and vermin
- 3.3.11 appraise the health risks of waste management facilities
- 3.3.12 appraise the environmental impact of waste management facilities
- 3.3.13 formulate remediation standards and methods in land use change for inactive waste management facilities
- 3.3.14 describe the impact of recycling and composting programs to the waste stream and to public health
- 3.3.15 Explain the four basic principals for reducing waste (4 R's)
- 3.3.16 Explain the carbon foot print concept

3.4 Industrial / Hazardous Waste Disposal

- 3.4.1 compare and contrast industrial and hazardous waste
- 3.4.2 identify the types of non-hazardous industrial waste and their probable sources
- 3.4.3 identify the types of hazardous wastes and their probable sources
- 3.4.4 list the public health requirements for various storage, collection, transportation and disposal of industrial waste
- 3.4.5 list the public health requirements for various storage, collection, transportation and disposal of hazardous waste
- 3.4.6 describe the reclamation methods for inactive non-hazardous industrial waste sites
- 3.4.7 describe the reclamation methods for inactive hazardous industrial waste sites
- 3.4.8 define the acceptable *standards for inactive industrial non-hazardous waste sites*
- 3.4.9 define the acceptable *standards for inactive industrial hazardous waste sites*
- 3.4.10 propose appropriate action where illegal, non-hazardous waste disposal has occurred
- 3.4.11 propose appropriate action where illegal, hazardous waste disposal has occurred
- 3.4.12 list the steps of inspection for industrial non-hazardous waste disposal facilities
- 3.4.13 list the steps of inspection for industrial hazardous waste disposal facilities
- 3.4.14 describe the health risks of industrial non-hazardous wastes
- 3.4.15 describe the health risks of industrial hazardous wastes

- 3.4.16 describe the environmental impact of industrial non-hazardous wastes
- 3.4.17 describe the environmental impact of industrial hazardous wastes
- 3.4.18 describe the equipment used in the storage, handling, transportation, and disposal of non-hazardous industrial waste
- 3.4.19 describe the equipment used in the storage, handling, transportation, and disposal of hazardous industrial waste
- 3.4.20 define *manifests*
- 3.4.21 explain the purpose of *manifests*
- 3.4.22 compare and contrast the roles of environmental departments and health departments in non-hazardous industrial waste management
- 3.4.23 compare and contrast the roles of environmental departments and health departments in hazardous industrial waste management
- 3.4.24 explain WHMIS

3.5 Biological / Biomedical Waste Management

- 3.5.1 list a typical schedule of wastes in the biological/biomedical waste stream
- 3.5.2 describe the level of health risk for the various biomedical wastes and identify the target groups for infection
- 3.5.3 identify the diseases which are transmissible as a result of infection from biomedical waste
- 3.5.4 describe the methods used for the safe storage and disposal of biomedical waste
- 3.5.5 describe the equipment used for the safe distribution and transportation of biomedical waste
- 3.5.6 explain the reasons for manifesting and color-coding biomedical wastes
- 3.5.7 describe the methods used for rendering biomedical wastes non-pathogenic

3.0(c) Nuisance and General Sanitation

3.6 Health Nuisance

- 3.6.1 define the term *health nuisance*
- 3.6.2 describe the various kinds of health nuisances which may be reported to an Environmental Health Officer
- 3.6.3 explain how one determines if a health nuisance exists
- 3.6.4 propose a protocol for nuisance abatement choosing any health nuisance as an example
- 3.6.5 identify the legislation in your jurisdiction which regulates health nuisances

3.0(d) Animal Facilities

3.7 Animal Facilities

- 3.7.1 list the various types of animal keeping facilities
- 3.7.2 describe the public health concerns associated with the various kinds of animal facility operations
- 3.7.3 develop a housekeeping plan for a given animal facility
- 3.7.4 develop a waste control program, which includes the disposal of dead animals, for a given animal facility

- 3.7.5 describe the setback requirements for some kinds of animal facilities and explain the rationale behind these setbacks
- 3.7.6 explain the health concerns of intensive livestock operations
- 3.7.7 describe environmental controls for controlling infectious and contagious diseases at animal facilities (e.g. avian influenza)

3.0(e) Land Reclamation Review

3.8 Land Reclamation / Contaminated Soil

- 3.8.1 describe what is meant by *land reclamation*
- 3.8.2 describe the technological options available for land reclamation
- 3.8.3 develop a protocol for public health intervention with respect to a land reclamation proposal for contaminated sites(an old industrial site)
- 3.8.4 define the term *site specific*
- 3.8.5 identify the sources of land reclamation standards and indicate which are superior or inferior
- 3.8.6 describe options for land use as related to land reclamation
- 3.8.7 identify the types of laboratory analysis procedures which should be considered when contaminated sites are involved
- 3.8.8 identify and demonstrate the field testing techniques commonly used when examining contaminated sites
- 3.8.9 list the health impacts which contaminated sites pose
- 3.8.10 describe the environmental impacts which contaminated sites pose
- 3.8.11 outline a plan for storage and disposal of contaminated soils
- 3.8.12 explain land farming of contaminated soil
- 3.8.13 design a sampling program given a site and situation in soil
- 3.8.14 demonstrate the operation of land survey equipment

3.0(f) Occupational Health

3.9 Occupational Workplace Inspection

- 3.9.1 identify the primary health risks to workers in selected industries
- 3.9.2 design a work site information system regarding hazardous material
- 3.9.3 describe the effects on worker's health of various industrial exposures
- 3.9.4 identify the major kinds of industrial exposure
- 3.9.5 describe the testing equipment, indicating the mode of operation, used to measure major kinds of industrial exposure
- 3.9.6 use environmental sampling equipment to collect and measure gases and vapours, noise, radiation including light, heat and radon
- 3.9.7 explain *control, mitigation, and amelioration methods* as applied to industrial exposures
- 3.9.8 list the regulatory authorities for industrial concerns and identify the legal instruments used by each
- 3.9.9 recognize the role of occupational hygiene in environmental assessment
- 3.9.10 describe the principles, applications and limitations of various laboratory instrumental methods for analysis of environmental samples or interpretation of data

- 3.9.11 demonstrate competence in the use of all standard field instrumentation including recording devices and data-loggers for the collection and/or measurement of chemical and physical factors
- 3.9.12 identify the best available technology control strategies for chemical and physical factors
- 3.9.13 recognize the importance of evaluating the impact of noise on the individual and on the community
- 3.9.14 explain the concept of risk assessment in dealing with environmental factors
- 3.9.15 discuss the risks to individuals due to exposure to harmful gases, particulates, noise, vibration, lighting, radiation and bio-aerosols
- 3.9.16 discuss the jurisdiction of various government agencies and regulations in Occupational Health
- 3.9.17 describe the use of personal protective equipment including gloves, eye protection, face masks or respirators
- 3.9.18 comprehend common occupational terminology used to describe exposure including TLV, STEL, ppm, TWA, mg/m³
- 3.9.19 describe minimal risk levels, chronic and acute risk levels (LD50s)

3.0(g) Pest Control

3.10 Pest Control

- 3.10.1 list and classify invertebrates and vertebrates likely to be encountered by citizens engaging in common activities
- 3.10.2 describe the life cycles of common insect pests
- 3.10.3 describe the life cycles of common rodent pests
- 3.10.4 describe the harbourage of common insect pests
- 3.10.5 describe the harbourage of common rodent pests
- 3.10.6 describe the methods used to control insect pests
- 3.10.7 describe the methods used to control rodent pests
- 3.10.8 describe the methods used to control vertebrate pests other than rodents
- 3.10.9 list some diseases transmissible to humans from invertebrates common to North America
- 3.10.10 list diseases transmissible to humans from vertebrates common to North America
- 3.10.11 use taxonomic keys to identify insects
- 3.10.12 describe the significance of integrated pest management

Instructional Objective # 4: Disease and Injury

4.0(a) Social Care Facilities

4.1 Social Care Facilities (Child Care)

- 4.1.1 define the term *child care facility*
- 4.1.2 list the various kinds of complaints which may be reported to an Environmental Health Officer regarding child care facilities
- 4.1.3 list the health concerns associated with child care facilities

- 4.1.4 explain the steps involved in preventing the spread of a communicable disease in a child care facility
- 4.1.5 identify typical injury control measures used in child care facilities
- 4.1.6 name the types of disinfections used in various parts of child care facilities and describe the effectiveness of each
- 4.1.7 identify the legislation in your jurisdiction which regulates child care facilities

4.2 Social Care Facilities (Adult Care)

- 4.2.1 define the term *adult care facility*
- 4.2.2 identify the types of adult care facilities that exist
- 4.2.3 describe the various kinds of complaints which may be reported to an Environmental Health Officer regarding adult care facilities
- 4.2.4 list the health concerns associated with adult care facilities
- 4.2.5 explain the steps involved in preventing the spread of a communicable disease in an adult care facility
- 4.2.6 identify typical injury control measures used in adult care facilities
- 4.2.7 name the types of disinfectants used in various parts of adult care facilities and describe the effectiveness of each

4.3 Personal Services Facilities

- 4.3.1 define the term *personal service facilities*
- 4.3.2 list the health concerns associated with personal services facilities
- 4.3.3 identify the types of industries which may be included under the designation of personal service facilities
- 4.3.4 describe disinfection and sterilization procedures required in personal services facilities
- 4.3.5 explain the health risks from the different types of personal services
- 4.3.6 explain critical and non critical disinfection requirements of equipment used in personal service establishments

4.0(b) Communicable Disease Control

4.4 Food-borne / Enteric Diseases

- 4.4.1 classify the common types of food-borne / enteric disease
- 4.4.2 describe the notable / distinguishing symptoms of each of the common food-borne / enteric diseases
- 4.4.3 explain the role of public health agencies in food-borne / enteric diseases
- 4.4.4 list the principles of food-borne / enteric diseases
- 4.4.5 explain the process for taking samples and identify the types of samples to be taken, when investigating food-borne / enteric diseases
- 4.4.6 describe the purpose and nature of isolation procedures as related to food-borne / enteric diseases
- 4.4.7 describe the purpose and nature of reporting procedures as related to food-borne / enteric diseases
- 4.4.8 name the micro-organisms associated with food poisoning and food intoxication
- 4.4.9 describe how these micro-organisms are controlled or destroyed

- 4.4.10 describe the social and economic costs associated with food-borne illness
- 4.4.11 interpret a given laboratory analysis of a food sample

4.5 Waterborne Diseases

- 4.5.1 classify the common types of waterborne disease
- 4.5.2 describe the notable / distinguishing symptoms of waterborne diseases
- 4.5.3 explain the role of public health agencies in waterborne disease control
- 4.5.4 list the principles of waterborne disease control
- 4.5.5 explain the process for taking samples, and identify the types of samples to be taken, when investigating waterborne disease outbreaks
- 4.5.6 describe the purpose and nature of isolation procedures as related to waterborne diseases
- 4.5.7 describe the purpose and nature of reporting procedures as related to waterborne diseases

4.6 Zoonotic Diseases

- 4.6.1 classify the common types of zoonotic disease
- 4.6.2 describe the notable / distinguishing symptoms of zoonotic diseases
- 4.6.3 explain the role of public health agencies in zoonotic disease control
- 4.6.4 list the principles of zoonotic disease control
- 4.6.5 explain the process for taking samples, and identify the types of samples to be taken, when investigating zoonotic disease outbreaks
- 4.6.6 describe the purpose and nature of isolation procedures as related to zoonotic diseases
- 4.6.7 describe the purpose and nature of reporting procedures as related to zoonotic diseases

4.7 Sexually Transmitted Diseases (STD)

- 4.7.1 classify the common STDs
- 4.7.2 describe the notable / distinguishing symptoms of each of the common STDs
- 4.7.3 explain the role of public health agencies in STD control
- 4.7.4 explain the process for taking samples, and identify the types of samples to be taken, when investigating STD outbreaks
- 4.7.5 describe the purpose and nature of isolation procedures as related to STDs
- 4.7.6 describe the purpose and nature of reporting procedures as related to STDs

4.8 Infection Control in Institutions

- 4.8.1 describe the components of an institutional infection control program
- 4.8.2 explain the role of a public health inspector in an infection control program
- 4.8.3 identify institutional personnel responsible for infection control
- 4.8.4 discuss infection control practices which may be utilized in an institution

4.9 Outbreak Control in Institutions

- 4.9.1 define an outbreak
- 4.9.2 identify potential sources
- 4.9.3 identify members of an outbreak team
- 4.9.4 explain the steps involved in the investigation of an institutional outbreak

- 4.9.5 describe measures which may be implemented to control an outbreak

4.10 Diseases of Public Health Significance

- 4.10.1 name current communicable diseases of major public health significance in Canada
4.10.2 for each communicable disease, name the causative agent, mode of transmission, incubation period, symptoms and control measures used in public health
4.10.3 describe the legal provisions for communicable disease control
4.10.4 what are the accountability roles for the control and management of communicable diseases (e.g. MOH, PHN, PHI/EHO)

Instructional Objective # 5: Healthy Living and Healthy Community Environments

5.0(a) Waste Disposal

5.1 Liquid Waste Disposal [Municipal]

- 5.1.1 describe the volumes, characteristics and composition of liquid municipal waste
5.1.2 describe, sequentially, the processes involved in liquid waste treatment employed by various municipalities
5.1.3 list the mechanical processes involved in liquid waste treatment employed by various municipalities
5.1.4 describe the biological processes involved in liquid waste treatment employed by various municipalities
5.1.5 describe the chemical processes involved in liquid waste treatment employed by various municipalities
5.1.6 describe the various equipment used in a waste disposal and treatment plant
5.1.7 describe the various structures used in a waste disposal and treatment plant
5.1.8 describe the acceptable biological requirements for treated liquid waste effluents
5.1.9 describe the acceptable chemical requirements for treated liquid waste effluents
5.1.10 assess the environmental and public health problems related to liquid waste collection and treatment systems
5.1.11 define *expected levels of treatment* for each of the levels of liquid waste (e.g. primary, secondary and tertiary)
5.1.12 describe the disposal methods and public health concerns of storm water and industrial waste water
5.1.13 describe some sampling techniques and standards analyses as used in “*Standard Methods for the Examination of Water and Wastewater*”, latest edition

5.2 Waste Water Treatment and Disposal [Private]

- 5.2.1 outline how sewage disposal systems should be constructed where municipal sewage treatment facilities are not available (e.g. private dwellings, small industry, and small developments)
5.2.2 describe the biological processes employed by sewage disposal systems in private dwellings, small industry, and small developments where municipal sewage treatment facilities are not available

- 5.2.3 define the *specifications for construction* (including such things as soil conditions, water tables, construction materials, sizes, slopes, soil depths, etc.) of sewage disposal systems where municipal sewage treatment facilities are not available (e.g. private dwellings, small industry, and small developments)
- 5.2.4 outline the steps in installing and approving a sewage disposal system where municipal sewage treatment facilities are not available (e.g. private dwellings, small industry, and small developments)
- 5.2.5 identify the major problems found with sewage disposal systems where municipal sewage treatment facilities are not available (e.g. private dwellings, small industry, and small developments) and describe how these could be corrected
- 5.2.6 describe how to conduct a site evaluation
- 5.2.7 describe how to conduct a percolation test
- 5.2.8 assess the effectiveness of private sewage disposal legislation
- 5.2.9 propose appropriate action where a private sewage treatment system fails
- 5.2.10 identify and describe the function of plumbing fixtures and fittings
- 5.2.11 explain and describe a sanitary survey
- 5.2.12 describe environmental evidence of a sewage malfunction

5.0(b) Recreational Facilities

5.3 Recreational Facilities

- 5.3.1 describe the appropriate terrain for a recreational park or camp
- 5.3.2 explain the natural environmental hazards to which patrons of a recreational park or camp may be exposed

5.0(c) Housing

5.4 Housing

- 5.4.1 evaluate the legislation used to control housing problems
- 5.4.2 identify housing problems which have an impact on health
- 5.4.3 identify the government departments/agencies who may be involved in housing complaints and describe the role of each
- 5.4.4 state the health standards that may be used in housing inspections and interventions

5.0(d) Land Management

5.5 Land Use Review

- 5.5.1 define *land use review* and the variety of uses anticipated
- 5.5.2 explain the public health rationale behind land use review
- 5.5.3 identify the essential components of a land use review
- 5.5.4 identify the government departments/agencies who may be involved in land use review and describe the role of each
- 5.5.5 identify the factors of public health significance in land use planning
- 5.5.6 describe the setbacks which should be considered in land use planning

- 5.5.7 identify some incompatible developments and/or sites which must be considered in land use planning
- 5.5.8 describe the types of public health and environmental impacts which must be considered in land use planning (e.g. sewer loading, noise, industrial/residential setbacks, storm water drainage, etc.)

5.6 Area Development Plan Review

- 5.6.1 identify the impacts to public health associated with development planning
- 5.6.2 describe the kinds of environmental impacts which must be considered in development planning
- 5.6.3 identify the development incompatibilities which should be considered when planning developments
- 5.6.4 identify setbacks which should be considered in developmental planning
- 5.6.5 explain *ambient air levels* as related to development planning
- 5.6.6 describe *noise level factors* as related to development planning
- 5.6.7 explain the reason for public health intervention in development planning
- 5.6.8 identify the factors which should be considered in planning sewer services in a proposed development
- 5.6.9 identify the factors which should be considered in planning water services in a proposed development
- 5.6.10 describe healthy community planning

5.7 Subdivision Review

- 5.7.1 identify the impacts to public health associated with subdivision planning
- 5.7.2 describe the kinds of environmental impacts which must be considered in subdivision planning
- 5.7.3 identify the development incompatibles which should be considered when planning a subdivision
- 5.7.4 identify setbacks which should be considered in subdivision planning
- 5.7.5 describe ambient air levels as related to subdivision planning
- 5.7.6 describe noise level factors as related to subdivision planning
- 5.7.7 explain the reason for public health intervention in subdivision planning
- 5.7.8 identify the factors which should be considered in planning sewer services in a proposed subdivision
- 5.7.9 identify the factors which should be considered in planning water services in a proposed subdivision

5.0 (e) Plan Review

5.8 Plan Review

- 5.8.1 describe the purpose, process and the elements involved in community planning
- 5.8.2 identify the types of community planning
- 5.8.3 identify the inputs used in community planning
- 5.8.4 describe the public health role in community planning
- 5.8.5 prepare a presentation supporting/opposing a proposed development plan(to be provided)

5.0(f) Community Development

5.9 Community Development

- 5.9.1 define community development
- 5.9.2 define community mobilization
- 5.9.3 describe the mechanics of a public participation process
- 5.9.4 describe how communication theory is used to involve others in planning and decision making
- 5.9.5 describe the role of a group facilitator in motivating group involvement in community action
- 5.9.6 describe the roles of the health professional in community development
- 5.9.7 describe the dynamics of work group processes involved with community development initiatives
- 5.9.8 discuss the methods used to resolve conflict
- 5.9.9 define social planning
- 5.9.10 define social action
- 5.9.11 planning
- 5.9.12 define sustainable development and how it applies to Public Health

5.0(g) Lifestyle Programs

5.10 Lifestyle Program and Planning

- 5.10.1 describe the public health concerns surrounding life style issues such as substance abuse (alcohol, tobacco, drugs) injury prevention, healthy eating and exercise
- 5.10.2 identify the role of strategies such as education, engineering of the environment and enforcement of legislation in promoting healthy lifestyles
- 5.10.3 describe how the outcomes of these strategies could be measured
- 5.10.4 explain the role of community mobilization in public health programs
- 5.10.5 list potential partners in health promotion initiatives

Instructional Objective # 6: Emergency Preparedness

6.0(a) Environmental Health Assessment

6.1 Risk Assessment

- 6.1.1 explain the concept of *risk assessment*
- 6.1.2 explain the purpose of conducting a risk assessment
- 6.1.3 explain how health risk assessment relates to regulations
- 6.1.4 identify the components of a health risk assessment
- 6.1.5 explain the concept of *relative risk*
- 6.1.6 explain the concept of *quantitative risk assessment*
- 6.1.7 explain the concept of *qualitative risk assessment*
- 6.1.8 demonstrate how a health risk assessment is used in the environmental health field
- 6.1.9 define environmental monitoring
- 6.1.10 explain the methods and techniques used in environmental monitoring

- 6.1.11 state what is meant by toxicity testing
- 6.1.12 explain the exposure pathways from sources to recipient
- 6.1.13 identify the target organs in humans from given toxic substances
- 6.1.14 identify likely sources of toxic substances in the environment

6.2 Risk Management

- 6.2.1 explain the concept of *risk management*
- 6.2.2 identify, giving the advantages and disadvantages, the risk management options in the environmental health field
- 6.2.3 apply all risk management options, giving the advantages and disadvantages of each option, to a given health risk situation [to be provided]
- 6.2.4 describe the economic considerations of choosing risk management options

6.3 Risk Perception and Risk Communication

- 6.3.1 define *risk perception*
- 6.3.2 list the principles of risk communication
- 6.3.3 define the term *focus group*
- 6.3.4 describe the value of focus groups in assessing risk perception
- 6.3.5 explain the concept of *statistical significance* used with data from community surveys
- 6.3.6 define the term *stakeholder*, identifying key stakeholders to be considered in risk communication
- 6.3.7 apply the concept of *the right to know* to risk communications

6.0(b) Emergency Preparedness

- 6.4.1 describe the kinds of emergency situations involving public health agencies
- 6.4.2 explain the roles and functions of public health agencies in emergency situations
- 6.4.3 design an environmental health emergency plan, which includes the identification of needed equipment and supplies, to ensure preparedness in the case of an emergency
- 6.4.4 evaluate environmental health actions taken in a real or mock emergency scenario (to be provided)

Instructional Objective # 7: Assessment and Analysis

7.0(a) Computer Technology

7.1 Computer Technology

- 7.1.1 Explain the basic needs of an information data system for environmental public health programs
- 7.1.2 define and describe concerns of network information systems (i.e. privacy, accessibility, security of data)
- 7.1.3 describe procedures that are being used to protect information systems from unauthorized intrusions
- 7.1.4 describe electronic communication applications used in environmental public health (i.e. software)
- 7.1.5 define and describe the challenge with public electronic information systems

- 7.1.6 define and describe the function of the internet for environmental public health (i.e. disease surveillance)
- 7.1.7 define and describe the applications for GIS/GPS to environmental health programs

7.0(b) Environmental Health Advisory

7.2 Environmental Health Education

- 7.2.1 explain the purpose of environmental public health education
- 7.2.2 describe the range of environmental public health education
- 7.2.3 explain the principles of adult education
- 7.2.4 list the steps involved in designing an educational program
- 7.2.5 evaluate a scientific report intended for the general public on an environmental public health topic
- 7.2.6 design an evaluation process for an educational program
- 7.2.7 list various instructional techniques which may be used to present information, giving the advantages and disadvantages of each
- 7.2.8 conduct a group training session
- 7.2.9 write goals and objectives and a lesson plan for an educational program
- 7.2.10 present the educational program
- 7.2.11 evaluate the program
- 7.2.12 discuss the strategies used in preparing and presenting a media release or interview
- 7.2.13 design a radio spot announcement on health education
- 7.2.14 design a poster on health education
- 7.2.15 develop a risk communication strategy for an environmental public health issue

7.0(c) Miscellaneous (Equipment, blueprints, calculations)

7.3 Miscellaneous

- 7.3.1 calibrate, use and read various testing equipment commonly used by public health inspectors/environmental health officers
- 7.3.2 read and interpret architectural plans, blueprints and floor plans
- 7.3.3 identify and describe the function of operational equipment used in the industries inspected (i.e., food, water, air)
- 7.3.4 demonstrate the application of mathematical formulas in a public health situation (i.e., disinfection of a well)
- 7.3.5 describe the basic tenets of TEK (traditional environmental knowledge)

Instructional Objective # 8: Policy, Program Planning, Implementation and Evaluation**8.0 Policy****8.1 Policy Development**

- 8.1.1 define *policy, procedure and guideline*
- 8.1.2 describe the basic components of a policy
- 8.1.3 evaluate sample environmental health policies in terms of their impact on health protection
- 8.1.4 design a policy statement which covers adequately an environmental public health issue
- 8.1.5 give a rationale for policy development, indicating the purposes for which policies are developed and the potential range of application
- 8.1.6 describe the current determinants of health in Canadian Society
- 8.1.7 describe the concerns of population growth, community organization and community development patterns
- 8.1.8 evaluate a neighbourhood development plan
- 8.1.9 distinguish between policy, guidelines and procedures
- 8.1.10 define best management practises and components of a quality assurance/quality control program in environmental public health
- 8.1.11 distinguish between health policy and healthy public policy

8.2 Investigation, Research and Reporting

- 8.2.1 describe how the epidemiologic surveillance is used in the environmental public health field
- 8.2.2 describe how one conducts a critical literature review
- 8.2.3 describe the purpose of writing an annotated bibliography
- 8.2.4 interpret common bio-statistical terms such as incidence, prevalence, risk, relative risk, risk ratio
- 8.2.5 list the key components of an epidemiological study and define their statistical significance
- 8.2.6 describe the elements to be considered in writing a research proposal
- 8.2.7 describe the appropriate methods used to conduct an epidemiological research study
- 8.2.8 list the types of writing public health inspector/environmental health officer may be required to do in an environmental health program
- 8.2.9 name the characteristics and components of well written materials in the organizational setting (reports, memorandums, letters)
- 8.2.10 submit a sample of a well-written document (*their own*)

Instructional Objective # 9: Public Health Sciences

- 9.1.1 describe health indicators
- 9.1.2 describe how behavioural and social sciences impact the health of the population
- 9.1.3 describe inequities in health and population health status
- 9.1.4 describe how demography, socioeconomic status impact the health of the population
- 9.1.5 describe tools to monitor health indicators
- 9.1.6 describe measurement and monitoring programs to improve population health
- 9.1.7 describe methods to improve access to health care services
- 9.1.8 describe methods to reduce inequities in health
- 9.1.9

Instructional Objective # 10: Legal and Regulatory**10.0 Legislation****10.1 Legislative Review**

- 10.1.1 describe the process by which legislation is written, reviewed and passed
- 10.1.2 identify the key elements of legislation
- 10.1.3 illustrate the uses of legislation
- 10.1.4 describe the types and authority of legislation
- 10.1.5 describe the process from education to enforcement of legislation
- 10.1.6 describe the process for the laying of charges
- 10.1.7 delineate the essential elements in a case brief
- 10.1.8 describe the criteria used in selecting and using expert testimony
- 10.1.9 describe the role of an expert witness
- 10.1.10 explain the categories of law such as criminal law, torts, contracts, statutory law and duty
- 10.1.11 interpret intent and scope of statutory law
- 10.1.12 describe the types of appeal procedures to orders issued by public health inspectors
- 10.1.13 describe the significance on the enforcement of health laws of human rights and constitutional powers
- 10.1.14 list the grounds on which statutory law can be challenged

Instructional Objective # 11: Partnerships, Collaboration and Advocacy**11.0 Interagency Roles****11.1 Public Administration**

- 11.1.1 explain how government is organized
- 11.1.2 define the role of politicians, deputy ministers, department heads and program directors

- 11.1.3 outline the roles of health boards, local health authorities, chief executive officers of public health organizations, a medical officer of health and the various components of public health organizations
- 11.1.4 explain the funding process to support public health programs and specifically, environmental health programs
- 11.1.5 compare the mandate of environmental health programs at the federal and provincial, municipal and First Nations levels of government
- 11.1.6 describe the accountability and role of an environmental health program director/manager
- 11.1.7 describe the fundamental role of the EHO in the Public Health Act

11.2 Advocacy

- 11.2.1 define what advocacy means
- 11.2.2 describe the role of advocacy in addressing public health issues and challenges
- 11.2.3 describe when advocacy should be used over other strategies
- 11.2.4 describe the benefits of partnerships and collaboration strategies

Instructional Objective # 12: Communication

12.0 Communications

12.1 Communications

- 12.1.1 effective interpersonal communications
- 12.1.2 public speaking: one-to-one
- 12.1.3 public speaking: group situation (town hall forum, classroom, etc.)
- 12.1.4 media relations: print, electronic
- 12.1.5 media relations: TV, radio,
- 12.1.6 briefing notes, communiqués
- 12.1.7 cross-cultural awareness

Instructional Objective # 13: Leadership

- 13.1.1 define leadership competencies
- 13.1.2 describe management principals
- 13.1.3 describe performance improvement
- 13.1.4 describe organizational values and vision
- 13.1.5 define effective team work,
- 13.1.6 define organizational capacity

Appendix C

Canadian Institute of Public Health Inspectors

Code of Ethics

Members of the Canadian Institute of Public Health Inspectors agree:

1. That they have an obligation to the sciences and arts for the advancement of public health. They uphold the standards of the profession, continually search for truths, and disseminate their findings; they strive to keep themselves fully informed of the developments in the field of Public Health.
2. That they have an obligation to the public whose trust they hold and endeavour, to the best of their ability, to guard the public's interest honestly and wisely. They agree to be loyal to the government division of industry by which they are retained.
3. That the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.
4. That being loyal to their profession, they will uphold the constitution and By-laws of the Canadian Institute of Public Health Inspectors and they will, at all times, conduct themselves in a manner worthy of their profession.

Appendix D

Training Schedule Guide (Suggested Hours for Form C)

Name of Candidate: _____

Name of Health Agency(s): _____

Programs required by the Board of Certification

PART I: Programs Required (Suggested Hours Are For Guidance Purposes Only)	Number of professional hours completed this session.		
Air Pollution •Ambient Air •Indoor Air Total Hours Suggested: 6			
Waste Management •Solid Waste Disposal •Liquid Waste Disposal -municipal -private •Industrial/Hazardous Waste Disposal •Biological Waste Disposal Total Hours Suggested: 28			
Water Management •Potable Water Quality •Recreational Water Quality •Surface & Ground Water Quality Total Hours Suggested: 40			
Food Establishments Total Hours Suggested: 120			
Recreational Facilities Total Hours Suggested: 35			
Housing Total Hours Suggested: 35			

Nuisance and General Sanitation			
Total Hours Suggested: 7			
Child Care Facilities			
Total Hours Suggested: 35			
Special Care Facilities			
Total Hours Suggested: 14			
Personal Services Facilities			
Total Hours Suggested: 14			
Land Management <ul style="list-style-type: none"> •Land Use Review •Area Development Plan Review •Subdivision Review •Land Reclamation Review 			
Total Hours Suggested: 7			
Environmental Health Assessment <ul style="list-style-type: none"> •Risk Assessment •Risk Management •Risk Perception & Communication 			
Total Hours Suggested: experience gained through various program areas			
Administration <ul style="list-style-type: none"> •Computer Information System •Policy Development •Legislation Review 			
Total Hours Suggested: 7			
Occupational Health <ul style="list-style-type: none"> •Radiation •Industrial Plant Inspection 			
Total Hours Suggested: 3			
Communicable Disease Control <ul style="list-style-type: none"> •Food Borne/Enteric Diseases •Water Borne Diseases •Zoonotic Diseases 			
Total Hours Suggested: 48			
Emergency Preparedness			
Total Hours Suggested: 3			
Insect & Rodent Control			
Total Hours Suggested: Captured in Food & Housing Hours			

Environmental Health Education/Community Development			
Total Hours Suggested: 14			
Plan Review			
Total Hours Suggested: 4			
PART II			
Lifestyle			
Public Meetings			
Seminars			
Special Investigations/Research			
Staff Meetings			
Surveys			
TOTAL OF HOURS THIS SESSION: 420			

Appendix E

Form D
*(To be submitted
in duplicate)*

Board of Certification of Public Health Inspectors

Certification of Practicum

This is to certify that:

Name of Candidate (Please Print)

received Practicum/practical field training in accordance with the requirements of the Regulations Respecting the Certificate in Public Health Inspection (Canada) and Governing the Board of Certification of Public Health Inspectors at the

Name of Approved Agency

From: _____ To _____

Date Date

Under the supervision of the undersigned

Number of Field Reports Certified: _____

Print Name and Title of Supervising PHI/EHO

Date Signature

Appendix F

Board of Certification of Public Health Inspectors

Documentation of Written Inspection Reports

Report Title:

Number of pages including this page:

This is to certify that:

Name of Candidate (Please Print)

prepared this report as the result of actual inspections made under the supervision of

Name of Approved Agency

Print Name and Title of Supervising PHI/EHO

Date

Signature

FORME/08/97

Board of Certification of Public Health Inspectors
Practicum Training Commencement Form

Form G

This form is to be completed at the **commencement** of the practicum period, and a copy submitted to the Board of Certification with each of the reports.

I _____(name, title), holder of the C.P.H.I.(C.), supervising the training of _____(name of student) at _____(name of training agency) understand that any inspection reports that are completed during the practicum period for the aforementioned student are to be solely the students work.

Note: *The training agency is required to sign off reports only to verify that the reports were based on inspections completed by the student during the student's practicum period at this location. The reports are not viewed in any way as a reflection on the health agency, but rather as an indication of the student's ability to **independently** write a satisfactory report. **Do not** assist students by correcting and/or commenting on the reports prior to submission to the Board of Certification.*

_____(Signature of supervising C.P.H.I.(C.))

_____Date

FORM G/10/2001

Appendix H

Field Inspection Reports

Content

Reports must be based on actual inspections or investigations completed by the candidate under the supervision of a certified public health inspector. Each report must portray the candidate's knowledge of all areas and aspects of the facility or situation under consideration. They must be based on a different type of establishment or investigation. Thoroughness of inspection and documentation of all aspects of the inspection, not only the adverse conditions, is essential.

These reports should contain:

- An introduction
- A discussion of Public Health rationale
- A conclusion

The introduction should address the issues surrounding the reasons why the facility, or situation under consideration, requires a Public Health Inspection intervention.

The content of the report should provide the pertinent background information and address the following:

- The physical environment that is the subject of the report;
- The legislative authority under which the inspection was carried out;
- The standards/guidelines or other relevant legislation utilised during the inspection;
- The **public health rationale** for the inspection/investigation and why a Public Health Inspection intervention is required;
- A discussion of the inspection findings that includes the **public health rationale/significance** of those findings and an evaluation of them;

It is important that the student address in some detail the **Public Health significance** of the issues detailed in the report. The student should ensure that the material presented covers the following:

- Identification of the health issue
- Why is this an issue for Environmental Health
- What is the significance of these issue(s)
- What might be the impact(s) on public health
- What priority would the subject matter being discussed reasonably hold in an Environmental Health program and why?
- Potential interventions that could be considered further under the circumstances and the **rationale** for such interventions.

The **conclusion** section of the report should identify a recommended course of action, which is **justifiable** under the circumstances, including a discussion on what future action could be contemplated. The **rationale** for proposed action(s) should be discussed.

The following examples of submissions would be acceptable:

1. Food sanitation - restaurant
2. Communicable disease investigation - a rabies investigation
3. Sewage collection and disposal systems - private sewage system
4. Recreational sanitation and premises - public swimming pool
5. Housing and institutional - investigation of sanitary conditions of a housing district
6. Community care facility - adult care or child care facility
7. Any other related responsibility.

Unacceptable Report

A report in a check-sheet format will not be accepted.

A report on a research activity is not acceptable.

Reports must be the candidates work exclusively, not a team or partnership effort.

Date for Submission

These reports must be submitted to the Secretary of the Board of Certification with the supervisor's comments, where applicable, and received **at least sixty (60) days** before the date of the Certification Examination.

Appendix I

Guide for Completion of the Trainee Evaluation Form

Assessment and evaluation of the trainee's performance depends on accurate and reliable measurement of key performance indicators or competencies for an entry level Public Health Inspector.

Critical or systems thinking, procedural knowledge, attitude and practical application of skills require a sophisticated measurement scheme.

By identifying competencies or performance criteria, rubrics classify and organize performance observations with respect to different skill levels, and behaviors.

Purpose and Use of Rubrics

Measuring a performance, a work outcome, or a learning skill can prove to be challenging without the appropriate measurement tool. Rubrics are tools that can help evaluators come to similar conclusions about development of higher-level conceptual knowledge, performance skills, and attitudes.

The practicum coordinator and mentor need to evaluate the trainee on their skill and ability to apply their conceptual knowledge in the field of Environmental Public Health. The assessment of the skills and abilities is complex, and requires a consistent application of a subjective evaluation.

The rubric is designed to help the practicum coordinator complete the Trainee Evaluation Form (Appendix I).

The Evaluation form uses four categories, use the following interpretation for reach category as follows;

Satisfactory: Consistently meets expectations of an entry level Public Health Inspector **61%** of the time or more. **Score (2)**

Borderline: Sometimes meets expectations of an entry level Public Health Inspector 51% to 60% of the time. **Score (1)**

Unsatisfactory: Frequently does not meet the expectations of an entry level Public Health Inspector 50% of the time or less. **Score (0)**

Not Applicable; Trainee not exposed to the category of work and can not be assessed. **Not counted or Scored**

The Final Standing is interpreted as:

Satisfactory Standing: Trainee achieved a **score 51% or greater in all sections and overall. Scoring 52 or more out of 102, and scoring 51 % or more on every section.**

Unsatisfactory Standing: Student achieved a **score 50% or less in any section or overall. Scoring 51 or less out of 102 overall all, or 50% or less on any section.**

Section 1			
Was the trainee able to complete site inspections, facility evaluations and assessments, and other assigned duties independently?	Satisfactory: Consistently meets expectations (61% or more of the time) (Score 2)	Borderline; Sometimes meets expectations (51-60% of the time) (Score 1)	Unsatisfactory; Frequently does not meet expectations (50% or less of the time) (Score 0)
1. Ability to organize a work schedule	Trainee can organize and prioritize work independently	Trainee can organize work but not set appropriate priorities independently	Trainee can not organize and prioritize work independently
2. Ability to complete work on time	Trainee usually completes work on time	Trainee Sometimes completes work on time	Trainee frequently does not complete work on time
3. Ability to carry out inspections	Trainee can conduct an inspection independently and determine an appropriate hazard rating	Trainee can conduct an inspection independently and need some encouragement to determine the correct hazard rating	Trainee can not conduct an inspection independently or determine an appropriate hazard rating
4. Ability to work under pressure	Trainee can usually work under pressure (function at an expected level 70% of the time or more)	Trainee sometimes works under pressure at an acceptable level (60% of the time or more)	Trainee does not function at an expected level under pressure.
5. Ability to work independently	Trainee can work independently at the expected level	Trainee sometimes works independently at the expected level	Trainee frequently does not work independently at the expected level
Section 2			
Did the trainee carry out the investigative field activities needed to analyze and assess environmental health concerns?	Satisfactory	Borderline	Unsatisfactory
1. Ability to assess actual or potential health hazards?	Trainee consistently is able to assess actual or potential health hazards	Trainee sometimes able to assess actual or potential health hazards	Trainee not able to assess actual or potential health hazards
2. Demonstrated academic knowledge?	Trainee is able to define, assess and understand basic public health sciences	Trainee sometimes is able to define, assess and understand basic public health sciences	Trainee frequently is not able to define, assess and understand basic public health sciences
3. Ability to solve problems?	Trainee can usually diagnose and solve basic environmental public health problems	Trainee can sometimes diagnose and solve basic environmental public health problems	Trainee can not diagnose and solve basic environmental public health problems
4. Ability to utilize equipment correctly?	Trainee can operate public health inspection equipment required for inspections	Trainee sometimes able to operate public health inspection equipment required for inspections	Trainee can not operate basic public health inspection equipment required for inspections
5. Ability to handle equipment safely?	Trainee can skillfully operate public health inspection equipment in a safe manner	Trainee able to operate public health inspection equipment in a safe manner	Trainee frequently does not operate basic public health inspection equipment in a safe or skillful manner

6. Thoroughness of Inspections?	Trainee is able to conduct an inspection, identify critical and non-critical hazards and recommend control measures	Trainee is able to conduct an inspection, and sometimes able to identify critical and non-critical hazards and recommend control measures	Trainee is not able conduct an inspection independently or identify critical and non-critical hazards and recommend control measures
Section 3			
Has the trainee utilized appropriate reporting methods?	Satisfactory	Borderline	Unsatisfactory
1. Ability to use and complete agency forms?	Trainee consistently uses and completes the appropriate forms correctly	Trainee usually uses and completes the appropriate forms correctly	Trainee rarely uses or completes the required agency forms correctly
2. Ability to record details of inspection accurately?	Trainee consistently records the details of the inspection in an orderly, legible, and accurate way	Trainee usually records the details of the inspection in an orderly, legible, and accurate way	Trainee frequently does not record all the details of the inspection in an orderly, legible, and accurate way
3. Ability to utilize agency's environmental health information systems for day-to-day activities?	Trainee consistently and competently utilizes the information system	Trainee sometimes operates and utilizes the information system	Trainee does not competently utilize the information system
Section 4			
Has the trainee demonstrated an ability to work within the culture of the organization?	Satisfactory	Borderline	Unsatisfactory
1. Attendance	Trainee consistently arrives prepared for work on scheduled days	Trainee sometimes arrives late and unprepared to work	Frequently late or unaccounted for and unprepared to work
2. Punctuality	Usually punctual and on task	Sometimes punctual and on task	Often not punctual and off task
3. Appearance on duty	Usually dressed in a professional manner appropriate for the days work	Sometimes dressed in a professional manner	Frequently dress inappropriate or unprofessional
4. Attitude to job	Enthusiastic, seldom needs encouragement	Sometimes needs encouragement	Not enthusiastic, frequently needs encouragement
5. Attitude toward supervision	Usually maintains positive attitude in the face of constructive criticism.	Sometimes maintains a positive attitude in the face of constructive criticism.	Defensive and has a negative attitude when receiving constructive criticism.
6. Relationships with staff and allied workers	Usually courteous and works in a professional manner with all staff	Sometimes courteous and usually works in a professional manner with other staff	Frequently disrespectful to staff

BOC Practicum Guide

7. Ability to follow agency procedures	Consistently follows policy and procedures.	Sometimes follows policies and procedures.	Frequently fails to follow policies and procedures.
8. Ability to function within a working group	Usually functions at the best of their ability, accepts responsibility and completes assign tasks competently and willingly.	Sometimes functions at the best of their ability, accepts responsibility and typically completes assigned tasks competently and willingly.	Frequently not functioning at the expected level, averts responsibility, and fails to complete tasks on time.
Section 4.1			
Did the trainee communicate professionally with clients?	Satisfactory	Borderline	Unsatisfactory
1. Written communications	Usually writes coherently and legibly on inspection reports, forms and other written records.	Sometimes writes coherently and legibly on inspection reports, forms and other written records.	Frequently does not write coherently or legibly on inspection reports, forms or other written records.
2. Verbal communications	Usually communicates in a clear and concise manner when communicating with the public	Sometimes communicates in a clear and concise manner when communicating with the public.	Frequently communication is not clear or concise, mentor frequently needs to intervene.
Did the trainee communicate professionally with members of the organization?	Satisfactory	Borderline	Unsatisfactory
1. Written communications	Usually writes coherently and legibly on reports, forms and other written communication records.	Sometimes writes coherently and legibly on reports, forms and other written communication records.	Frequently does not write coherently or legibly on reports, forms or other written communication records.
2. Verbal communications	Usually communicates in a clear and concise manner when communicating with staff.	Sometimes communicates in a clear and concise manner when communicating with staff.	Frequently communication is not clear or concise, mentor frequently needs to intervene.
Section 4.2			
Did the trainee employ appropriate interpersonal skills in dealing with clients and members of the organization?	Satisfactory	Borderline	Unsatisfactory
1. Manner toward the public	Usually acted in a professional, courteous and respectful manner when dealing with the public.	Sometimes acted in a professional, courteous and respectful manner when dealing with the public.	Frequently acts unprofessionally and is disrespectful to the public.
2. Manner toward the staff and allied workers	Usually acted in a professional, courteous and respectful manner when dealing with staff.	Sometimes acted in a professional, courteous and respectful manner when dealing with staff.	Frequently acted unprofessionally and was disrespectful to staff.

Section 5.0			
Is the trainee able to conduct inspections and/or investigations equivalent to an entry-level PHI?			
Potable Water Quality	Satisfactory	Borderline	Unsatisfactory
1. Public drinking water	Usually proficient identifying, interpreting, and applying public health laws, policies, and guidelines related to Public Drinking water	Sometimes proficient identifying, interpreting, and applying public health laws, policies, and guidelines related to Public Drinking water	Frequently has difficulty identifying, interpreting, or applying public health laws, policies, and guidelines related to Public Drinking water
2. Private drinking water	Usually proficient identifying, interpreting, and applying public health laws, policies, and guidelines related to Private drinking water	Sometimes proficient identifying, interpreting, and applying public health laws, policies, and guidelines related to Private drinking water	Frequently has difficulty identifying, interpreting, and applying public health laws, policies, and guidelines related to Private drinking water
Food Safety	Satisfactory	Borderline	Unsatisfactory
1. Review of plans/blueprints	Usually proficient in reading plans, interpreting and applying public health laws, policies, and guidelines related to food service establishments	Sometimes proficient in reading plans, interpreting and applying public health laws, policies, and guidelines related to food service establishments	Frequently lacking the ability to read plans, interpret and applying public health laws, policies, and guidelines related to food service establishments
2. Inspections	Usually proficient in identifying hazards and violations. Proficient in communicating the results of the inspection to the operator.	Sometimes proficient in identifying hazards and violations. Proficient in communicating the results of the inspection to the operator.	Frequently has difficulty in identifying hazards and violations. Needs encouragement to communicate the results of the inspection to the operator clearly or factually.
Communicable Disease	Satisfactory	Borderline	Unsatisfactory
1. Investigations	Proficient in collecting case history information and effective at informing the case in prevention strategies. Knowledgeable of most enteric pathogens and effective control measures.	Sometimes proficient in collecting case history information and effective at informing the case in prevention strategies. Knowledgeable of some enteric pathogens and effective control measures.	Frequently has difficulty in collecting case history information and effective at informing the case in prevention strategies. Unaware of most enteric pathogens and effective control measures.
Recreational Water	Satisfactory	Borderline	Unsatisfactory
1. Review of plans/blueprints	Usually proficient in reading plans, and interpreting and applying public health laws, policies, and guidelines related to recreational water facilities.	Sometimes proficient in reading plans, and interpreting and applying public health laws, policies, and guidelines related to recreational water facilities.	Frequently has difficulty reading plans, interpreting and applying public health laws, policies, and guidelines related to recreational water facilities.
2. Inspections	Usually proficient in identifying hazards and violations. Proficient in communicating the results of inspection to the operator.	Sometimes proficient in identifying hazards and violations. Usually proficient in communicating the results of inspection to the operator.	Frequently has difficulty identifying hazards and violations. Needs encouragement in communicating the results of inspection to the operator.

Waste Management	Satisfactory	Borderline	Unsatisfactory
1. Review of sewage disposal plans/blueprints	Usually proficient in reading plans, interpreting and applying public health laws, policies, and guidelines related to sewage systems.	Sometimes proficient in reading plans, interpreting and applying public health laws, policies, and guidelines related to food service establishments sewage systems.	Frequently lacking the ability to read plans, interpret and applying public health laws, policies, and guidelines related to food service establishments sewage systems.
2. Sewage disposal inspections	Proficient identifying malfunctioning sewage systems or environmental impacts to existing sewage systems and effective control measures. Proficient in communicating the results of inspection to the home owner, etc.	Sometimes proficient identifying malfunctioning sewage systems or environmental impacts to existing sewage systems and effective control measures. Sometimes proficient in communicating the results of inspection to the home owner, etc.	Frequently has difficulty identifying malfunctioning sewerage systems or environmental impacts to existing sewerage systems and effective control measures. Needs encouragement communicating the results of inspection to the home owner, etc.
3. Solid waste disposal	Knowledgeable of various types of waste management facilities, environmental impacts and health risks. Aware to knowledgeable of setback distances, health concerns and monitoring techniques.	Has some knowledge of various types of waste management facilities, environmental impacts and health risks. Aware of setback distances, health concerns and monitoring techniques.	Frequently has difficulty identifying environmental impacts or health risks associated with waste management facilities. Has difficulty identifying setback distances, health concerns and monitoring techniques.
Community Environment and Sanitation	Satisfactory	Borderline	Unsatisfactory
1. Pest management	Knowledgeable of various types of pests and health risks. Knowledgeable of monitoring techniques, treatment options and integrated pest management.	Incomplete knowledge of various types of pests and health risks. Aware of monitoring techniques, treatment options and integrated pest management.	Frequently has difficulty identifying pests and health risks. Lacks knowledge of monitoring techniques, treatment options and integrated pest management.
2. Nuisances	Knowledgeable of what defines a health nuisance and can describe various types of nuisances. Knowledgeable of the criteria for the existence of a health nuisance and can identify abatements options, and the legislation which regulates health nuisances.	Aware of what defines a health nuisance, and can describe various types of nuisances. Aware of the criteria for the existence of a health nuisance, abatements options, and legislation which regulates health nuisances	Frequently has difficulty defining a health nuisance, and describing types of nuisances. Sometimes has difficulty explaining the criteria for the existence of a health nuisance, abatements options, or legislation which regulates health nuisances.
3. General sanitation	Knowledgeable of what constitutes a health hazard, can describe and identify abatements options, and the legislation which regulates general sanitation complaints.	Incomplete knowledge of what constitutes a health hazard can describe various and identify abatements options, and the legislation which regulates general sanitation complaints.	Frequently has difficulty identifying a health hazard and abatements options, and the legislation which regulates general sanitation complaints.
4. Housing	Knowledgeable of housing problems that have an impact on health Usually proficient in interpreting and applying public health laws, policies,	Incomplete knowledge of housing problems that have an impact on health. Sometimes proficient in interpreting and applying	Frequently has difficulty defining types of housing problems that have an impact on health. Frequently lacking the ability to interpret and

	and guidelines related to housing issues.	public health laws, policies, and guidelines related to housing issues.	applying public health laws, policies, and guidelines related to housing issues.
5. Noise	Knowledgeable of how noise impacts health, can identify the agencies who may be involved with noise complaints and their roles. Can identify the health standards that may be used for noise complaints and can identify abatements options, and the legislation used to control noise problems.	Incomplete knowledge of how noise impacts health, aware of other agencies may be involved with noise complaints. Incomplete knowledge of the health standards that may be used for noise complaints and aware of abatements options and the legislation used to control noise problems.	Frequently has difficulty defining how noise impacts health, or the agencies who may be involved with noise complaints and their roles. Has difficulty identifying the health standards that may be used for noise complaints and abatements options, or the legislation used to control noise problems.
6. Indoor Air Quality (including tobacco enforcement)	Knowledgeable of types and sources of indoor air quality contaminants in private dwellings, public places and in a workplace. Knowledgeable of the protocol for IAQ investigations and types of surveys conducted. Knowledgeable of IAQ testing equipment and limitations of the equipment and can identify abatements options, and the relevant legislation.	Incomplete knowledge of types and sources of indoor air quality contaminants in private dwellings, public places and in a workplace. Incomplete knowledge of the protocol for IAQ investigations and types of surveys conducted. Incomplete knowledge of IAQ testing equipment and can identify abatements options, and the relevant legislation.	Frequently has difficulty defining a types and sources of indoor air quality contaminants in private dwellings, public places and in a workplace. Has difficulty identifying the protocol for IAQ investigations, testing equipment and abatements options, or the relevant legislation.
7. Outdoor Air Quality (including complaints and referrals from other agencies)	Knowledgeable of the health risks associated with outdoor air quality, types of contaminants, and what information should be assesses to determine hazard identification and health risk. Aware of the roles of the other agencies involved in monitoring and can identify abatements options, and the relevant legislation.	Incomplete knowledge of the health risks associated with outdoor air quality, types of contaminants, and what information should be assesses to determine hazard identification and health risk. Incomplete knowledge of the roles of the other agencies involved in monitoring and can identify abatements options, and the relevant legislation.	Frequently has difficulty defining health risks associated with outdoor air quality, types of contaminants, and what information should be assesses to determine hazard identification and health risk. Unaware of the roles of the other agencies involved in monitoring and abatements options, and the relevant legislation.

Public Institutions	Satisfactory	Borderline	Unsatisfactory
1. Schools	<p>Knowledgeable of the primary health risks of workers and students in school settings. Can identify the health standards that may be used in school inspections and can identify abatements options, and the legislation used to correct problems.</p>	<p>Incomplete knowledge of the primary health risks of workers and students in school settings. Sometimes needs encouragement to identify the health standards that may be used in school inspections and can identify abatements options, and the legislation used to correct problems.</p>	<p>Has difficulty identifying the primary health risks of workers and students in school settings. Needs encouragement to identify the health standards that may be used in school inspections and can identify abatements options, and the legislation used to correct problems.</p>
2. Child Care Facilities	<p>Knowledgeable of the types of facilities, and PHI involvement, health concerns, disease spread, and legislation that regulates these facilities.</p>	<p>Incomplete knowledge of the types of facilities, and PHI involvement, health concerns, disease spread, and legislation that regulates these facilities.</p>	<p>Has difficulty defining the types of facilities, and PHI involvement, health concerns, disease spread, and legislation that regulates these facilities.</p>
3. Adult Care Facilities	<p>Knowledgeable of the types of facilities, and PHI involvement and health concerns, Knowledgeable of disease spread, injury prevention and legislation that regulates these types of facilities.</p>	<p>Incomplete knowledge of the types of facilities, and PHI involvement and health concerns. Incomplete knowledge of disease spread, injury prevention and legislation that regulates these facilities.</p>	<p>Has difficulty defining the types of facilities, and PHI involvement, health concerns, disease spread, and legislation that regulates these facilities.</p>
4. Industrial or Summer Camps	<p>Knowledgeable of the types of facilities, and PHI involvement. Knowledgeable of health risk of workers in industrial camps and summer camps and environmental issues of these types of camps. Knowledgeable of the applicable legislation that regulates these facilities.</p>	<p>Incomplete knowledge of the types of facilities, and PHI involvement. Incomplete knowledge of the health risk of workers in industrial camps and summer camps and environmental issues of these types of camps. Incomplete knowledge of the applicable legislation that regulates these facilities.</p>	<p>Has difficulty defining the types of facilities, and PHI involvement. Needs encouragement to identify the health concerns and legislation that regulates these facilities.</p>
Land Use	Satisfactory	Borderline	Unsatisfactory
1. subdivisions, community plans, re-zoning applications and referrals from other agencies	<p>Knowledgeable of the factors of public health significance in land use planning and agencies involved. Knowledgeable of the public health and environmental impacts that must be considered for subdivision development and community planning. Knowledgeable of other agency roles and applicable legislation.</p>	<p>Incomplete knowledge of the factors of public health significance in land use planning and agencies involved. Incomplete knowledge of the public health and environmental impacts that must be considered for subdivision development and community planning. Incomplete knowledge of other agency roles and applicable legislation.</p>	<p>Has difficulty identifying the factors of public health significance in land use planning and agencies involved. Needs encouragement identifying the public health and environmental impacts that must be considered for subdivision development and community planning. Has difficulty recognizing other agency roles and applicable legislation.</p>

<p>Personal Services Facilities</p>	<p>Knowledgeable of the different types of personal service facilities, related health concerns and applicable legislation or standards. Knowledgeable of the disinfection and sterilization procedures for the equipment.</p>	<p>Incomplete knowledge of the different types of personal service facilities, related health concerns and applicable legislation or standards. Incomplete knowledge of the disinfection and sterilization procedures for the equipment.</p>	<p>Has difficulty identifying the different types of personal service facilities, related health concerns and applicable legislation or standards. Has difficulty identifying the disinfection and sterilization procedures for the equipment.</p>
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Appendix J

**Board of Certification of Public Health Inspectors
Trainee Evaluation Form**

Form F

Name of Candidate: _____ Name of Health

Agency: _____

Practicum Period: From _____

To _____

This rating is based on the Candidate Public Health Inspector field experience. This form should be completed nearing the completion of the 12 week Practicum by the Coordinator. or For students from BCIT who complete their practicum at a B.C. training agency submit the ENVH 8600 final evaluation form.

Name of Trainee:	_____	(please print)
Name of Agency:	_____	(please print)
Name of Coordinator:	_____	(please print)

Practicum Period (start and end dates of 12-week session):

From: _____ To: _____

Overall Evaluation:	Satisfactory <input type="checkbox"/>
	Unsatisfactory <input type="checkbox"/>
Note: The trainee must obtain a "Satisfactory" evaluation in this practicum in order to successfully complete	

1. Complete **Sections 1.0 to 5.0** using the following categories:

S	Satisfactory
B	Borderline
U	Unsatisfactory
N	Not Applicable
2. The trainee should be assessed in all the categories listed. If it is necessary to leave a category blank please give an explanation in the corresponding "Comments" box.
3. Record the trainee's strengths and weaknesses in the "Comments" box provided in each section.
4. Record additional comments on the last page.
5. Check off "Satisfactory" or "Unsatisfactory" on this cover page. Select "Satisfactory" if the trainee has achieved entry-level competence (see Explanatory Notes).

Section 1.0

Was the trainee able to complete site inspections, facility evaluations and assessments, and other assigned duties independently?	S	B	U	N	Comments
1. Ability to organize a work schedule					
2. Ability to complete work on time					
3. Ability to carry out instructions					
4. Ability to work under pressure					
5. Ability to work independently					

Section 2.0

Did the trainee carry out the investigative field activities needed to analyze and assess environmental health concerns?	S	B	U	N	Comments
1. Ability to assess actual or potential health hazards					
2. Demonstrated academic knowledge					
3. Ability to solve problems					
4. Ability to utilize equipment correctly					
5. Ability to handle equipment safely					
6. Thoroughness of inspections					

Section 3.0

Has the trainee utilized appropriate reporting methods?	S	B	U	N	Comments
1. Ability to use agency forms					

2. Ability to record details of inspections accurately					
3. Ability to utilize the agency's environmental health information systems for day-to-day activities.					

Section 4.0

Has the trainee demonstrated an ability to work within the culture of the organization?	S	B	U	N	Comments
1. Attendance					
2. Punctuality					
3. Appearance on duty					
4. Attitude to job					
5. Attitude toward supervision					
6. Relationships with staff and allied workers					
7. Ability to follow agency procedures					
8. Ability to function within a working group					

Section 4.1

Did the trainee communicate professionally with clients?	S	B	U	N	Comments
1. Written communications					
2. Verbal communications					

Did the trainee communicate professionally with members of the organization?	S	B	U	N	Comments
1. Written communications					
2. Verbal communications					

Section 4.2

Did the trainee employ appropriate interpersonal skills in dealing with clients and members of the organization?	S	B	U	N	Comments
1. Manner toward the public					
2. Manner toward the staff and allied workers					

Section 5.0

Is the trainee able to conduct inspections and/or investigations appropriate to the role of the entry-level EHO/PHI?	S	B	U	N	Comments
Potable Water Quality					
1. Public drinking water					
2. Private drinking water					
Food Safety					
1. Review of plans/blueprints					
2. Inspections					

Communicable Disease Investigations						
1. Investigations						
Recreational Water						
1. Review of plans/blueprints						
2. Inspections						
Waste Management						
1. Review of sewage disposal plans/blueprints						
2. Sewage disposal inspections						
3. Solid waste disposal						
Community Environment and Sanitation						
1. Pest management						
2. Nuisances						
3. General sanitation						
4. Housing						
5. Noise						
6. Indoor Air Quality (including tobacco enforcement)						
7. Outdoor Air Quality (including complaints and referrals from other agencies)						

Public Institutions					
1. Schools					
2. Child Care Facilities					
3. Adult Care Facilities					
4. Industrial or Summer Camps					
Land Use (subdivisions, community plans, re-zoning applications and referrals from other agencies)					
Personal Services Facilities					

Signature of Practicum
Coordinator:

Date evaluation discussed with
Trainee:

I, _____ have read this form and
(trainee name, please print) agree

with this
evaluation

(signature)

Appendix K

BOC Practicum Guideline - Feedback Form

What suggestions do you have for improving this practicum guide?

What is your role in the practicum process?

Coordinator ___ **Mentor** ___ **Trainee** ___ **Other** _____

Return form to:

Board of Certification
#720 – 999 West Broadway
Vancouver, BC
V5Z 1K5

e-mail: office@ciphi.ca

Appendix L

Mock Oral Questions

POINTS	<p>You inspect a rural stand alone restaurant that is a full hour from your base office. The restaurant has an untreated well water supply. The facility appears to meet the requirements of The Food Premises Regulation as required. You take a routine bacteriological water sample from the 3 compartment sink tap, and you receive results two days later revealing the presence of Total Coliforms and E. Coli in the water.</p>		
	Questions to ask...	Expected/Required Response	Candidates Response
__ / 5	<p>What actions do you take?</p>	<ul style="list-style-type: none"> — Contact the operators and close the facility by Order or voluntary closure — Advise the operator that any food made by or with the contaminated water must be set aside until you arrive. — Advise your MOH or Supervisor of the situation — Advise the operator that further water samples are required prior to taking any action to disinfect the water — Advise the Provincial Lab that further water samples are forthcoming that require immediate processing 	
__ / 5	<p>Is there anything else you may do?</p>	<ul style="list-style-type: none"> — Inspect the well head and surrounding area — Inspect the sewage disposal system and surrounding area — Disinfect the taps and re-sample the water supply from several points in the system — Remove any affected foods from the supply chain and have them held or disposed — Review steps with operator to disinfect or boil 	

		water for cleaning	
__ / 5	What do you suspect? and Why?	<ul style="list-style-type: none"> — Suspect that sewage may have contaminated the well water because: — Close proximity — Effluent not contained in the system — Well pit may allow pooling on top of the well — Soil has been dry and may allow downward infiltration through the soil to the well 	

<p>Maximum Total Points __ / 15</p> <p>Bonus Points if total points have not been obtained __ / 2</p>	
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POINTS	While performing a routine inspection of a restaurant, you observe a roast turkey on a counter top. You are informed that it is “cooling off”. You take the internal temperature and determine it is at 25 ⁰ C.		
	Questions to ask...	Expected/Required Response	Candidates Response
__ / 2 Any 2 of 3	What are the concerns here?	<ul style="list-style-type: none"> — Turkey may have been at ambient temperatures for an extended period of time (i.e., temperature abuse) — This could allow for the growth of pathogenic bacteria and/or — Production of their toxins. 	
__ / 1	What do you ask the operator?	<ul style="list-style-type: none"> — Ask the operator how long the turkey has been cooling on the counter. 	
__ / 2	The operator advises you that it has been out for 7 hours. What do you tell the operator the accepted cooling period is?	<ul style="list-style-type: none"> — Potentially hazardous food must be cooled from 60 C to 20 C or less within 2 hours and then from 20 C to 4 C or less within 4 hours 	
	Based on this information what	<ul style="list-style-type: none"> — direct the operator to discard the turkey due to 	

<p>_/1</p>	<p>do you direct the operator to do and why?</p>	<p>temperature abuse</p>	
<p>_/2 (any 2 of 3)</p>	<p>What measures might you take to ensure that the operator actually does discard the turkey?</p>	<ul style="list-style-type: none"> — Observe the operator dispose of the turkey — Consider adulterating the discarded turkey so it can't be used after your departure — Seize and/or dispose of the product yourself if necessary 	
<p>_/2</p>	<p>What other options do you have to try to ensure this operator does not do this again?</p>	<ul style="list-style-type: none"> — Educate the operator about the importance of proper cooling to reduce the risk of food borne illness — Advise/warn the operator that temperature abuse is a violation of food safety legislation and liable to charges/fines upon conviction 	
<p>Maximum Total Points ___/ 10</p> <p>Bonus Points if total points have not been obtained ___/ 2</p>			