A. ADMINISTRATIVE CRITERIA

1. System for Awarding CEU/TCH: The NJAWWA provides a system for identifying participants who meet the requirements for satisfactory completion and maintains permanent CEU/TCH records for individuals.

Guidelines: A designated official of the NJAWWA, usually the coordinator or instructor, verifies and reports that each participant has (or has not) met the specified requirements for satisfactory completion and is (or is not) awarded CEU/TCH. Permanent individual records are then established indicating the number or CEU/TCH awarded each participant. Only those participants who successfully complete a program or activity are awarded CEU/TCH, and only those learning experiences for which CEU/TCH were awarded appear on the participant’s permanent CEU/TCH record. Information on individual failures to qualify for CEU/TCH is maintained only in the NJAWWA program files, never on individual CEU/TCH records.

Because participants in continuing education experiences may not recognize, at the time, the potential value of a permanent record of their participation and achievement, the decision to record CEU/TCH awarded is not left to the individual participant. Therefore, the NJAWWA will maintain a permanent record for each participant who successfully completes a program or activity and to record the number of CEU/TCH awarded. In addition to NJAWWA maintaining a permanent record of CEU/TCHs, Rutgers University Office of Continuing Professional Education (OCPE) also maintains a database that tracks CEU/TCHs obtained from NJAWWA programs along with the OCPE’s programs. A copy of the contract with the OCPE is attached.

2. Maintenance and Availability of Records: A permanent record of participation is maintained by the NJAWWA and OCPE for each individual to whom CEU/TCH are awarded and is readily available to the individual upon request.

Guidelines: Cumulative records of all CEU/TCH earned by each participant are to be available for a minimum of 20 years and are to be issued as an official statement or transcript upon request by the participant. (The NJAWWA has established the OCPE database for permanent maintenance of its CEU/TCHs in the event of its demise.) CEU/TCH records will be made available during the planned NJDEP audit of water operators sometime in the year 2003.
The following specified items of information are to be included on all CEU/TCH records and transcripts:

- Name and address of the NJAWWA;
- Name and Social Security number of the individual participant;
- Title of the program or activity (the title should be as descriptive as possible);
- Completion date of the program or activity;
- Number of CEU/TCHs awarded;
- Report of assessment results or other criteria for satisfactory completion (i.e. attendance, evaluation, etc.)
- Course ID Number
- Name and affiliation of proctor
- Course instructor
- Location of course
- Date and Time of course

Additional information, such as current address and telephone number, may be included as an option.

3. **Facilities:** The NJAWWA provides or arranges for appropriate educational facilities, library or reference materials, instructional aids, and equipment consistent with the purpose, design and intended learning outcomes of each learning experience.

**Guidelines:** The design and use of facilities should enhance the opportunities of participants and teaching staff to communicate effectively. For example, lighting, sound, seating, and visuals should be appropriate, and sufficient reference materials and other needed resources should be available to enhance learning.

**B. PROGRAM CRITERIA**

1. **Needs Identification:** The program or activity is planned in response to the identified needs of a target audience.

**Guidelines:** The purpose of identifying learning needs is to ensure that the planned activity is relevant to the learner’s continuing education and/or job requirements. Needs may be identified in several ways, for example, input from operators, their supervisors, etc. The key to effective needs assessment is the identification of the gap between what the learner knows and what the learner needs to know. The documentation produced by needs assessment becomes the basis for developing learning outcomes.
2. **Learning Outcomes:** The NJAWWA has clear and concise written statements of intended learning outcomes (e.g. behavioral or performance objectives) for each continuing education program/activity.

**Guidelines:** Intended learning outcomes are synonymous with behavioral and performance objectives. Their purpose is to specify the determined skills, knowledge, and/or attitudes that the participants should be able to demonstrate following the continuing education experience. The participants should be aware of these intended learning outcomes prior to and during the activity. Such outcomes form the basis for measurement of progress, periodic feedback, and final assessment.

3. **Instruction:** Qualified instructional personnel are directly involved in determining the program purpose, developing intended learning outcomes, and planning and conducting each learning experience.

**Guidelines:** A systematic and sequential process that fulfills the specified purposes and intended learning outcomes of the continuing education experience requires program leaders or instructional staff who have the following qualifications:

- Competence in the subject matter;
- Understanding of the purposes and intended learning outcomes of the continuing education or training experience;
- Knowledge and skill in the instructional methodologies and learning processes to be used;
- Ability to communicate the educational content to the participants at an appropriate level.

4. **Content and Methodology:** The content and instructional methodologies selected are consistent with stated learning outcomes, sequenced to facilitate learning, and permit opportunities for the learner to participate and to receive feedback.

**Guidelines:** Statements of intended learning outcomes (behavioral or performance objectives) are logically supported by subject content relevant to achieving the outcomes. Both the learner and the instructor have a clear understanding of the intended outcomes and how they are to be achieved.

Content should be sequenced in a logical manner and should proceed from basic to advanced levels. Instructional methodologies should permit the learner to participate interactively and to receive feedback that strengthens and reinforces learning and measures progress.
5. Requirements for Satisfactory Completion: Requirements for satisfactory completion are established for each planned learning experience. These requirements are based on the purpose and intended learning outcomes. Participants should be informed of the requirements for satisfactory completion prior to their participation.

Guidelines: The requirements for satisfactory completion are established prior to the offering of the program or activity through the mutual agreement of the course coordinator, course director, or other persons responsible for the overall CEU/TCH program. Requirements may be based on the ability of participants to demonstrate what they have learned, or some predetermined level of attendance at sessions, or a combination of performance and attendance.

Programs that require the achievement of certain performance levels should be based on the intended learning outcomes. Requirements which focus on attendance only should be high (e.g. 90 percent and above) and documented by such means as attendance rosters or sign-in sheets as well as sign-out sheets.

Participants should be informed in advance (e.g. continuing education announcement, letter of acceptance) of the requirements for satisfactory completion and should know that only those who meet those requirements will earn CEU/TCH.

6. Assessment of Learning Outcomes: Procedures established during program planning are used, when applicable, to measure the achievement of intended learning outcomes specified for the program or activity as they relate to changes in learner’s knowledge, skills, or attitudes.

Guidelines: Assessment refers to the measurement of individual performance in relation to intended learning outcomes. Assessments may be made during and on conclusion of the learning activity. Assessment made during the activity may help to reinforce learning and provide a point of reference for the progress of the learners.

The assessment procedure, its timing, and its application are established as part of the planning process. Because the assessment procedure depends on the intended learning outcomes, they must be measurable or observable, clearly stated, and focused on the level of performance expected of the learner. When a formal assessment of learning outcomes is to be a part of a program or activity, the purpose and nature of the assessment procedure is made known to the participants.

Assessment may take diverse forms, such as performance demonstrations under real or simulated conditions, written or oral examinations, written reports, completion of a project, self-assessments, or locally or externally developed standardized examinations. Moreover, assessments may be made during or at the conclusion of the program or activity, or after some elapsed time following the learning experience. When learning outcomes are formally assessed, the results
should be entered on the individual learner’s permanent record along with the number of CEU/TCH earned.

7. **Program Evaluation:** During the course of planning, a process is established to evaluate major aspects of the continuing education experience, i.e. organizational input; the design, content, content level, and operation; and the extent to which intended learning outcomes were achieved.

**Guidelines:** The distinction between assessment and evaluation is: “assessment” refers to the measurement of individual learning outcomes; “evaluation” refers to measures of the quality of the administration and operations and of the continuing education experience as a whole.

Using only participant reaction surveys will not yield the data needed for an adequate evaluation of a continuing education experience. However, substantial and useful participant reaction surveys can be designed (1) to measure what the participants consider to be the benefits of the learning experience, (2) to determine participant satisfaction with the physical arrangements, or (3) for comparisons between different offerings or between the same offerings or different occasions. The evaluation process itself is one measure of the quality of a continuing education program or activity.

**C. DETERMINING THE NUMBER OF CEU/TCHs TO BE AWARDED**

One Continuing Education Unit (CEU) is awarded for each 10 contact hours of instruction included in a specified continuing education program or activity. Per an NJDEP fact sheet dated 1/29/01, one (1) CEU is equal to ten (10) Training Contact Hours (TCHs). The number of contact hours of instruction and appropriate CEU/TCH to be awarded are determined prior to conducting a learning experience and only after the purpose and intended learning outcomes, requirements for satisfactory completion; content and content level, format, instructional methodology, instructional staff, and time schedule have been established. A decision to award CEU/TCH is not made after the program or activity has been offered.

The 60-minute clock hour is used as the contact hour in all continuing education experiences. Only the number of complete instructional hours is considered in assigning CEU. For example, 1.7 CEU are assigned for a learning experience with a total of 17, 17.50, or 17.75 contact hours. Any fractional portion of an instructional hour calculated for the total program or activity is disregarded. When unforeseen circumstances require a significant alteration in the instructional schedule, an appropriate adjustment in the number of CEU/TCH to be awarded should be recommended by those planning and approving the program.
To determine the number of contact hours, count the hours in the program, and subtract refreshment breaks, lunches, and other activities not directly part of the instructional experience.

Continuing education activities that involve less than 10 contact hours of instruction (less than 1.0 CEU) should be evaluated carefully in terms of the CEU/TCH program criteria before deciding to award fractional (e.g. 0.3 or 0.4) CEU.

Although the number or CEU/TCH to be awarded for each program or activity is recommended during the planning process, responsibility for final determination of the number of CEU/TCH awarded for a particular continuing education experience rests with the Education and Professional Development Committee Chair of the New Jersey Section American Water Works Association, the designated individual who is responsible for administering the CEU/TCH system.

Calculations of contact hours involved in a continuing education experience may include the following elements:

1. Classroom or meeting session time with direct participation between the learner and instructor or discussion leader is converted directly to contact hours.

2. Activities that use methods of instruction such as supervised independent study, directed reading, or project-based assignments will not be awarded CEU/TCH. This element while not eligible for CEU/TCHs by the NJAWWA is being investigated on a state level by the Water and Wastewater Advisory Board.

3. Field trips (minus travel and other administrative time) and other experimental course activities may be awarded CEU/TCH, but usually on a bases of at least two experimental hours being required for each contact hour of instruction.

The following and similar activities are not included when calculating the number of instructional contact hours for any continuing education experience:

- Time for study, assigned reading, and other related activities outside the classroom or meeting schedule;

- Meeting time devoted to business or committee activities;

- Meeting time devoted to announcements, welcoming speeches, or organizational reports;
- Time allocated to social activities, refreshment breaks, luncheons, receptions, dinners, and so forth. NOTE: Time devoted to a luncheon or dinner presentation integral to the continuing education experience may be included in calculating instructional contact hours.

D. ALTERNATE DELIVERY METHODS

Alternate delivery methods are not acceptable unless approved by the Water and Wastewater Advisory Board. Any member or committee of the NJAWWA must make an application to the Water and Wastewater Advisory Board for approval of an alternate delivery method.

E. FORMATS AND FORMS

1. Program Announcement Copy

The NJAWWA’s promotion and advertising must provide full and accurate disclosures about its programs, services, and fees. The statement to be placed on the announcement of an individual continuing education program or activity should include the number of CEU/TCHs being awarded for satisfactory completion of the learning experience. For example:

The New Jersey Section of the American Water Works Association will award 2.7 CEU to each participant who successfully completes the Workshop on Filter Optimization. The CEU/TCH is a nationally recognized unit designed to provide a record of an individual’s continuing education accomplishments. Upon written request to the NJAWWA, a transcript of this record will be made available as designated by the participant.

A brief definition of the CEU/TCH often is included, where space permits. In a catalog of continuing education offerings, a general statement about CEU/TCH should be supplemented by designating the number of CEU/TCH awarded in the description of each learning experience. The brochure will clearly display the NJDEP assigned number for awarding CEU/TCHs.

2. Certification of Completion

The NJAWWA makes available to participants recognition and documentation of their successful completion of continuing education experiences. In addition to required transcripts, the NJAWWA will issue certificates. Such certificates should include essentially the same information as specified earlier for transcripts. The certificate will clearly display the NJDEP course assigned number for documentation of CEUs/TCHs earned. A copy of a typical certificate is attached.
3. **Attendance Records**

If attendance records are the only means of determining individual participation in the learning experience, a sign-in sheet and sign-out sheet for each session should be adequate. Some attendance record designs have provisions for checking a column for each session, which may be helpful for the instructor’s use. This format is not recommended if it is to be checked by the participants. It is recommended that, whenever possible, additional means of determining attendance be used.

4. **Permanent CEU/TCH Record Forms**

Individual CEU/TCH records may be maintained manually and should be ready to photocopy for providing a transcript when needed. A similar format can be designed for a computer system.
New Jersey Section American Water Works Association NJAWWA

Name:
Address:
City & State;

SS Number:
Zip Code:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title and Description</th>
<th>Date Completed</th>
<th>CEU/TCH Awarded</th>
<th>Grade or Assignment</th>
</tr>
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One Continuing Education Unit is defined as 10 contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

_________________________________________ DATE
_________________________________________ CEU/TCH Administrator

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