Final Report to the Connecticut Department of Energy and Environmental Protection

On

Evaluation of LEP Program Performance and Utilization

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Submitted to Support the Comprehensive Evaluation and Transformation of Connecticut's Cleanup Laws

Table of Contents

Workgroup Membership	4
Executive Summary	5
Introduction	7
Evaluation Background	7
Scope and Deliverable	7
Subject Matter Background	8
Workgroup Meetings and Format	8
Areas of Evaluation	10
Area 1	10
Area 2	13
Area 3	15
Recommendations	18
Discussions	19
Appendices	
Appendix A – Section 22a-133v of Connecticut General Statutes	A-1
Appendix B – Glossary of Terms	A-5
Appendix C – Connecticut Department of Environmental Protection's Licensed Environmental Professional (LEP) Overview & Incentive Committee	A-7
Appendix D – Massachusetts Contingency Plan and Response Action Performance Standards	A-15
Appendix E – Massachusetts Department of Environmental Protection's Audit Program	A-17
Appendix F – Connecticut Department of Environmental Protection's Audit Program	A-23

Appendix G – Connecticut Department of Environmental Protection's LEP Audit Program Information	A-27
Appendix H – Environmental Professionals of Connecticut Education Committee Distance Learning White Paper	A-69

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Executive Summary

This Workgroup evaluated three primary areas associated with the Licensed Environmental Professional (LEP) program in Connecticut. First, the Workgroup evaluated the metrics of the Connecticut LEP program, including the utilization of LEPs and the roles that similar licensed professionals play in other states. In so doing, the Workgroup concluded that although the various programs are facially similar, when one investigates below the surface, it becomes apparent that the various programs have significant differences. Key among those differences are the environmental conditions that are subject to review by a licensed professional; the degree in which a professional's conduct is governed by regulation as opposed to guidance or even prevailing standards; the absence or presence of mandatory deadlines; and the level of involvement of the agency during the remediation process.

From there, the Workgroup next evaluated the role of the Connecticut Department of Energy and Environmental Protection (DEEP) in the LEP remediation process, including the audit process for submission by LEPs. The Workgroup looked to the number of LEP submissions received by DEEP, the number of submissions that were audited and the outcomes of such audits. The Workgroup then contrasted the Connecticut audit experience with that of Massachusetts to compare the audit process and better understand potential areas of improvement. Finally, the Workgroup evaluated the role of the LEP Board in Connecticut, and again compared the function of that board to the roles that similar boards play in other states. The Workgroup noted the lack of regulation that guides the LEP Board's function, however, the Workgroup was generally impressed with the efficacy of the Board, despite the relative lack of regulation or resources. Indeed, as the Workgroup notes on p. 16 of this Report the LEP Board "surely provides an encouraging model for what can be accomplished."

After completing its review of these three areas and deliberating over several meetings, the Workgroup came to several conclusions regarding the need for over-arching reform of the LEP program. These recommendations are discussed in slightly greater detail at the end of this Report, however, the Workgroup noted that these recommendations are a starting point for further evaluation. They are neither an exhaustive list of reforms, nor are they complete solutions, owing to the compressed timeframe in which the Workgroup had to perform its task. That having been said, the Workgroup believes that the following recommendations will improve Connecticut's LEP program:

- Enacting regulations that address the process by which sites move through the program;
- Establishing a single cleanup program under which spills and historical contamination are addressed;

- Accepting electronic submittals;
- Establishing milestone reporting and interim submittals to track progress and expedite investigation and remediation;
- Establishing an appropriate fee structure and timelines to support site closure;
- Increasing DEEP transparency on policy, decision making and tracking metrics;
- Developing tracking metrics within DEEP to measure effectiveness of the LEP program and site closure, then publishing the results of those metrics on a regular basis;
- Enacting regulations that create an audit program at DEEP that is similar to the Massachusetts model;
- Increasing transparency with LEP Board oversight;
- Developing an investigatory process by the LEP Board that achieves timely review and consistent outcome of disciplinary actions;
- Creating DEEP policy and guidance that establishes a clear expectation for standard of care by LEPs, including but not limited to, guidance and checklists for each step of the process;
- Continuing DEEP's development of educational programs, which may include partnering with the private sector. A percentage of required education should be associated with DEEP procedural education (Remediation Standard Regulations (RSRs) course, Audit course, etc.) and directed by DEEP (for example Audit Case Studies similar to Massachusetts); and
- Creating an ongoing workgroup to examine the effectiveness of the LEP program, including solicitation of input from all affected parties.

Introduction

Evaluation Background

The cleanup of pollution and redevelopment of Brownfields and other environmentally-degraded properties is critical for Connecticut. The benefits of such cleanups are significant and include protecting human health and the environment from the effects of pollution, creating opportunities for economic development, and aiding in efforts to make our cities, towns and villages more sustainable.

While Connecticut was ground-breaking to initiate strong human health and environmental protections to address pollution, a significant top-to-bottom review of our current cleanup laws and the framework they create has never been conducted. Significant changes, additions, and improvements have been made to the cleanup laws since the late 1960s, but changes have been incremental and selective. This draft workgroup report is part of an on-going Comprehensive Evaluation of the cleanup laws for the State of Connecticut. DEEP intends to use this Comprehensive Evaluation to aid in the transformation of the cleanup laws. A successful transformation of the cleanup laws will create a system of cleaning up contaminated properties that is efficient and effective for the broad array of stakeholders that rely upon the safe reuse of Brownfields and other environmentally-degraded properties.

Scope and Deliverable

The Workgroup was provided with the following scope and deliverable by Connecticut Department of Energy and Environmental Protection (DEEP).

<u>Scope</u>: Evaluate the Connecticut Licensed Environmental Professional (LEP) program. Compile and evaluate data on the performance of the LEP program, including number and percentage of verifications that undergo the audit process, the frequency by which sites or releases are delegated to LEPs, roles that LEPs can serve and those they cannot during the investigation and remediation process, additional roles that similar professionals serve in other states, and the authority of Oversight Boards in Connecticut compared to other states with similar licensed environmental professional programs.

<u>Deliverable</u>: Present information from this evaluation and suggest how the audit process, utilization of the LEP, and the oversight Board could be modified to expedite investigation and remediation.

Subject Matter Background

The LEP Program was established by Public Act 95-183 and codified as section 22a-133v of the Connecticut General Statutes (CGS) on October 1, 1995. A copy of that legislation is included as Appendix A. Following the lead of Massachusetts, which in 1993 became the first state in the nation to privatize its hazardous waste site cleanup program, Public Act 95-183 and the ensuing body of regulations was enacted in an effort to expedite the investigation and remediation of contaminated properties through Connecticut's regulatory system. The intention of the privatized program was to have an LEP, work with a responsible party to accomplish site remediation. In so doing, it was presumed that the process would be able to proceed through the process at a faster pace than the traditional approach of submitting reports for DEEP review and approval.

Stakeholder input that was received during recent DEEP-sponsored visioning sessions for remediation suggested that the transfer of responsibility for the primary oversight associated with the assessment, characterization, and remediation of contaminated sites from the state regulatory agency to licensed professionals has not reached its full potential. For example, the LEP's responsibility for decision-making is somewhat limited because approval of the Commissioner is required to take advantage of multiple alternative approaches for achieving compliance in accordance with in the Remediation Standard Regulations Section 22a-133k-1 through 22a-133k-1 of the Regulations of Connecticut State Agencies (RSRs). This report of the LEP Program Evaluation Workgroup has been provided by DEEP in an effort to determine:

- What are specific impediments to prompt clean up under existing site cleanup programs?
- What mix of improvements could achieve better cleanup results?
- Is there value in a comprehensive overhaul of laws governing remediation?

Workgroup Meetings and Format

During the initial meeting presented by DEEP, the participants were provided Evaluation Workgroup Guidance and associated ground rules; one DEEP co-lead; a template for this report (shared by each of the six workgroups) and set deadline for the deliverable. Otherwise, the manner in which the workgroup conducted this evaluation was not dictated in any material fashion.

The workgroup selected a non-DEEP co-lead and convened on six separate occasions between August 30, 2011 and September 28, 2011 to conduct this evaluation and poll the members regarding the final recommendations. For those participants unable to attend specific meetings

in person, a teleconference was available. Further, for those unable to attend in either manner, the workgroup employed the use of a website to post topics discussed (meeting minutes), tasks assigned and referenced material. In addition, email was used extensively to apprise members of workgroup progress made between the five meetings and one conference call.

A compare-contrast approach comprises the core of this evaluation. The workgroup assessed the LEP Program relative to similar programs in other states and assessed the licensing of environmental professionals relative to other licensed professions. Specifically, the workgroup considered the intent of the program, its changes since enacted and the reasons for such modifications, to determine areas of success or achievement and uncover what appear to be problematic areas. From this, the workgroup solicited input associated with potential recommendations.

The evaluation was conducted in an extremely expedited manner, due to the short time allotted for the investigation. Expertise and opinions were solicited from a wide variety of stakeholders. Published data, applicable statutes and regulations were referenced as well. Time constraints prevented some areas of inquiry from being explored as fully as the workgroup desired, but all were explored sufficiently to arrive at recommendations for improvement.

As a result of the diverse background of workgroup members, many noted difficulty with respect to participating in technical discussions involving the methods employed by LEPs. Often connotations associated with specific terms needed to be explained. Further complicating communication was the fact that different terms are used for similar methods, processes and licenses in the different jurisdictions that were investigated. Therefore, to reduce potential confusion on the part of the reader of this report, a glossary of terms is provided in Appendix B for terms that have specific technical meanings not commonly understood by the general public or terms that may have different meanings to different groups.

Some members of the workgroup noted that the issues identified and discussed by the workgroup are not new. In fact, they have been discussed throughout the sixteen years since Public Act 95-183 was enacted. The recommendations of this group are similar to those reached by a 2007 internal DEEP committee, the Overview & Incentive (O/I) Committee that evaluated the LEP program in Connecticut. A summary of the findings of the Committee O/I Committee are included in Appendix C.

Areas of Evaluation

The evaluation of the program focused on three areas for investigation: 1) the metrics of the Connecticut LEP program, including utilization of LEPs and the roles that similar licensed professionals serve in other states, 2) the role of DEEP, including the audit process for submissions by LEPs, and 3) the role of the oversight board in Connecticut and a comparison to similar boards in other states.

Area 1. The metrics of the Connecticut LEP program, including the utilization of LEPs and the roles that similar licensed professionals serve in other states::

The roles that LEPs serve during the investigation and remediation of sites have been researched and compared to similar programs in Massachusetts and New Jersey. Though analogous in many ways on the surface, the programs are dissimilar conceptually, in practice, and most importantly, in outcome.

The majority of relative program data was derived primarily from the Massachusetts program due to the length of the time the program has been in operation. In addition, as since the New Jersey program recently underwent a remedial program transformation, considerable information was available regarding stakeholder concerns with such an undertaking. However, the New Jersey program is too new to establish a record of success or failure, but may provide examples of how a comprehensive transformation process can be undertaken.

Several specific differences in elements of the regulatory programs are noted below:

- In Connecticut, unlike New Jersey or Massachusetts, all releases to the subsurface are not captured under a single regulatory program, and for those that are captured, the definition of a "site" is based on geographic boundaries (primarily property boundaries) as opposed to specific release areas or areas of concern;
- Connecticut does not have a set of regulations that specifically references elements that are considered in establishing a standard of care. However, in Section 22a-133v-6 (c) of the Regulations of Connecticut State Agencies, "A licensed environmental professional shall perform his duties in accordance with the standard of care applicable to professionals engaged in such duties." In contrast, in Massachusetts, language in the Massachusetts Contingency Plan (MCP) at 310 Code of Massachusetts Regulations (CMR) 40.0191, specifically identifies requirements with which an Licensed Site Professional (LSP) must comply in order to meet the expected standard of care;

- Relative to programs in other states under which similarly licensed environmental professionals work, Connecticut does not have in regulation many of the strict timelines and compliance fees that are present in other states regulations. Such timelines and incentives, such as compliance fees, are useful for expediting site closure and subsequent reuse. In the recent past, Connecticut has recognized this and has begun to enact timelines specific to new sites under certain circumstances associated with individual programs;
- Compared to similar programs in other states, the LEP Program is limited in its scope by statute and does not address all impacted sites; and
- A high percentage of sites in the LEP program do not get closed out. There are
 too few regulations requiring the LEP approval of the completion of specific
 interim milestones prior to a final verification (site closure). This results in a very
 lengthy and cumbersome audit process and uncertainty with respect to
 outcomes. This uncertainty is a real problem for owners of contaminated sites
 resulting significant economic impacts.

Sites may be delegated to an LEP under the Property Transfer Program (now with 30-day presumptive delegation), Voluntary Remediation Program and the Underground Storage Tank (UST) Program. LEPs are able to approve completion of limited aspects under each of these programs. Each of these programs has a regulation governing when the endpoint is reached; but no regulations are associated with the process of investigation of sites or with the professional's exercise of expert judgment in the process.

Moreover, an LEP's verification is to be based on an investigation conducted in accordance with prevailing standards and guidelines, but remediated in accordance with the remediation standard regulations, which only specify the endpoint concentrations that must be achieved and methods that can be used to demonstrate that concentrations present at a site meet the endpoint concentrations. In contrast, the regulations with which licensed environmental professionals in Massachusetts and New Jersey must comply explicitly identify activities that must be performed throughout the investigation and remediation process.

Historically, use of the prevailing standards and guidelines has presented a number of difficulties with respect to site closure. Relative to the "life" of a project including investigations and remediation, new policies, guidelines and standards may change and in some cases may adversely affect the project. An LEP is required to employ professional judgment, reasonable care and diligence and shall apply the knowledge and skill ordinarily required of a professional in good standing practicing in that field at the time the services are performed. The roles of the LEP and DEEP should be further defined through regulation to allow for legitimate differences in professional judgment and opinion, while simultaneously ensuring the ongoing confidence of the public in the LEP program.

Under the current program, licensees have an obligation to seek the Commissioner's approval in some specific circumstances during the remediation process before final verification can be demonstrated. One example that demonstrates the environmental professional's obligation to seek the Commissioner's approval exists with respect to risk assessment and how that issue is handled in Connecticut vs. Massachusetts. Very similar to determining that a site does not pose a risk to human health and the environment in Massachusetts, the Connecticut RSRs provide a risk-based approach to site closure. The primary difference is that in Connecticut, the LEPs must seek DEEP approval for the use of alternative methods for demonstrating compliance and alternative numeric criteria prior to verification, whereas in Massachusetts, such approval is not required prior to submitting the final closure document. However, as with any submittal made under the MCP, all elements of the final closure document are subject to audit. Under the RSRs, Connecticut increases the burden on the state agency, rather than alleviating it, which appears to contradict one of the objectives for establishing the LEP program.

Area 2. The role of DEEP, including the audit process for submissions by LEPs

The workgroup interviewed DEEP's LEP Audit Program Coordinator on several occasions. The Coordinator provided valuable documents and information (see Appendix G). The statistical data provided indicated that DEEP has received approximately 4,000 Environmental Condition Assessment Forms (ECAFs). A total of 585 verifications that a site has been remediated in compliance with the state's Remediation Standard Regulations were submitted to DEEP. These arrive at a rate of about 40 per year. Of the 585 submissions, 195 (33%) were audited by DEEP personnel and (87) (15 % of the total submissions received) were rejected as inadequate.

Potential reasons for the rejected verifications may be a lack of clarity regarding exactly what is required for an acceptable verification, the unfamiliarity of LEPs with the guidelines used by auditors when evaluating verifications, and less than rigorous efforts by LEPs. It appears that some guidance regarding acceptable protocol for submissions can be found on the DEEP website. Nevertheless, in light of the absence of regulations, LEPs appear to want more certainty, including less ambiguous standards for submittals, improved communication between DEEP staff and the LEPs, and education. Regardless of the cause of the rejection rate, it is clear that if sites are to be closed safely and expeditiously, a more efficient approach needs to be explored.

According to DEEP, the purpose of the LEP Verification Audit Program is to ensure that the opinions ("verifications") of the LEP are based on an appropriate understanding of the environmental conditions of the site and that the verification is in compliance with all applicable statutes and regulations, including the RSRs. However, the audit program does not address any written opinion an LEP is authorized by law to render. In contrast, the Massachusetts DEP audit program, as described on the Massachusetts DEP audit web site, "...has been designed to ensure:

- Compliance with Massachusetts General Law (M.G.L.) c. 21E, the MCP, and other applicable requirements;
- Consistency of audits within and across Massachusetts DEP regions;
- Credibility to maintain public confidence that response actions that have little or no direct Massachusetts DEP oversight are being performed in a proper and timely manner; and
- Commitment to achieving the 20 percent audit target in M.G.L. c. 21E."

In its audit of any response action submittal, the Massachusetts DEP shall base its finding of any violation or assessment of a penalty on the Massachusetts Contingency Plan and Response Action Performance Standard (RAPS, Appendix D) in effect at the time of its receipt of the submittal.

Unlike Massachusetts and New Jersey, the Connecticut DEEP audit program currently only audits verifications (not certification or other LEP opinions). Both Massachusetts and New Jersey, but not Connecticut, require licensees to stamp various submissions/opinions throughout the characterization/remediation process, and those stamped submissions may be subject to audit.

Specifics for how the Massachusetts DEP audit program is to function are set forth in regulations 310 CMR 40.1100 (Appendix E).

In contrast, DEEP's audit program is not set forth in regulations. Information on Connecticut's Audit Program is presented in Appendix F. In comparison to other states, Connecticut does not have regulations which specify:

- the percentage of audits to be conducted for verifications; and
- a requirement that all submittals must be screened.

In Connecticut, most of the verifications are screened. The time required to screen verifications has been found to be inconsistent. Recent modifications made by DEEP to the screening process have improved the timeframes to complete screening conducted on verifications.

Following screening, if a verification is selected for an audit, that process may take from 17 weeks to the timeframe allowed by the regulation in effect at the time of verification. Post-July 2007 audits must be completed within 3 years of receipt of the verification. Audits are completed within 1 to 100 weeks (some audits may have taken even longer), with an average of 17 weeks (based on recorded data).

In contrast, according to the Massachusetts DEP and LSP Association (LSPA) (which is the professional organization for Licensed Site Professionals in Massachusetts), screenings in Massachusetts typically take a couple of days and comprehensive audits usually take 4 to 6 weeks, with special or very unique cases taking much longer. New Jersey's Licensed Site Remediation Professional audit program is very new and therefore, useful data on its audit program has not yet been developed.

Each state recognizes the need for guidance and education to further its audit program; for example, Massachusetts presents educational seminars specifically designed to transmit actual

case studies of sites that have been audited. These seminars help the LSPs to better understand the Department's approach to conducting audits and evaluating the LSPs' submittals for compliance with regulations and quality and scope of investigation and remediation. In Connecticut, suggestions for educational improvement have included posting redacted audit findings, posting of professional experience and disciplinary records, posting questions and answers, use of checklists and applicable regulations and DEEP policies.

Area 3. The role of the oversight board in Connecticut and a comparison to similar boards in other states.

In Connecticut, Massachusetts, and New Jersey the licensing boards were established to implement and oversee the performance of the individual licensed environmental professional programs. Specifically, their purposes include:

- review, approval or denial of license applications;
- administration and evaluation of licensing examination;
- issuance of licenses (or in some cases authorize the Commissioner to issue license);
- investigation of complaints and disciplinary actions, including suspension or revocation of a license;
- establishment of standards and requirements for continuing education of licensees; and
- approval and/or offering of continuing education courses.

Each of these states has independent licensing boards. However, unlike Massachusetts, those in Connecticut and New Jersey exist within the Department of Environmental Protection (DEEP in Connecticut). The workgroup is not aware of any issues associated with where the "LEP Board" resides in State government. The workgroup was told that in New Jersey, the supervisory board collects the fees from the program and utilizes New Jersey DEP staff.

This report has already included information that reveals the lack of regulations associated with many aspects of the LEP Program relative to similar programs in other states. In contrast, the LEP regulations do seem to include many of the same elements of the LSP Board's regulations, for example, including the Rules of Professional Conduct, which specify requirements for the professional conduct and behavior of licensed environmental professionals when performing their professional services. In general, the LEP Board has been successful in administrating the

LEP Program effectively and has made efforts to change its regulations and policies to improve performance of the program over the years as issues have been identified. Specifically, the following are some of the issues the Board has addressed:

- The Board is required to track the administration of the licensure examination. A job analysis study (CAS, 1997) was conducted to establish and validate appropriate content for the environmental professionals' licensure examination. In 1996, prior to the first examination, the Board allowed applicants to qualify as an Interim Environmental Professionals. During the first two years of the program (1997 and 1998), the examination was administered biannually and annually thereafter (in contrast Massachusetts has made efforts to administer their licensing examination more frequently). Since 1997, on average approximately 47 applicants per year sit for the examination and on average approximately 47 % pass/become licensed;
- Although this accounts for approximately 22 additional LEPs each year, the Board notes that the cumulative number of licensees is starting to become asymptotic, because the number of new licensees is offset by the number of licensees retiring or opting out of the LEP Program for various reasons. These reasons have included inability to use license in a meaningful way, switching careers and voluntary surrenders of licenses following audits. The statistics maintained by the LEP Board appear to reveal an adequate administration associated with professional qualifications and licensure examination. It must be noted that any changes to the LEP program, including those that broaden the application of the program, will require revisiting the Job Analysis Study; and
- One aspect of the original LEP regulations that proved problematic for successful implementation of the LEP Program from the LEP Board's perspective was the manner in which the Board was required by regulation to address complaints regarding LEP performance and conduct investigations in response to such complaints. In addition, the original regulations contained limited options for discipline. Recognizing the issues presented by its own regulations, the Board undertook an extensive and in-depth review of the complaint, investigation, and adjudicatory process, which included evaluation of procedures used by similar licensing boards. As a result of this review, the LEP Board has adopted new/amended regulations that provide greater flexibility in the disciplinary purview of the LEP Board, greatly improving the disciplinary process and supporting its own role in ensuring that LEPs perform in a manner that meets the standards expressed in the Rules of Professional Conduct.

In accordance with CGS Section 22a-133v-6, the Rules of Professional Conduct apply to LEPs "in order to establish and maintain a high standard of integrity, skill, and practice and to safeguard the health, safety, property and welfare of the public." Such language

appears in the regulations for most similarly licensed professionals, including professional engineers, and was undoubtedly included in Codes of Professional Conduct to foster public trust and facilitate a privatized system. The ability of the LEP Board to now respond to complaints against LEPs in a fair and timely manner and discipline LEPs in a manner appropriate for the nature of a violation should serve to increase public confidence in the LEP Program in as a whole, and represents a notable improvement in the operation of the LEP Program.

- The oversight boards for similar program in other states and those for other professions have varying ideas on how to implement continuing education. The LEP and LSP Boards each have fairly rigorous requirements and procedures associated with continuing education, possibly due to the fact that the profession was new when the original regulations were promulgated, as compared to other licensed professions (such as doctors and attorneys). Other licensed professional programs have a self-implementing approach to continuing education (i.e., it is the professional's responsibility to seek out appropriate courses and maintain their own records of attendance, although many programs specified that audits would be conducted on a random basis to ensure that licensed professional were, in fact, meeting their obligations for continuing education). In contrast, The LEP Board reviews and approves courses used for continuing education credit and requires licensees to provide proof of attendance upon license renewal. An LEP is required to obtain 24 continuing education credits (CECs) within two years (for an average of 12 CECs per year). In contrast, an LSP is required to obtain 48 CECs in three years (for an average of 16 CECs per year). The LSP regulations also require that a specific number of credits during a renewal cycle be regulatory in nature and also that a specific number of credits be from courses sponsored by the Massachusetts Department of Environmental Protection; and
- The Environmental Professionals' Organization of Connecticut (EPOC), the professional organization for LEPs in Connecticut, has recently studied the subject of distance learning as a possibility for LEPs to obtain required continuing education credits and has prepared a white paper on the subject for submittal to the LEP Board that was designed to assist the LEP Board in approving such courses for continuing education credit (EPOC Education Committee Distance Learning White Paper, attached as Appendix H). The LEP Board has indicated the desire to approve distance learning options for LEPs, while maintaining the requisite standards of traditional courses. This is reflected in the recently approved online courses "Pneumatic Slug Testing" and "Determining Hydraulic Conductivity while Low Flow Sampling, "which are the first of their kind to be approved of by the LEP Board.

It would be difficult to point to any aspect of the LEP Board as one that has materially contributed to the slow pace of site closures associated with the LEP Program. On the contrary, the workgroup believes the LEP Board has made substantial efforts to constantly improve the program by adopting regulations that allow more flexibility, while simultaneously supporting the basis of the LEP program. Clearly, the incremental changes associated with the LEP Board, may appear uncomplicated relative to the difficult choices associated with the process of extensive transformation, but it surely provides an encouraging model for what can be accomplished.

Recommendations

The recommendations presented below are, by necessity, general in nature because of the compressed timeframe in which this Workgroup met. One of the most important recommendations that we make is that additional workgroups be created to address each of the recommendations made herein.

The goal of our recommendations would be to improve the LEP program such that the public and private sectors have confidence that the original intent of the legislation is being met and to encourage site clean-up. To accomplish this goal, it will be necessary to create tools and regulations that allow the current LEP program to realize its full potential and close out sites. These recommendations reflect a workgroup consensus, with the condition that they are not stand alone, but in fact, many are interrelated and must be implemented together. These include, but are not limited to:

- Enacting regulations that address the process by which sites move through the program;
- Establishing a single cleanup program under which spills and historical contamination are addressed;
- Accepting electronic submittals;
- Establishing milestone reporting and interim submittals to track progress and expedite investigation and remediation;
- Establishing an appropriate fee structure and timelines to support site closure;
- Increasing DEEP transparency on policy, decision making and tracking metrics;

- Developing tracking metrics within DEEP to measure effectiveness of the LEP program and site closure, then publishing the results of those metrics on a regular basis;
- Enacting regulations that create an audit program at DEEP that is similar to the Massachusetts model;
- Increasing transparency with LEP Board oversight;
- Developing an investigatory process by the LEP Board that achieves timely review and consistent outcome of disciplinary actions;
- Creating DEEP policy and guidance that establishes a clear expectation for standard of care by LEPs, including but not limited to, guidance and checklists for each step of the process;
- Continuing DEEP's development of educational programs, which may include partnering with the private sector. A percentage of required education should be associated with DEEP procedural education (RSR course, Audit course, etc.)and directed by DEEP (for example Audit Case Studies similar to Massachusetts); and
- Creating an ongoing workgroup to examine the effectiveness of the LEP program, including solicitation of input from all affected parties.

Discussions

Although there has been insufficient time to discuss the details, it is clear that some changes will be easier to implement than others. Clearly changing to one overall program is easier to suggest than to implement. The same is true for the enforcement of timelines and assessing compliance fees and the enactment of suitable regulations to embrace the privatization of the LEP program. However, we believe these issues overlap with the scope presented to other workgroups.

The workgroup discussed the different approaches to transformation being either:

- Complete overhaul of the program, as was done Massachusetts and in New Jersey, with New Jersey providing a transition period; or
- Continued incremental changes consistent with Connecticut's past changes.

The incremental changes made to date have had a positive impact, but have not fully produced the changes necessary to accomplish the original goals of the legislation, which were to expedite the investigation and remediation of sites. Consequently, the workgroup recommends that for effective transformation to occur, Connecticut should move forward with a complete revision of the program, which may include some elements of the existing program.

The Workgroup recommends that Connecticut move forward using a standardized approach to the solicitation of stakeholder input and evaluation of Connecticut's environmental programs.

Appendixes

Appendix A – Section 22a-133v of Connecticut General Statutes

Appendix B – Glossary of Terms

Appendix C – Connecticut Department of Environmental Protection's Licensed Environmental Professional (LEP) Overview & Incentive Committee

Appendix D – Massachusetts Contingency Plan and Response Action Performance Standards

Appendix E – Massachusetts Department of Environmental Protection's Audit Program

Appendix F – Connecticut Department of Environmental Protection's Audit Program

Appendix G – Connecticut Department of Environmental Protection's LEP Audit Program Information

Appendix H – Environmental Professionals of Connecticut Education Committee Distance Learning White Paper

<u>Appendix A – Section 22a-133v of Connecticut General Statutes</u>

Sec. 22a-133v. Licensed environmental professionals. Definitions. Licensing board. Standard of care. Issuance of license. Fees. Suspension or revocation of license or other sanction.

Examination. (a) As used in this section: (1) "Environmental professional" means a person who is qualified by reason of his knowledge, as specified in subsection (e) of this section, to engage in activities associated with the investigation and remediation of pollution and sources of pollution including the rendering or offering to render to clients professional services in connection with the investigation and remediation of pollution and sources of pollution; (2) "pollution" means pollution, as defined in section 22a-423; and (3) "commissioner" means the Commissioner of Environmental Protection or his designated agent.

- (b) There shall be within the Department of Environmental Protection a State Board of Examiners of Environmental Professionals. The board shall consist of eleven members. One member, who shall be the chairman of the board, shall be the Commissioner of Environmental Protection, or his designee. The Governor shall appoint the other ten members of the board who shall consist of the following: Six members shall be licensed environmental professionals or, prior to the publication by the board of the first roster of licensed environmental professionals, persons on the list maintained by the commissioner pursuant to subsection (h) of this section, including at least two having hydrogeology expertise and two who are licensed professional engineers; two members who are active members of an organization that promotes the protection of the environment; one member who is an active member of an organization that promotes business; and one member who is an employee of a lending institution. The members of the board shall administer the provisions of this section as to licensure and issuance, reissuance, suspension or revocation of licenses concerning environmental professionals. The Governor may remove any member of the board for misconduct, incompetence or neglect of duty. The members of the board shall receive no compensation for their services but shall be reimbursed for necessary expenses incurred in the performance of their duties. The board shall keep a true and complete record of all its proceedings.
- (c) A licensed environmental professional shall perform his duties in accordance with the standard of care applicable to professionals engaged in such duties. The commissioner, with advice and assistance from the board, may adopt regulations, in accordance with the provisions of chapter 54, concerning professional ethics and conduct appropriate to establish and maintain a high standard of integrity and dignity in the practice of an environmental professional and may make rules for the conduct of the board's affairs and for the examination of applicants for licenses.

- (d) The commissioner shall receive and account for all moneys derived under the provisions of this section and shall deposit such moneys in the Environmental Quality Fund established pursuant to section 22a-27g. The board shall keep a register of all applications for licenses with the actions of the board thereon. A roster showing the names of all licensees shall be prepared each year. A copy of such roster shall be placed on file with the Secretary of the State.
- (e) The board shall authorize the commissioner to issue a license under subsection (d) of section 22a-133m, sections 22a-184 to 22a-184e, inclusive, this section and section 22a-133w to any person who demonstrates to the satisfaction of the board that such person: (1) (A) Has for a minimum of eight years engaged in the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater, including a minimum of four years in responsible charge of investigation and remediation of the release of hazardous waste or petroleum products into soil or groundwater, and holds a bachelor's or advanced degree from an accredited college or university in a related science or related engineering field or is a professional engineer licensed in accordance with chapter 391, or (B) has for a minimum of fourteen years engaged in the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater, including a minimum of seven years in responsible charge of investigation and remediation of hazardous waste or petroleum products into soil or groundwater; (2) has successfully passed a written examination, or a written and oral examination, prescribed by the board and approved by the commissioner, which shall test the applicant's knowledge of the physical and environmental sciences applicable to an investigation of a polluted site and remediation conducted in accordance with regulations adopted by the commissioner under section 22a-133k and any other applicable guidelines or regulations as may be adopted by the commissioner; and (3) has paid an examination fee of one hundred eighty-eight dollars to the commissioner. In considering whether a degree held by an applicant for such license qualifies for the educational requirements under this section, the board may consider all undergraduate, graduate, postgraduate and other courses completed by the applicant.
- (f) The board shall authorize the commissioner to issue a license to any applicant who, in the opinion of the board, has satisfactorily met the requirements of this section. The issuance of a license by the commissioner shall be evidence that the person named therein is entitled to all the rights and privileges of a licensed environmental professional while such license remains unrevoked or unexpired. A licensed environmental professional shall pay to the commissioner an annual fee of three hundred thirty-eight dollars, due and payable on July first of every year beginning with July first of the calendar year immediately following the year of license issuance. The commissioner, with the advice and assistance of the board, may adopt regulations in

accordance with the provisions of chapter 54, pertaining to the design and use of seals by licensees under this section and governing the license issuance and renewal process, including, but not limited to, procedures for allowing the renewal of licenses when an application is submitted not later than six months after the expiration of the license without the applicant having to take the examination required under subsection (e) of this section.

- (g) The board may conduct investigations concerning the conduct of any licensed environmental professional. The commissioner may conduct audits of any actions authorized by law to be performed by a licensed environmental professional. The board shall authorize the commissioner to: (1) Revoke the license of any environmental professional; (2) suspend the license of any environmental professional; (3) impose any other sanctions that the board deems appropriate; or (4) deny an application for such licensure if the board, after providing such professional with notice and an opportunity to be heard concerning such revocation, suspension, other sanction or denial, finds that such professional has submitted false or misleading information to the board or has engaged in professional misconduct including, without limitation, knowingly or recklessly making a false verification of a remediation under section 22a-134a, or violating any provision of this section or regulations adopted under the provisions of this section.
- (h) The board shall hold the first examination pursuant to this section no later than eighteen months after the date the commissioner adopts regulations pursuant to section 22a-133k, and shall publish the first roster of licensed environmental professionals no later than six months after the date of such examination. Until such time as the board publishes the first roster of licensed environmental professionals, any person who (1) has for a minimum of eight years engaged in the investigation and remediation of releases of hazardous waste or petroleum products into soil or groundwater, including a minimum of four years in responsible charge of investigation and remediation of the release of hazardous waste or petroleum products into soil or groundwater, (2) holds a bachelor's or advanced degree from an accredited college or university in a related science or related engineering field or is a professional engineer licensed in accordance with chapter 391, and (3) pays a registration fee of two hundred twenty-five dollars may apply to the commissioner to be placed on a list of environmental professionals. Any person on such list may perform any duties authorized by law to be performed by a licensed environmental professional until such time as the first roster of licensed environmental professionals is published by the board.
- (i) Nothing in this section shall be construed to authorize a licensed environmental professional to engage in any profession or occupation requiring a license under any other provisions of the general statutes without such license.

(P.A. 95-183, S. 4; P.A. 96-113, S. 15, 17; 96-180, S. 132, 166; June 30 Sp. Sess. P.A. 03-6, S. 117; P.A. 06-76, S. 16; P.A. 07-81, S. 1.)

History: P.A. 96-113 amended Subsec. (h) to change the first examination of licensed environmental professionals from no later than one year to no later than 18 months after the date the commissioner adopts regulations, effective May 24, 1996; P.A. 96-180 amended Subsec. (b) to correct a statutory reference, effective June 3, 1996; June 30 Sp. Sess. P.A. 03-6 amended Subsec. (e) to increase examination fee from \$125 to \$188, amended Subsec. (f) to increase annual fee from \$225 to \$338 and to delete provision re specification of fees in regulations and amended Subsec. (h) to increase registration fee from \$150 to \$225, effective August 20, 2003; P.A. 06-76 amended Subsec. (e) to allow the board to consider all undergraduate, graduate, postgraduate and other courses completed by the applicant and amended Subsec. (f) to allow the commissioner to adopt regulations governing the license issuance and renewal process; P.A. 07-81 amended Subsec. (g) to add Subdiv. designators (1), (2) and (4), add Subdiv. (3) re imposition of other sanctions and make conforming and technical changes.

See website - http://cga.ct.gov/2009/pub/Chap445.htm#Sec22a-133v.htm

<u>Appendix B - Glossary of Terms Used in the Report or in Documents</u> Referenced in it.

AOC - Area of Concern

BOARD OF EXAMINERS OF ENVIRONMENTAL PROFESSIONALS - This board is responsible for the licensing, reissuance, suspension or revocation of licenses for environmental professionals in Connecticut.

DEEP, DEP - The Department of Energy and Environmental Protection succeeded the Department of Environmental Protection. References to the DEP should be understood to refer to the current DEEP. The term "Commissioner of Environmental Protection" now refers to the DEEP Commissioner

ECAF- An "Environmental Conditions Assessment Form" is required to be submitted when establishments are transferred. As such, it is an indicator of the number of establishments considered.

ELUR – An "Environmental Land use Restriction" is a limitation in any instrument executed and recorded on the land records of the municipality in which such land is located, as prescribed in sections 22a-133n and 22a-133o of the Connecticut General Statutes, the purpose of which is to minimize the risk of human exposure to pollutants and hazards to the environment by 1) preventing the use of specified real property for certain purposes or 2) prohibiting certain activities on such properties.

ESTABLISHMENT - When used in this report, refers to properties with specific historic uses listed in the Property Transfer Act for which it is required that an investigation of contamination and remediation is required prior to their sale or transfer.

FORM I, FORM II, FORM III, and FORM IV - These are forms that are submitted DEEP by a Licensed Environmental Professional (LEP). They describe the contamination history of a piece of property, called an "establishment", with a current or former use that raises the probability that it is contaminated. The list of establishment categories and a precise definition of Form I through Form IV is in Section 22a-134 of the Connecticut General Statutes.

LEP - "Licensed Environmental Professional" in Connecticut is the term for a professional who has been licensed to perform investigations to describe the nature and extent of contamination on a property and to design a remediation plan for it. Other states have similar environmental professionals, though their authority varies. Equivalent professionals are referred to as LSPs in Massachusetts and LSRPs in New Jersey.

PRIVATIZED - This is the term used in the report to describe a system in which LEPs have authority to make decisions about remediation methods without having to first seek approval of the DEEP.

Appendix C: LEP Overview & Incentive Committee

2/9/07

Based on the general quality of reports submitted to DEP, including, but not limited to annual status reports, technical reports and Verification Reports, the Department established the LEP Overview and Incentive Committee. The ultimate goal of the committee was to determine what can be done to promote a better work product from LEPs. In other words, identify main areas within the LEP Program and the Remediation Division in which some mechanisms can realistically be established - or emphasized - to promote a greater % of acceptable verifications (and foster a greater sense of comfort/trust for the end product by both regulators and public); and recommend solutions to address the concerns.

The committee's assessment proceeded in a phased approach. The first phase required identification of the likely problems and/or problematic processes - due to apparent LEP practices and those potentially a result of DEPs practices. The 2nd phase then focused on what measures, or actions, could be instituted to address the issues.

Committee Members: Rob Robinson, Audit Program Coordinator

Ray Frigon, EAIII - SouthCentral District Dan White, EAII - Northwestern District Sarah Battistini, EAI - Northwestern District

Based on a consensus of the committee, the following represents the top thirteen solutions which can be realistically established or completed. These have been ranked in consideration of the importance and ease/opportunity to initiate and/or act on the solutions. Many of the items were identified to address the **final** work product of an LEP.

- #1. Accountability
- #2. Finalize Guidance Documents
- #3. Written Guidance on Verification Report
- #4. Guidance Document Coordinator
- #5. Post Pertinent DEP Documents
- #6. Staff Responses to LEP Questions
- #7. Consistency within DEP
- #8. Provide Audit Reports to EPOC Board

- #9. Consumer's Guide for Hiring a LEP
- #10. Finalize Policies / Procedures
- #11. Fill Open Position On LEP Board
- #12. Continue to Support Educational Forums
- #13. Technical Practices Workgroups

#1. Accountability:

The most effective means to encourage a better work product from LEPs is **Accountability**. The LEP must be held accountable for his/her actions. The mechanisms for this accountability is the continued audit process, providing public access to disciplinary records (public embarrassment), and referring complaints to the LEP Board for disciplinary actions (potential disciplinary action against license). The expectation by an LEP that they will be accountable for their opinions and actions as a licensed environmental professional - by regulators and/or by embarrassment to their peers and potential clients - is a prime motivator for a more critical review of their own work prior to presentation.

The 3 main factors/solutions for accountability include:

- 1. Personal accountability for opinion: the audit process is an active solution.
- 2. Public accountability: public access to the LEPs records would be a great deterrent. Although the verification history of an LEP cannot be posted on the WEB, a contact name to access this information is viable. Also, posting Audit Reports on the WEB will provide means for the public to access information.
- 3. Licensure accountability: the referral of LEPs to the Board (Board of Examiners of Environmental Professionals) must be re-activated.

#2. Finalize Guidelines:

Written guidelines for the LEPs provide assurance that their actions are in accordance with expectations. It also provides the LEPs with written ammunition to present to their clients to justify actions. Written in-house procedures/processes provide DEP staff with the necessary guidance, which promotes a lean use of resources and ensures consistency. The following guidance documents are in the queue for completion: Site Characterization Guidance Document; Reference Document for the Audit Program [Processing and screening Verifications]; and QA/QC Enhanced Laboratory Methods.

#3. Written Guidance on Verification Report:

It appears to be most important that we need to provide written documentation on what is DEPs expectations/ requirements of LEPs related to how to submit a verification, such as: the Verification Report - and specifics on what this report is to include (such as: the level of detail or summarization, historical report references, the types of supporting documentation expected, how it is to be presented, etc.). The concept (and

requirement?) of a Verification Report was presented at an educational forum "Effective Site Characterization through Conceptual site Modeling, June 2004"; however, the message is not getting across and DEP has not provided any written guidance on how to prepare or submit a verification.

This type of document will leave no doubt as to what DEP expects as support for a verification. Posting of this 'Documentation Requirements for a Verification' is an immediate way of disseminating this information. Including this topic in future educational forums will also benefit LEPs and DEP staff.

→The current document will require some revisions to address DEP concerns and to format in a proper guidance document. However, the resource commitment should not be great, as the majority of the document (components and concepts) has already been drafted.

#4. Guidance Document Coordination:

It would be beneficial to DEP and the public to assign staff (one or more) to coordinate, track and maintain the various Remediation Division guidance documents. This may also include program fact sheets. This centralized processing/coordination of guidance documents would ensure proper and consistent management of such. The duties would include:

- 1. evaluating the current library of guidance documents to determine if they are still applicable,
- 2. get a listing of those guidance documents in the process of being drafted and those in the queue, and
- tracking the assignment, progress, and dissemination of all guidance documents. Note: actual assignment of personnel to draft guidance documents is not the responsibility of this effort.

#5. Post Pertinent DEP Documents:

It was determined that accessibility to information would be beneficial to LEPs (and the general public). The posting of pertinent DEP documents related to the Remediation Division on the WEB would provide means of accessibility. These documents include: fact sheets; key policies (such as our "Policy on Upgradient Contamination"); guidance documents; Approval Request or Notice Transmittal form; verification and audit related materials; etc.

The posting of <u>Key Audit Issues</u> may provide a reference to LEPs for a check on their CSM and site information and whether they are ready to verify. The Key Audit Issues will be similar to the checklist of outstanding issues identified during the screening of a verification.

The types of documents to be posted should be finalized, the library of documents available must be reviewed for applicability (obsolete or germane), and the documents revised to meet current WEB requirements. This can be done relatively soon. It is recognized that, to some extent, this is already in process.

The division will need a WEB manager to oversee this process. This effort could be coordinated with Solution #4. Camille Fontanella has been charged with the general WEB Manager responsibilities for the Remediation Division, but we may need to define/refine the scope of those duties.

#6. Staff Responses to LEP Questions:

This was identified as an issue in part because of persistent claims that DEP is inconsistent. Some LEPs tend to 'shop around' for the best answer, often manipulating an answer with leading questions and/or scenarios. Questions and answers related to the RSRs are not as much of an issue, as site characterization issues (and sufficient information to <u>apply</u> the RSRs).

Solutions:

- i. On LEP fishing expeditions, staff should ask initial core questions, such as: Is there a current DEP staff assigned? How many DEP staff have you asked this question?
- ii. If a question or scenario is presented as a hypothetical, present answer as hypothetical, with the following qualifier.
- iii. Staff should qualify all answers with a "based on the information provided" type of response if going to respond.

This solution can be implemented at once, but may not be as easy as it appears as staff handle a wide variety of issues, programs, and situations; and individual personalities (both within and outside DEP) influence the degree / level of interaction.

#7. <u>Consistency within DEP</u>:

Another aspect of the "consistency" concern, is the actual degree of review performed by staff. Because of the same reasons as stated above, staff differ on what are important issues of concern, what constitutes a significant data gap, how to present these issues to the LEP, etc.

This issue can be addressed at the "End Product" (Verification) by providing written guidance for staff on how to screen a verification and supporting documentation. This has been drafted and reviewed, and presentations of the guidance to staff will commence in February.

#8. Provide Audit Reports to EPOC Board:

This can be done immediately. Upon completion of an audit, the Audit Report can either be redacted or not, and sent to the EPOC Board. They will have to decide if and how these Audit Reports can/will be used - not as an "accountability" process, but as a tool for education. As mentioned in Solution #1, Audit Reports should also be posted on the WEB.

#9. "Consumer's Guide for Hiring an LEP"

This solution may provide some guidance for Certifying Parties, property owners, etc. on what are important things to seek when choosing an LEP to verify remediation of their site. This consumer's guide would be located on the WEB, and would include:

- FAQ type of process
- what should consumer be asking LEP, looking for in LEP, etc.
 - references
 - appropriate experience/knowledge for type of site +/or ops
 - contact DEP for actions against LEP (either audit of verification or referral to Board)

#10. Finalize Policies/Procedures:

Most important policy that this committee deems necessary is: ►How much resource or type of resource (staff time) do we dedicate to sites which have been delegated to an LEP. ■The current dedication of staff time on LEP-lead sites covers both extremes: (1)

log in status reports and file; to (2) perform a full technical review of status reports and provide written feedback to LEP, if staff feels necessary to get LEP on track or to highlight an issue DEP staff believes is not being addressed by the LEP.

This range of involvement also lends credence to the 'inconsistencies of DEP'.

#11. Fill Open Position(s) on LEP Board:

This was identified as a potential concern related to the accountability issue; however it warranted a separate solution.

Apparently, the Board has already initiated steps to fill the 2 open positions, therefore, this issue has been addressed.

#12. Continue to Support Educational Forums:

Continued involvement in the continuing education of LEPs is essential. An Education Committee has been convened and meets on a monthly basis. The purpose of the committee is to identify educational needs for LEPs to fulfill their continuing education requirements for their license, and to coordinate and sponsor the seminars or classes to address those needs. DEP had 2 positions on this committee (EdCom); however, only one position is currently filled (by the DEP EdCom Liaison: Rob Robinson). The other DEP position should be filled.

In addition to EdCom, DEP occasionally presents educational forums for LEPs on various topics, such as the RSRs, site characterization, audit program, etc. However, many seminars sponsored and presented by DEP for LEPs are not always presented to staff in a similar forum. A better effort to provide continuing in-house educational opportunities for staff is fully warranted.

EPOC generally offers evening technical presentations (always held at 6:00 pm at the Rocky Hill Marriott) which are open to all. Attendance at these forums has not been restricted because of ethical issues.

On a side note: the availability of the seminars and classes presented through EdCom are one-sided. DEP staff do not have the same access to these technically oriented classes. These classes include such topics as Bedrock Fracture Analyses, Groundwater Modeling, Environmental Statistics, USGS Monitored Natural Attenuation, and Fractured rock/Pumping Test Analysis. Consequently, while LEPs have the requirement and

availability to continue and expand their knowledge, DEP staff are at a disadvantage. In addition, DEP access to EdCom sponsored events is not possible under the current ethical restrictions.

#13. Technical Practices Workgroups:

This is actually a subset of Solution #2; however, this was designated a separate solution because of the effort to complete these guidance documents.

In a cooperative venture between DEP and EPOC, and coordinated through the Technical Liaison (DEP) with EPOC, several workgroups were established to draft 'white papers' for guidance on specific topics/issues. A listing of the topics and workgroups are attached at end-of-document.

The process was set up with a co-lead of DEP and EPOC, with additional members if the technical practice warranted such (complexity, interest, etc.); then a review team - for each draft white paper - was set; upon completion, the white paper would be provided to EPOC Board and DEP for final review; then white paper would be published as guidance.

Some of the workgroups have completed their tasks, some of the topics became obsolete, some were very close to completion, and the QA/QC workgroup, has been proceeding full-bore. However, as a whole, the Technical Practices Workgroups appear to have lost steam. The Technical Practices Workgroups should be re-energized. This will require designating a new technical liaison to EPOC [no-one seems to recall who our technical liaison was], schedule a meeting through EPOC Board with all previously established workgroup leads, and set some realistic deadlines for white papers.

<u>Appendix D - Massachusetts Contingency Plan and Response Action</u> Performance Standards

40.0191: Response Action Performance Standard (RAPS)

- (1) The Response Action Performance Standard (RAPS) is the level of diligence reasonably necessary to obtain the quantity and quality of information adequate to assess a site and evaluate remedial action alternatives, and to design and implement specific remedial actions at a disposal site to achieve a level of No Significant Risk for any foreseeable period of time and, where feasible, to reduce to the extent possible the level of oil and/or hazardous materials in the environment to background levels.
- (2) RAPS shall be employed during the performance of all response actions conducted pursuant to 310 CMR 40.0000, and shall include, without limitation, the following:
 - (a) consideration of relevant policies and guidelines issued by the Department and EPA;
 - (b) use of accurate and up-to-date methods, standards and practices, equipment and technologies which are appropriate, available and generally accepted by the professional and trade communities conducting response actions in accordance with M.G.L. c. 21E and 310 CMR 40.0000 under similar circumstances; and
 - (c) investigative practices which are scientifically defensible, and of a level of precision and accuracy commensurate with the intended use of the results of such investigations.
- (3) The application of RAPS shall be protective of health, safety, public welfare and the environment and shall include, without limitation, in the context of meeting the requirements of this Contingency Plan, consideration of the following:
 - (a) technologies which reuse, recycle, destroy, detoxify or treat oil and/or hazardous materials, where feasible, to minimize the need for long-term management of contamination at or from a disposal site;
 - (b) containment measures as feasible Permanent Solutions only where reuse, recycling, destruction, detoxification and treatment are not feasible;
 - (c) remedial actions to reduce the overall mass and volume of oil and/or hazardous material at a disposal site to the extent feasible, regardless of

whether it is feasible to achieve one or more Temporary Solutions and/or Permanent Solutions or whether it is feasible to achieve background for the entire disposal site and not include the dilution of contaminated media with uncontaminated media; and

(d) response actions to restore groundwater, where feasible, to the applicable standards of quality within a reasonable period of time to protect the existing and potential uses of such resources.

40.0193: Technical Justification

- (1) A Licensed Site Professional may provide technical justification for forgoing any specific activity required by 310 CMR 40.0000, related to Initial Site Investigation Activities performed in accordance with 310 CMR 40.0405(1), Phase I Initial Site Investigation Activities performed in accordance with 310 CMR 40.0480 through 310 CMR 40.0483, Phase II Comprehensive Site Investigation Activities performed in accordance with 310 CMR 40.0830, and Phase III Identification and Evaluation of Response Action Alternatives performed in accordance with 310 CMR 40.0850 through 310 CMR 40.0860, if in his or her professional judgment any particular requirement is unnecessary or inappropriate based upon the conditions and characteristics of a disposal site. The LSP shall employ RAPS in determining whether any such activity is unnecessary or inappropriate.
- (2) When forgoing any particular activity in accordance with 310 CMR 40.0193(1), the LSP shall identify such activity, and shall set forth the basis for such technical justification, in the pertinent submittal.

<u>Appendix E – Massachusetts Department of Environmental</u> <u>Protection's Audit Program</u>

SUBPART K: AUDITS

40.1101: Purpose, Scope and Applicability

- (1) The regulations published at 310 CMR 40.1101 through 310 CMR 40.1199, collectively referred to as 310 CMR 40.1100, establish procedures for the Department to audit a sufficient number of response actions not overseen or conducted by the Department to ensure that those response actions are performed in compliance with M.G.L. c. 21E, 310 CMR 40.0000, 310 CMR 40.000 and any other requirement applicable to such response actions.
- (2) During each fiscal year, the Department shall audit at least 20% of all sites for which annual compliance assurance fees are required to be paid pursuant to M.G.L. c. 21E, ∋ 3B. The Department may establish additional audit targets for categories of persons, response actions or sites based on the level of Department oversight provided to each category.
- (3) In its audit of any response action submittal, the Department shall base its finding of any violation or assessment of a penalty on the Massachusetts Contingency Plan and Response Action Performance Standard in effect at the time of its receipt of the submittal.

40.1110: Selection of Persons, Response Actions and Sites for Audit

- (1) The Department may conduct an audit of any RP, PRP, Other Person, response action or site in accordance with 310 CMR 40.1100. The Department selects persons, response actions and sites for audit randomly (Random Audits) and by criteria-specific methods (Targeted Audits).
- (2) Except as provided in 310 CMR 40.1110(3) and 310 CMR 40.1110(4), the Department may initiate an audit of any specific RP, PRP, Other Person, response action or site without any limitation as to time.
- (3) Except as provided in 310 CMR 40.1110(5), the Department shall not initiate a Random Audit with respect to any specific person, response action or site after two years has passed since the date of the Department's receipt of:
 - (a) a Class A or Class B Response Action Outcome Statement; or
 - (b) an LSP Evaluation Opinion stating that the requirements for a Class A or B Response Action Outcome have been achieved from such person and/or pertinent to such response action and/or site. Except as expressly provided by 310 CMR 40.1110(4), 310 CMR 40.1110(3) shall not be construed to limit the

Department's authority to initiate a Targeted Audit of any person, response action or site.

- (4) Except as provided in 310 CMR 40.1110(5), the Department shall not initiate a Targeted Audit of any RP, PRP, Other Person, response action or site after five years has passed since the date of the Department's receipt of a Class A or Class B Response Action Outcome Statement from such person and/or pertinent to such response action and/or site, unless the Department has reason to believe that:
 - (a) response actions taken at a site may have failed to achieve or maintain a level of No Significant Risk; or
 - (b) a significant risk of harm to health, safety, public welfare or the environment may exist at a site, or in the vicinity of a site, for which a Response Action Outcome Statement has been submitted to the Department; or
 - (c) a response action has been taken at a site in noncompliance with M.G.L. c. 21E, 310 CMR 40.0000 or any other applicable requirement; or
 - (d) the Response Action Outcome Statement has failed to identify material facts, data, or other information known by the LSP who rendered the Response Action Outcome Statement or by the person who undertook response actions at a site; or
 - (e) the person responsible for undertaking response actions at a site has failed to fully respond to a Request for Information; or
 - (f) the activities, uses and/or exposures upon which a Response Action Outcome Statement is based have changed to cause human or ecological exposure, or cause an increased potential for human or environmental exposure, to oil and/or hazardous material; or
 - (g) any person required by 310 CMR 40.0014 to retain documents pertinent to the Response Action Outcome Statement has failed to do so; or
 - (h) any person required by 310 CMR 40.0800 to perform operation and maintenance and monitoring activities at the site has failed to do so; or
 - (i) any person undertaking, performing, managing, supervising or overseeing response actions at the site has engaged in a pattern of noncompliance, considering the criteria set forth in 310 CMR 5.13;
 - (j) any person responsible for undertaking response actions at a disposal site has violated, suffered, allowed or caused any person to violate an Environmental Restriction; or
 - (k) any change in activity, use and/or exposure upon which a Response Action Outcome Statement is based occurred at a disposal site without an evaluation

by an LSP in accordance with 310 CMR 40.1080 and without additional response actions, if necessary.

(5) Notwithstanding any provision in 310 CMR 40.1110(3) or 310 CMR 40.1110(4), the Department may initiate, at any time, a Random or Targeted Audit of any site subject to an Activity and Use Limitation.

40.1120 Audit Activities

- (1) During an audit, the Department may do the following:
 - (a) examine documents within the Department's records;
 - (b) request that the person who has performed the response action provide a written explanation, or other supporting evidence, to demonstrate compliance with M.G.L. c. 21E, 310 CMR 40.0000, and other applicable requirements;
 - (c) request that the person who has performed the response action that is the subject of the audit appear at one of the Department's offices to discuss response actions and provide supporting evidence to demonstrate compliance with M.G.L. c. 21E, 310 CMR 40.0000, and other applicable requirements;
 - (d) enter and inspect a site or other location to determine whether an RP, PRP, Other Person, response action or site is in compliance with M.G.L. c. 21E, 310 CMR 40.0000, and other applicable requirements;
 - (e) investigate, take samples at a site and inspect records, conditions, equipment or practices material to the response action or property related to the site; and
 - (f) take any other actions the Department deems necessary to determine whether response actions have been performed in compliance with M.G.L. c. 21E, 310 CMR 40.0000, and other applicable requirements.
- (2) Any person requested to appear for an interview may be represented by an attorney, Licensed Site Professional or other representative.

40.1130: Initiation of Audit

Prior to undertaking an audit activity other than an examination of documents within the Department's records, or within other public records, the Department shall provide reasonable Notice of Audit to the person who has performed response actions at the site that the site has been selected for audit. Such notice shall include the following information:

- (1) the name and location of the site;
- (2) the Release Tracking Number(s);
- (3) the scope of the audit and the type of audit activities to be performed;

- (4) the location at which the audit will be conducted; and
- (5) any other notice, information or request the Department deems appropriate.

40.1131: Response Actions During Audits

Persons who have been notified of the initiation of an audit may continue to conduct response actions during the course of an audit unless otherwise ordered by the Department.

40.1140: Notice of Audit Findings

- (1) Except with respect to an audit that consists solely of an examination of documents within the Department's records or in other public records, the Department shall issue a Notice of Audit Findings at the conclusion of an audit. Such notice shall include the following information:
 - (a) the name and location of the site;
 - (b) the Release Tracking Number(s);
 - (c) a statement as to the type of audit performed;
 - (d) a statement as to whether the Department, on the basis of the information reviewed during the audit and in reliance upon the accuracy of that information, identified any violations or deficiencies;
 - (e) an Interim Deadline by which violations and/or deficiencies shall be corrected;
 - (f) an Interim Deadline by which an Audit Follow-up Plan, if such a plan is required, shall be submitted; and
 - (g) any other information or request the Department deems appropriate.
- (2) In the event the Department identifies violations of M.G.L. c. 21E, 310 CMR 40.0000 or any other applicable requirement during an audit, the Department may issue any of the following with a Notice of Audit Findings:
 - (a) a Notice of Noncompliance;
 - (b) a Notice of Intent to Assess a Civil Administrative Penalty;
 - (c) a Notice of Responsibility;
 - (d) a Notice of Response Action; and/or
 - (e) an order.

(3) The Department shall not be required to issue a Notice of Audit Findings to any person if the Department determines that such notice could jeopardize an enforcement action.

40.1160: Audit Follow-up Plans

- (1) At or prior to the issuance of a Notice of Audit Findings, the Department may require that a RP, PRP or Other Person submit for its approval a written Audit Follow-up Plan setting forth how and when such person proposes to confirm, demonstrate or achieve compliance with M.G.L. c. 21E, 310 CMR 40.0000 and/or any applicable requirements.
- (2) Each Audit Follow-up Plan shall be submitted to the Department using a form established by the Department for such purpose, and shall include, at a minimum, the following information:
 - (a) a description of the activities that will be taken;
 - (b) the objective of, and proposed schedule for, each element of the plan;
 - (c) the name, registration number, signature and seal of the Licensed Site Professional who prepared the Audit Follow-up Plan; and
 - (d) the certification set forth in 310 CMR 40.0009.
- (3) In approving an Audit Follow-up Plan, the Department may do the following:
 - (a) establish conditions, including, but not limited to, conditions setting forth the Department's role in overseeing elements of the plan;
 - (b) establish Interim Deadlines;
 - (c) establish requirements for documentation and/or submittal of information; and
 - (d) take any other action authorized by M.G.L. c. 21E, 310 CMR 40.0000 or any other applicable law.
- (4) If the Department does not approve or disapprove of an Audit Follow-up Plan within 90 days of its receipt of such plan, an RP, PRP or Other Person shall proceed to implement such plan.
- (5) Any person who is required to comply with an Audit Follow-up Plan may request, in writing, a modification thereof prior to the running of any applicable deadline. Modifications shall be approved, conditionally approved, or denied by the Department in writing within 21 days of receipt. Approval of such modification shall be presumed if the Department does not issue a written approval or denial of said modification within 21 days of receipt.
- (6) Public Involvement Activities required for Audit Follow-up Plans shall be conducted in accordance with 310 CMR 40.1400. If the disposal site where an

Audit Follow-up Plan is being implemented is a designated Public Involvement Plan site, then a Public Involvement Plan shall be implemented by the person conducting response actions at that site pursuant to 310 CMR 40.1405.

40.1170: Post-Audit Completion Statements

- (1) Upon completion of the activities required by the Department in a Notice of Audit Findings or any approved Audit Follow-up Plan, the RP, PRP or Other Person undertaking such activities shall submit a Post-Audit Completion Statement to the Department using a form established by the Department for such purpose.
- (2) Each Post-Audit Completion Statement shall include the following information:
 - (a) an LSP Opinion as to whether the response actions required by the Notice of Audit Findings and any approved Audit Follow-up Plan have been completed in accordance with M.G.L. c. 21E, 310 CMR 40.0000, the terms of any Department approval, and any other applicable laws and requirements;
 - (b) a description of the response actions completed pursuant to the Notice of Audit Findings and any approved Audit Follow-up Plan;
 - (c) the investigatory and monitoring data obtained, if any, during the implementation of such response actions;
 - (d) any other information required by the Department in the Notice of Audit Findings or any approved Audit Follow-up Plan; and
 - (e) a description of additional response activities, if any, necessary to confirm, demonstrate or achieve compliance with the requirements stated in the Notice of Audit Findings or any approved Audit Follow-up Plan.

40.1190: Reservation of Rights

- (1) No provision of 310 CMR 40.1100 shall be construed to relieve any person from any obligation for Response Action Costs or damages related to a site or disposal site for which that person is liable under M.G.L. c. 21E or from any obligation for any administrative, civil or criminal penalty, fine, settlement, or other damages.
- (2) No provision of 310 CMR 40.1100 shall be construed to limit the Department's authority to take or arrange, or to require any RP or PRP to perform, any response action authorized by M.G.L. c. 21E which the Department deems necessary to protect health, safety, public welfare or the environment.

<u>Appendix F - Connecticut Department of Environmental Protection's</u> Audit Program

Connecticut Department of Energy & Environmental Protection

LEP Verification Audit Program An Environmental Program Fact Sheet

NOTE: This fact sheet provides a brief overview of the program established to audit verifications rendered by Licensed Environmental Professionals.

Program Overview

The verification audit program provides an evaluation process in which the Department reviews verifications rendered by a licensed environmental professional (LEP) to confirm that an investigation has been conducted in accordance with prevailing standards and guidelines and that remediation has been completed in accordance with the Remediation Standard Regulations (RSRs), Section 22a-133k-1 through -3 of the Regulations of Connecticut State Agencies (RCSA).

Authorizing Statute

Pursuant to Section 22a-133v(g) of the Connecticut General Statutes (CGS), the Commissioner may conduct audits of any actions authorized by law to be performed by an LEP.

Verification

Means verification as defined in Section 22a-134 of the CGS or any written opinion which the LEP is authorized by law to render (i) regarding an investigation, remediation, Environmental Land Use Restriction, or (ii) pursuant to Sections 22a-133o, 22a-133x, 22a-133y, and 22a-134a of the CGS; Sections 22a-133k-1 through 22a-133k-3, inclusive, and 22a-133q-1 of the RCSA; or any other law, regulation, order, permit, license or approval.

Audit Selection

Upon receipt of a verification, the Department conducts an initial review to ensure the verification is supported with proper documentation. The Department selects verifications for audit based on incomplete documentation of the work performed by the LEP; apparent data gaps in the investigation and/or remediation of the subject property; apparent misapplication of self-implementing site-specific alternative criteria as provided in the RSRs; the audit history of the LEP; at random for quality control; and at the discretion of the Commissioner.

Audit Timeline

Pursuant to CGS section 22a-134a(g)(3)(A), the Commissioner shall not conduct an audit of a final verification of an entire

establishment after 3 years of receipt of the final verification.

In accordance with section 22a-133y, the Commissioner must notify the property owner within 60 days of her receipt of the Final Remediation Report if an audit of the remediation is being conducted. The audit must be conducted within 6 months of notice.

Pursuant to Section 1(f) of Public Act 06-184 (An Act Concerning Brownfields), the Commissioner must indicate acceptance of a verification within 90 days of receipt at certain state-funded Brownfield sites.

Auditing Procedures

When a verification has been selected for an audit, a Notice of Audit (NOA) will be issued to the LEP rendering the verification and the Certifying Party, responsible party, or property owner, as applicable. A meeting will be scheduled to discuss the issues identified by the Department and to provide a venue for the LEP to justify his/her rationale for the verification. Additional information in support of the verification may be presented at this time.

The Department will consider all information presented by the LEP in support of his/her verification and draft an Audit Report.

Notifications

Letter of No Audit: The applicable certifying party, responsible party, or property owner and the LEP may be notified that the Commissioner does not intend to audit the verification rendered by the LEP. This type of notification will only be applicable for site/establishment closure verifications.

Notice of Audit (NOA): The applicable certifying party, responsible party, or property owner and the LEP may be notified that the Commissioner is auditing the verification rendered by the LEP. The NOA will include the apparent issues which necessitated the audit.

Audit Findings: The Commissioner will issue a letter with the results of the audit to the LEP and applicable parties.

Audit Report: A report prepared by the Department which details the outstanding issues related to the LEP's verification. The Audit Report will be attached to the Audit Findings letter.

Termination of

The audit process is terminated upon issuance of the Audit

Audit

Findings. If the verification is determined to be appropriate, no further actions are required by the LEP or the applicable certifying party, responsible party, or property owner. If the verification is determined to be unacceptable, the applicable certifying party, responsible party, or property owner will be advised of their continuing legal responsibilities for investigation and remediation of the parcel, establishment, or release area.

Contact Information

REMEDIATION DIVISION BUREAU OF WATER PROTECTION AND LAND REUSE DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM STREET, SECOND FLOOR HARTFORD, CT 06106-5127

860-424-3705

This overview is designed to answer general questions and provide basic information. You should refer to the appropriate statutes for the specific language. It is your responsibility to comply with all applicable laws. The information contained in this fact sheet is intended only to acquaint you with the verification audit program and does not constitute the Department's interpretation of the applicable laws.

DEP-LEP-FS-200 Content Last Updated January 2008

<u>Appendix G – Connecticut Department of Environmental Protection's</u> <u>LEP Audit Program Information</u>

Туре	Verif. Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
I-IV	accepted	10/30/1997		3	
П	accepted	3/14/1997		24	
133y	accepted	12/8/1997			
133y	accepted	12/8/1997			
I-IV	accepted	6/11/1999		20	
I-IV	accepted	3/8/1999		50	
Ш	accepted	7/20/1998			
RA-133x	accepted	3/3/1999		9	
I-IV	accepted	2/21/2000		16	
I-IV	accepted	12/31/1996	n/a	28	
Ш	accepted	3/27/2000			
II	accepted	10/13/1999		42	
I-IV	accepted	9/12/2000			
133y	accepted	8/4/1998		8	
F-IV	accepted	5/14/2002		10	
I-IV	accepted	4/2/2002	n/a	15	
I-IV	accepted	5/15/2002	no	11	
III	accepted	5/25/2001	no	31	
133x	accepted	2/11/2002	no	7	
I-IV	accepted	9/6/2002		14	
III	accepted	11/22/2002		9	
П	accepted	2/28/2003		9	
I-IV	accepted	1/27/2003		13	
Ш	accepted	12/5/2003	n/a	4	
Ш	accepted	3/30/2004		8	
Ш	accepted	3/17/2004		19	
III	accepted	6/8/2004		16	
П	accepted	8/27/2004		25	
F-IV	accepted	3/13/2000			
Ш	accepted	2/1/2005		43	
П	accepted	3/28/2005		14	
П	accepted	4/20/2005		16	
Ш	accepted	12/30/2005		29 wks	
133y	accepted	1/16/2006		9	

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
1	accepted	4/19/2006		12	
Ш	accepted	7/14/2006			
П	accepted	7/31/2006		12wks-add info	06-Oct-06
I-IV	accepted	5/24/2006			19-Oct-06
I-IV	accepted	5/24/2006			19-Oct-06
I-IV	accepted	5/24/2006			20-Oct-06
I-IV	accepted	5/24/2006			23-Oct-06
I-IV	accepted	5/24/2006			23-Oct-06
I-IV	accepted	5/24/2006			23-Oct-06
I-IV	accepted	5/24/2006			23-Oct-06
I-IV	accepted	5/24/2006			23-Oct-06
I-IV	accepted	5/24/2006			23-Oct-06
I-IV	accepted	5/24/2006			08-Nov-06
I-IV	accepted	5/24/2006			08-Nov-06
I-IV	accepted	5/24/2006			20-Nov-06
Ш	accepted	1/27/2006		10 w	22-Nov-06
I-IV	accepted	5/24/2006			22-Nov-06
I-IV	accepted	5/24/2006			22-Nov-06
I-IV	accepted	5/24/2006			22-Nov-06
I-IV	accepted	5/24/2006			07-Dec-06
I-IV	accepted	5/24/2006			07-Dec-06
I-IV	accepted	5/24/2006			07-Dec-06
I-IV	accepted	5/24/2006			07-Dec-06
I-IV	accepted	5/24/2006			07-Dec-06
Ш	accepted	11/14/2006		12 wks	07-Dec-06
Ш	accepted	11/10/2006		10 wks	21-Feb-07
Ш	accepted	3/29/2007			30-Apr-07
Ш	accepted	4/18/2007			07-May-07
133x	accepted	5/7/2007			31-May-07
Ш	accepted	12/4/2007			31-Dec-07
I-IV	accepted	12/17/2007	pending		28-Jan-08
Ш	accepted	2/20/2008			27-Feb-08
I-IV	accepted	5/24/2006			14-Mar-08
I-IV	accepted	5/24/2006			14-Mar-08
I-IV	accepted	9/21/2006			14-Mar-08
I-IV	accepted	5/24/2006			14-Mar-08
I-IV	accepted	5/24/2006			14-Mar-08
I-IV	accepted	12/13/2007			17-Mar-08
Ш	accepted	5/12/2008			14-May-08

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
II	accepted	4/25/2008			21-May-08
П	accepted	5/1/2008			21-May-08
П	accepted	5/7/2008			21-May-08
Ш	accepted	1/29/2008			28-May-08
F-IV	accepted	6/30/2008			14-Jul-08
П	accepted	6/20/2008			13-Aug-08
133y	accepted	8/20/2009			27-Aug-09
11	accepted	10/29/2009			22-Dec-09
Ш	accepted	8/12/2009			22-Jan-10
II	accepted	2/12/2010			23-Mar-10
Ш	accepted	3/25/2010	08/26/09		30-Mar-10
Ш	accepted	3/16/2010			24-Jun-10
II	acknowledged	8/23/2004			
Ш	acknowledged	5/14/2001			
Ш	acknowledged	12/17/2002			
Ш	acknowledged	4/23/2001			
Ш	acknowledged	3/8/2001			
Ш	acknowledged	1/15/2002			
Ш	acknowledged	11/4/2002			
133X	acknowledged	1/17/2001			
Ш	acknowledged	8/25/2004			
Ш	acknowledged	3/26/2002			
133x	acknowledged	4/11/2003			
Ш	acknowledged	12/17/2003			
133y	acknowledged	12/3/2003			
Ш	acknowledged	4/1/2004			
Ш	acknowledged	1/16/2003			
Ш	acknowledged	3/2/2004			
Ш	acknowledged	11/27/2001			
I-IV	acknowledged	3/7/2002			
Ш	acknowledged	6/20/2003			
Ш	acknowledged	1/17/2003			
133x	acknowledged	9/21/1999			
II	acknowledged	12/10/2002			
Ш	acknowledged	6/4/2003			
Ш	acknowledged	5/10/2004			
Ш	acknowledged	5/25/2004			
Ш	acknowledged	9/1/2004			
Ш	acknowledged	1/5/2005			

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
III	acknowledged	11/3/2004			
III	acknowledged	9/14/2004			
1	acknowledged	5/7/2004			
II	acknowledged	5/17/2004			
Ш	acknowledged	3/21/2002			
F-IV	acknowledged	7/19/2001			
F-IV	acknowledged	5/2/2003			
Ш	acknowledged	1/2/2004			
Ш	acknowledged	2/20/2004			
133x	acknowledged	1/29/2004			
Ш	acknowledged	4/28/2005			
F-IV	acknowledged	5/14/2002			
Ш	acknowledged	5/27/2005			
=	acknowledged	5/24/2005			
Ш	acknowledged	6/8/2005			
=	acknowledged	4/15/2005			
=	acknowledged	5/5/2005			
Ш	acknowledged	4/5/2005			
F-IV	acknowledged	6/17/2005			
Ш	acknowledged	7/11/2005			
Ш	acknowledged	7/28/2005			
133y	acknowledged	12/21/2001			
=	acknowledged	10/18/2005			
133x	acknowledged	7/19/2005		1	
11	acknowledged	9/23/2005			
Ш	acknowledged	6/13/2005			
Ш	acknowledged	11/8/2005			
III	acknowledged	12/20/2005			
Ш	acknowledged	12/22/2005			
133x	acknowledged	1/27/2006			
Ш	acknowledged	1/19/2006	09/15/2005		
Ш	acknowledged	9/8/2005			
133x	acknowledged	4/14/2006			
Ш	acknowledged	5/26/2006		16	
Ш	acknowledged	4/26/2006			
11	acknowledged	6/15/2006			
Ш	acknowledged	7/12/2006			31-Jul-06
Ш	acknowledged	6/19/2006		32	31-Aug-06
F-IV	acknowledged	9/14/2006			19-Sep-06

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
III	acknowledged	9/15/2006			27-Sep-06
II	acknowledged	7/5/2006			29-Sep-06
F-IV	acknowledged	10/4/2006			16-Oct-06
Ш	acknowledged	9/12/2006		10 wks	18-Oct-06
Ш	acknowledged	10/5/2006		17	08-Nov-06
Ш	acknowledged	10/30/2006			08-Nov-06
Ш	acknowledged	8/28/2006			09-Nov-06
F-IV	acknowledged	10/26/2006			20-Nov-06
F-IV	acknowledged	11/8/2006			22-Nov-06
1	acknowledged	9/28/2006			07-Dec-06
П	acknowledged	10/1/2006			07-Dec-06
Ш	acknowledged	11/9/2006			27-Dec-06
III	acknowledged	12/20/2006			27-Dec-06
III	acknowledged	11/14/2006			22-Jan-07
Ш	acknowledged	2/8/2007			20-Feb-07
Ш	acknowledged	3/20/2007			26-Mar-07
II	acknowledged	12/22/2006			28-Mar-07
Ш	acknowledged	2/15/2007			30-Apr-07
III	acknowledged	3/27/2007			30-Apr-07
Ш	acknowledged	4/26/2007			01-May-07
Ш	acknowledged	4/26/2007			02-May-07
Ш	acknowledged	4/23/2007			10-May-07
Ш	acknowledged	5/8/2007			22-May-07
Ш	acknowledged	6/29/2007			06-Jul-07
133x	acknowledged	7/13/2007			08-Aug-07
133x	Acknowledged	5/31/2007			21-Aug-07
Ш	acknowledged	8/9/2007			27-Aug-07
Ш	acknowledged	8/17/2007			27-Aug-07
F-IV	acknowledged	6/22/2007			14-Sep-07
Ш	acknowledged	3/8/2007			15-Oct-07
П	acknowledged	8/6/2007			14-Nov-07
Ш	acknowledged	11/2/2007			14-Nov-07
Ш	acknowledged	11/8/2007			14-Nov-07
Ш	acknowledged	9/26/2007			15-Nov-07
Ш	acknowledged	12/28/2007			02-Jan-08
Ш	acknowledged	1/2/2008		4 wks	17-Jan-08
F-IV	acknowledged	1/9/2008			28-Jan-08
Ш	acknowledged	1/25/2008			30-Jan-08
F-IV	acknowledged	1/18/2008			31-Jan-08

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
F-IV	acknowledged	3/14/2008			24-Mar-08
III	acknowledged	3/10/2008			27-Mar-08
III	acknowledged	3/21/2008			01-Apr-08
III	acknowledged	3/18/2008			02-Apr-08
1	acknowledged	1/30/2008			14-Apr-08
III	acknowledged	4/8/2008			14-Apr-08
III	acknowledged	3/4/2008			18-Apr-08
F-IV	acknowledged	4/11/2008	07/31/2003		09-May-08
III	acknowledged	4/17/2008			16-May-08
III	acknowledged	5/13/2008	12/14/07		16-May-08
III	acknowledged	5/6/2008			02-Jun-08
III	acknowledged	6/3/2008			10-Jun-08
III	acknowledged	6/12/2008			16-Jul-08
III	acknowledged	7/8/2008			18-Jul-08
III	acknowledged	1/22/2008			25-Jul-08
133x	acknowledged	7/3/2008			11-Aug-08
III	acknowledged	10/23/2007			21-Aug-08
Ш	acknowledged	6/5/2008			04-Sep-08
II	acknowledged	8/14/2008			12-Sep-08
III	acknowledged	9/5/2008			15-Sep-08
F-IV	acknowledged	9/25/2008			06-Oct-08
III	acknowledged	10/14/2008			17-Oct-08
Ш	acknowledged	10/30/2008			31-Oct-08
III	acknowledged	9/10/2008			12-Nov-08
F-IV	acknowledged	11/11/2008			22-Dec-08
F-IV	acknowledged	11/11/2008			22-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
F-IV	acknowledged	11/11/2008			29-Dec-08
III	acknowledged	12/31/2008	yes		05-Jan-09
III	acknowledged	2/9/2009			18-Feb-09
III	acknowledged	1/28/2008			18-Mar-09
III	acknowledged	2/26/2009			23-Mar-09
133x	acknowledged	9/29/2008			25-Mar-09
III	acknowledged	3/20/2009	3/13/2009		07-Apr-09
III	acknowledged	3/26/2009			13-Apr-09
III	acknowledged	4/16/2009			21-Apr-09
III	acknowledged	4/9/2009			01-May-09
133y	acknowledged	4/23/2009	7/7/09		04-May-09
III	acknowledged	4/8/2009			05-May-09
III	acknowledged	4/30/2009	02/12/2009		04-Jun-09
III	acknowledged	5/14/2009			04-Jun-09
III	acknowledged	5/15/2009			08-Jun-09
III	acknowledged	7/23/2009			29-Jun-09
III	acknowledged	6/21/2009			27-Jul-09
III	acknowledged	6/21/2009			27-Jul-09
III	acknowledged	7/31/2009			12-Aug-09
F-IV	acknowledged	8/10/2009			18-Aug-09
III	acknowledged	8/28/2009			14-Sep-09
III	acknowledged	9/4/2009			16-Oct-09
III	acknowledged				16-Oct-09
F-IV	acknowledged	8/3/2009			04-Nov-09
III	acknowledged	11/2/2009			05-Nov-09
F-IV	acknowledged	11/2/2009			06-Nov-09
III	acknowledged	11/17/2009			20-Nov-09
III	acknowledged	12/1/2009			07-Dec-09
III	acknowledged	11/18/2009	03/03/2009		10-Dec-09

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
Ш	Acknowledged	11/23/2009			23-Dec-09
Ш	acknowledged	12/3/2009			23-Dec-09
III	acknowledged	11/4/2009			05-Jan-10
Ш	acknowledged	12/23/2009	11/2/09		13-Jan-10
Ш	acknowledged	1/11/2010			22-Jan-10
Ш	acknowledged	1/12/2010			02-Feb-10
Ш	acknowledged	1/28/2010			03-Feb-10
III	acknowledged	1/22/2010			03-Feb-10
Ш	acknowledged	4/21/2010			28-Apr-10
Ш	acknowledged	4/29/2010	7/30/09		04-May-10
Ш	acknowledged	5/10/2010			19-May-10
Ш	acknowledged	6/7/2010			27-Jul-10
Ш	acknowledged	7/23/2010			03-Aug-10
Ш	acknowledged	8/6/2010			23-Aug-10
Ш	acknowledged	8/16/2010	4/20/10		23-Aug-10
III	acknowledged	8/16/2010	4/20/10		23-Aug-10
Ш	acknowledged	9/7/2010			22-Sep-10
Ш	acknowledged	9/17/2010			05-Oct-10
Ш	acknowledged	9/8/2010	08/10/2010		12-Oct-10
Ш	acknowledged	9/27/2010			19-Oct-10
Ш	acknowledged	11/8/2010	5/19/10		01-Dec-10
1	acknowledged	11/5/2010			01-Dec-10
III	acknowledged	12/10/2010			20-Dec-10
Ш	acknowledged	12/6/2010	11/23/10		20-Dec-10
П	acknowledged	12/29/2010			20-Jan-11
F-IV	acknowledged	2/14/2011			28-Feb-11
Ш	acknowledged	9/27/2010	8/20/2010		03-Mar-11
Ш	acknowledged	2/14/2011	11/22/2010		07-Mar-11
Ш	acknowledged	2/17/2011			07-Mar-11
Ш	acknowledged	3/1/2011			25-Mar-11
Ш	Acknowledged	1/7/2011			13-Apr-11
Ш	acknowledged	4/15/2011	08/13/2009		21-Apr-11
Ш	acknowledged	5/12/2011			25-May-11
Ш	acknowledged	5/17/2011			07-Jun-11
Ш	acknowledged	6/1/2011			07-Jun-11
Ш	acknowledged	6/6/2011			13-Jun-11
Ш	acknowledged	6/10/2011			15-Jun-11
Ш	acknowledged	7/6/2011			13-Jul-11
133x	acknowledged	6/9/2011			18-Jul-11

Туре	Verif. Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
	acknowledged	8/5/2011			11-Aug-11
Covenant	filed	9/9/2002			
I-IV	filed	9/30/2004	yes		
I-IV	filed	11/5/2004	,		
I-IV	filed	11/5/2004			
I-IV	filed	3/22/2000			
III	filed	6/24/2003			
I-IV	filed	2/6/1998			
III	filed	5/14/1997			
III	filed	9/16/1997			
133x	filed	11/20/1997			
III	filed	10/6/1997			
III	filed	7/22/1997			
III	filed	7/28/1999			
I-IV	filed	7/11/1996			
III	filed	1/7/1997			
III	filed	11/24/1997			
III	filed	7/19/2001			
III	filed	11/19/1999			
III	filed	2/10/2000			
III	filed	7/3/1997			
133x	filed	1/7/1997			
III	filed	12/15/1998			
III	filed	7/27/1999			
Ш	filed	11/17/2000			
F-IV	filed	6/27/2000			
I-IV	filed	10/21/1997			
I-IV	filed	3/10/1998			
I-IV	filed	9/16/1998			
Ш	filed	8/1/2003	10/24/00		
I-IV	filed	9/1/1998			
I-IV	filed	11/4/1998			
I-IV	filed	9/16/1998			
133x	filed	8/26/1998			
I-IV	filed	4/9/1999			
I-IV	filed	6/23/1999			
I-IV	filed	6/8/2001			
I-IV	filed	10/20/1999			
Ш	filed	11/2/2000			

	Verif.				
Type	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
I-IV	filed	11/18/1999			
I-IV	filed	12/14/1999			
I-IV	filed	8/14/2000			
I-IV	filed	2/28/2002			
I-IV	filed	1/29/2001			
I-IV	filed	6/12/2000			
I-IV	filed	9/8/2000			
II	filed	10/9/2000			
Ш	filed	12/10/2004			
П	filed	5/10/2001			
=	filed	8/27/2004			
I-IV	filed	11/29/2000			
Ш	filed	12/13/2002			
Ш	filed	7/19/2002			
I-IV	filed	7/16/2001			
Ш	filed	12/8/2004			
I-IV	filed	11/2/2001			
I-IV	filed	11/26/2001			
I-IV	filed	12/14/2001			
Ш	filed	3/21/2005			
I-IV	filed	5/8/2002			
I-IV	filed	2/22/2002			
II	filed	7/31/2002			
1	filed	10/3/2002			
I-IV	filed	10/23/2002			
I-IV	filed	10/25/2002			
133x	filed	2/1/2003			
Ш	filed	11/17/2004			
I-IV	filed	1/14/2003			
I-IV	filed	2/5/2003			
I-IV	filed	4/8/2003			
Ш	filed	3/23/2004			
I-IV	filed	6/12/2003			
II	filed	7/17/2003			
I-IV	filed	8/27/2003			
I-IV	filed	3/10/2004			
1	filed	3/25/2004			
11	filed	5/9/2004			
I-IV	filed	5/25/2004			

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
I-IV	filed	5/24/2004			
I-IV	filed	6/9/2004			
F-IV	filed	4/23/2003			
F-IV	filed	2/18/1999			
Ш	filed	1/25/2005			
I-IV	filed	1/28/2005			
F-IV	filed	11/16/2004			
Ш	filed	2/4/2005			
П	filed	3/1/2005			
I-IV	filed	4/6/2005			
Ш	filed	12/21/1998			
F-IV	filed	9/28/2003			
I-IV	filed	3/3/2005			
Ш	filed	5/18/2005			
П	filed	4/28/2005			
I-IV	filed	6/2/2000			
I-IV	filed	7/8/2005			
Ш	filed	3/1/2005			
I-IV	filed	8/31/2005			
I-IV	filed	10/4/2005			
Ш	filed	1/9/2006			
I-IV	filed	10/26/2005			
П	filed	10/24/2005			
133y	filed	12/30/2005			
F-IV	filed	12/27/2005			
I-IV	filed	1/16/2006			
133x	filed	2/22/2006			
Ш	filed	3/28/2006			
Ш	filed	4/12/2006			
I-IV	filed	1/25/2006			
F-IV	filed	6/15/2006			
I-IV	filed	6/21/2006			31-Aug-06
I-IV	filed	11/10/2006			01-Feb-07
I-IV	filed	9/15/2006		12 wks	01-Feb-07
I-IV	filed	9/15/2006		12 wks	01-Feb-07
I-IV	filed	11/9/2006			01-Feb-07
I-IV	filed	1/18/2007			30-Apr-07
I-IV	filed	1/29/2007			30-Apr-07
I-IV	filed	1/24/2007			02-May-07

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
133y	filed	9/18/2007			25-Sep-07
I-IV	filed	7/3/2007			15-Nov-07
portion	filed	2/14/2008			21-Feb-08
1	filed	5/31/2007			01-Apr-08
I-IV	filed	5/8/2008			28-May-08
portion	filed	3/20/2008			30-Jun-08
F	filed	7/29/1999			11-Aug-08
Ш	filed	11/5/2007			22-Oct-08
RA-133x	filed	10/28/2008			05-Nov-08
Ш	filed	1/29/2009			05-Feb-09
I-IV	filed	1/9/2009			03-Jun-09
I-IV	filed	6/29/2009	pending		15-Jul-09
portion	filed	6/19/2009			23-Jul-09
I-IV	filed	9/2/2009			30-Sep-09
portion	filed	9/22/2009			30-Sep-09
133y	filed	11/25/2009			04-Dec-09
I-IV	filed	10/1/2010	9/15/2010		29-Oct-10
I-IV	ongoing	2/5/2002	n/a	8	
I-IV	ongoing	1/22/2002	n/a	9	
III	ongoing	12/3/2002		16	
П	ongoing	2/4/2003		13	
I-IV	ongoing	10/2/2003		11	
Ш	ongoing	3/25/2006		6	
Ш	ongoing	3/21/2006		21 wks	
133x	ongoing	8/24/2006			13-Nov-06
П	ongoing	10/23/2006			13-Feb-07
I-IV	ongoing	12/28/2005			02-Mar-07
П	ongoing	3/19/2007			22-May-07
I-IV	ongoing	1/5/2007			24-May-07
I-IV	ongoing	1/19/2007			17-Oct-07
F-IV	ongoing	10/2/2007			31-Dec-07
Ш	ongoing	11/14/2007			30-Jan-08
I-IV	ongoing	2/14/2008			18-Mar-08
I-IV	ongoing	6/11/2007			12-Nov-08
Ш	ongoing	3/13/2009			18-Mar-09
Ш	ongoing	4/1/2009	03/17/2009		13-Apr-09
III	ongoing	3/30/2009	12/04/2008		05-May-09
133x	ongoing	12/30/2009			22-Jan-10
Ш	ongoing	3/15/2010			24-Jun-10

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
Ш	ongoing	8/12/2010			23-Aug-10
Ш	ongoing	5/12/2011			15-Jun-11
Ш	pending	3/11/2008			25-Mar-08
П	pending	3/18/2008			16-May-08
ELUR	pending	1/7/2007	yes		12-Sep-08
Ш	pending	11/26/2008			13-Jan-09
Ш	pending	11/26/2008			13-Jan-09
Ш	pending	3/25/2009			26-Mar-09
portion	pending	6/29/2009			16-Jul-09
portion	pending	4/15/2010			24-Jun-10
Ш	pending	8/27/2010			07-Sep-10
Ш	pending	10/13/2010			20-Oct-10
portion	pending	10/18/2010			20-Oct-10
Ш	pending	12/22/2010			21-Jan-11
Ш	pending	12/22/2010			21-Jan-11
Ш	pending	12/30/2010			24-Jan-11
Ш	pending	12/1/2010	8/4/10		31-Jan-11
Ш	pending	2/7/2011			28-Feb-11
Ш	pending	3/4/2011	1/23/2009		22-Mar-11
Ш	pending	3/3/2011			24-Mar-11
133x	pending	10/25/2010			26-Apr-11
Ш	pending	4/21/2011			28-Apr-11
Ш	pending	5/10/2011			07-Jun-11
portion	pending	6/7/2011			15-Jun-11
Ш	pending	3/4/2011	8/12/04		13-Jul-11
Ш	pending	6/16/2011			13-Jul-11
П	pending	5/16/2011			27-Jul-11
Ш	pending	7/8/2011			03-Aug-11
1	pending	6/9/2011			11-Aug-11
III	pending	8/4/2011			23-Aug-11
Ш	pending	8/11/2011	6/28/11		23-Aug-11
Ш	pending	8/2/2011			24-Aug-11
Ш	pending	8/19/2011			26-Aug-11
П	rejected	9/5/1996		17	_
Ш	rejected	2/20/1997		30	
I-IV	rejected	11/19/1997		9	
III	rejected	3/4/1998		3	
III	rejected	1/23/1998	LEP approved	8	

	Verif.				
Type	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
I-IV	rejected	12/16/1997		25	
I-IV	rejected	3/7/1998	N/A	11	
I-IV	rejected	12/12/1998		7	
II	rejected	5/12/1998		25	
Ш	rejected	12/10/1998		7	
Ш	rejected	1/25/1999		2	
133x	rejected	5/12/1998			
П	rejected	3/16/1999		4	
П	rejected	7/12/1997		100	
II	rejected	3/2/1999		9	
II	rejected	12/15/1998	12/14/98		
133y	rejected	4/19/1999			
III	rejected	12/16/1999		5	
III	rejected	4/25/2000		4	
			LEP		
III	rejected	5/4/2000	approved	10	
Ш	rejected	5/23/2000		3	
I-IV	rejected	9/23/1998	N/A	held	
		- 4 4	LEP		
ELUR	rejected	9/14/1998	approved	96 (ELUR)	
III	rejected	4/12/2000	DEP approved	4	
I-IV	rejected	4/17/2000	n/a	14	
I-IV	rejected	7/23/1999	N/A	9	
133x	rejected	5/30/2000	IN/A	10	
I-IV	rejected	12/19/1997		10	
II		10/13/1999		7	
	rejected		NI/A		
I-IV	rejected	9/23/1998	N/A LEP	held	
ELUR	rejected	10/14/1998	approved		
133x	rejected	6/20/2000	N/A	15	
III	rejected	11/20/2000	n/a	4	
II	rejected	8/2/2001	n/a	13	
I-IV	rejected	11/14/2000	n/a	-	
III	rejected	1/4/2002	, -	4	
III	rejected	1/4/2002		4	
III	rejected	1/4/2002		4	
II	rejected	1/29/2002	n/a	6	
133x	rejected	1/30/2002	, ~		
133x	rejected	8/27/2002		4	
1334	rejected	0/2//2002		-	

	Verif.				
Туре	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
III	rejected	6/27/2002		13	
II	rejected	7/15/2002		15	
Ш	rejected	2/14/2002	no	52	
Ш	rejected	2/14/2002	no	52	
II	rejected	9/4/2002		34	
I-IV	rejected	2/13/2003		28	
II	rejected	6/10/2003		9	
Ш	rejected	7/29/2003			
П	rejected	8/5/2003		16	
Ш	rejected	12/15/2003		31	
Ш	rejected	4/7/2004	no	18	
I-IV	rejected	7/20/2004		15	
I-IV	rejected	5/10/2004		31	
I-IV	rejected	10/15/2004		10	
Ш	rejected	11/19/2004		20	
I-IV	rejected	11/5/2004		40	
I-IV	rejected	4/23/2004		5	
I-IV	rejected	2/9/2005		21	
I-IV	rejected	4/26/2005			
I-IV	rejected	6/2/2005		35	
П	rejected	8/5/2005		14	
Ш	rejected	11/2/2005		10	
Ш	rejected	3/7/2006		4	
I-IV	rejected	7/15/2005		50	
I-IV	rejected	2/16/2007			02-May-07
Ш	rejected	3/5/2007			14-Jun-07
Ш	rejected	6/29/2007			31-Jul-07
I-IV	rejected	5/30/2007			16-Aug-07
F-IV	rejected	8/17/2007			27-Aug-07
Ш	rejected	8/6/2007			14-Sep-07
П	rejected	2/10/2006			17-Sep-07
I-IV	rejected	9/7/2007			19-Sep-07
Ш	rejected	8/30/2007			24-Jan-08
Ш	rejected	7/8/2008	yes		07-Jul-08
I-IV	rejected	6/4/2008			11-Aug-08
133y	rejected	7/21/2008	yes		19-Dec-08
I-IV	rejected	2/23/2006			18-Mar-09
I-IV	rejected	2/9/2009			18-Mar-09
Ш	rejected	12/30/2008			19-Mar-09

	Verif.				
Type	Outcome	Verif.	ELUR	ScreenTime	DateRecordCreated
I-IV	rejected	2/19/2009			03-Apr-09
I-IV	rejected	2/19/2009			03-Apr-09
П	rejected	2/4/2009			19-Aug-09
133x	rejected	9/9/2009			14-Sep-09
Ш	rejected	9/15/2009			30-Sep-09
III	rejected	1/27/2010			04-Feb-10
133y	rejected	4/20/2010	pending		23-Apr-10
133y	rescinded	3/22/1999	no	9	



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

LEP Verification Audit Program

ATTACHMENT 1

Type of Verification:

Ver#

The following checked (X) criteria were identified during review of the LEP's investigation. Level A and Level B Criteria refer to the State Board of Examiners of Environmental Professionals' ("Board") CRITERIA FOR REFERRALS OF LEPS TO THE BOARD FOR REVIEW/INVESTIGATION, dated September 21, 2001.

rent or obvious exceedances of RSR soil or groundwater remediation standards
f Attachment 3
ntion is underway
coverable non-aqueous phase liquid (NAPL) is present
environmental land use restriction (ELUR) recorded
lease area which has not been investigated is later determined to be polluting a or otherwise causing significant harm to human health or the environment
lease area of apparent significance has not been investigated
a detected groundwater plume has not been investigated for at all

Level B Criteria				
	several of the following shortcomings were noted in a single verification			
	the following shortcoming(s) is a repeat one for a particular LEP			
	the following shortcoming(s) is considered a gross deviation from the norm (e.g., particularly sensitive environmental setting, straightforward and should have known better, etc.)			
	DEP and the LEP are unable to work out an acceptable resolution on a given case			

LEV	vel B Criteria (cont.)
	A potential area of concern has not been investigated
ļ	Ie: See item #'s 4, 5, and 6 of Attachment 3
	The degree and extent of soil or groundwater contamination at a release area have not been investigated at all
Ī	
	The source of a groundwater plume has not been sufficiently investigated for
	Poor quality historic environmental data have been solely or largely relied on for demonstrating compliance with remediation standard regulations
	A potentially significant environmental release is indicated with conflicting information as to whether or not it poses a significant threat to human health or the environment (e.g., is compliant with remediation standards), and there have not been any follow-up investigations of the conflicting information.
От	THER BASIS FOR REFERRAL
	insert issue
	describe where documented
	Delete unused rows
	D.G.
Init	ial Date

Make sure to include Complaint No. in footer



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

LEP Verification Audit Program

ATTACHMENT 2

Re:

Complaint No.

Type of Verification:

Ver# ***

The LEP in question rendered a verification that an investigation has been performed at the parcel in accordance with prevailing standards and guidelines and that and that all actions to remediate any pollution caused by any release at the establishment had been taken in accordance with the RSRs, except for natural attenuation groundwater monitoring and post-remediation groundwater monitoring. The Commissioner completed an audit and rejected the verification on DATE.

In rendering professional services, the LEP is bound to the LEP regulations, Section 22a-133v-1 through 22a-133v-8 of the Regulations of Connecticut State Agencies. Based on the audit, it appears the LEP may have violated the following checked (X) items of the LEP regulations.

on 22a-133v-5 Design and Use of Licensed Environmental Professi	onal's Seal
A licensee's seal shall only be used by such licensee in connection with verifications or other documents pertaining to verifications for which such licensee is responsible.	22a-133v-5(b)(1)
very brief explanation of apparent offense with specific references to where a	liscussed in Audit Report
A licensee shall use a seal to attest that in his or her professional judgment, the verification, and the professional services rendered in connection with such verification, comply with the provisions of sections 22a-1330, 22a-133y, 22a-133x, and 22a-134a of the CGS, the RSRs, section 22a-133q-1 of the RCSA, and the LEP regulations.	22a-133v-5(b)(2)
Delete these explanation rows if no entry	
A licensee shall not affix his or her seal to any document other than a verification or other document pertaining to a verification.	22a-133v-5(b)(3)
A licensee may seal, or sign and seal, a verification or other document pertaining to a verification, provided such licensee shall prepare, and retain for a period of not less than six (6) years, records pertaining to such verification sufficient to reconstruct the basis for such verification including all alternatives considered. Such records shall clearly identify the project and the documents to which it relates, and the name of the person or organization for which the verification was conducted and the date of such	22a-133v-5(b)(4)
verification.	

A licensee shall not affix, or allow his or her seal to be affixed, on any verification for a parcel in which his or her employer has a financial interest, exclusive of professional services fess.	22a-133v-5(b)(5)
ction 22a-133v-6 Rules of Professional Conduct	
In providing professional services, a licensee shall act with reasonable care and diligence and shall apply the knowledge and skill of a licensee in good standing practicing in the applicable field at the time such services are performed	22a-133v-6(c)(1)
A licensee may perform professional services only when qualified by education or experience, and only to the extent such services involve activities with respect to which such licensee is so qualified. In rendering professional services, a licensee may rely, in part, upon the advice of one or more persons whom such licensee determines are qualified by education or experience to the extent that such reliance is consistent with the common and accepted practice of a LEP.	22a-133v-6(c)(1)
In the rendering of professional services, a licensee shall at all times, hold paramount the health, safety and welfare of the public and environment.	22a-133v-6(d)(1)
In rendering professional services, a licensee shall at all times exercise professional judgment.	22a-133v-6(d)(2)(A)
In rendering professional services, a licensee shall at all times follow the requirements and procedures set forth in the applicable provisions of sections 22a-133o, 22a-133y, 22a-133x, and 22a-134a of the CGS, the RSRs, the LEP regulations, and 22a-133q-1 of the Regulations of Connecticut State Agencies, and any other statute, regulation, permit or other license, approval, or order of the Board or the Commissioner.	22a-133v-6(d)(2)(B)
In rendering professional services, a licensee shall at all times make a good faith and reasonable effort to identify and obtain the relevant data and other information evidencing conditions at a parcel and identify and obtain such additional data and other information as necessary to discharge such licensee's obligations under sections 22a-133o, 22a-133y, 22a-133x, and 22a-134a of the CGS, the LEP regulations, and 22a-133q-1 of the RCSA.	22a-133v-6(d)(2)(C)

If after rendering professional services at a parcel, a licensee learns that a condition at such parcel, relevant data or other information which existed at the time such services were rendered, leads to a conclusion or recommendation contrary to, or significantly different from, the one previously expressed by such licensee, such licensee shall promptly (A) notify his or her client in writing of such, and (B) notify the Commissioner if such conclusion or recommendations was expressed to the Commissioner in a verification or other document pertaining to a verification.	22a-133v-6(d)(3)
A licensee shall not allow the use of his name by, or associate in business venture with, any person or firm which such licensee knows or reasonably should know is engaging in fraudulent business or professional practices.	22a-133v-6(d)(4)
A licensee shall not, whether orally or in writing, falsify, omit or misrepresent relevant facts concerning such licensee's (A) past accomplishments or the academic or other qualifications of such licensee, and (B) employers, employees, associates, joint ventures and their past accomplishments or the academic or other qualifications.	22a-133v-6(d)(5)
A licensee or applicant shall cooperate fully in an investigation conducted by the Commissioner or the Board	22a-133v-6(d)(6)
No licensee whose license has expiredshall render or offer to render professional services or represent himself as being a licensed environmental professional.	22a-133v-6(d)(7)
A licensee shall not accept monetary or other compensation or render professional services, pertaining to a parcel, from persons having or potentially having conflicting or potentially conflicting interests, unless such licensee fully discloses in writing to each such person such conflict or potential conflict and each such person agrees in writing to utilize the services of such licensee notwithstanding such conflict or potentially conflicting interests.	22a-133v-6(e)(1)
A licensee shall not permit any person, other than an employer, partner, employee, or associate in a professional firm, to share in the fees for professional services he renders or will render, unless the fee splitting arrangement between such licensee and any other person has been fully disclosed to and agreed to in writing by the client engaging the services of such licensee.	22a-133v-6(e)(2)
A licensee shall not solicit, offer or render professional services pursuant to any contingent fee arrangement	22a-133v-6(f)

 Initial		Date

CRITERIA FOR REFERRALS OF LEPS TO THE BOARD FOR REVIEW/INVESTIGATION

21 September 2001

A. AUTOMATIC REFERRALS IF ANY OF THE FOLLOWING ARE TRUE:

- 1. There are apparent or obvious exceedances of RSR soil or groundwater remediation standards;
- 2. Active remediation is underway;
- 3. Mobile and recoverable non-aqueous phase liquid (NAPL) is present;
- 4. Inappropriate environmental land use restriction (ELUR) recorded (even if no verification submitted) i.e., if ELUR was not done according to process described in Remediation Standard Regulations and Connecticut General Statutes; or if LEP not authorized to approve of ELUR under site-specific circumstances (e.g., if site was transferred under Transfer Act);
- 5. An obvious release area which has not been investigated is later determined to be polluting a water supply or otherwise causing significant harm to human health or the environment;
- 6. An obvious release area of apparent significance has not been investigated;
- 7. The source of a detected groundwater plume has not been investigated for at all.

B. REFERRALS OF THE FOLLOWING, IF:

- (i) several of the following shortcomings were noted in a single verification;
- (ii) the shortcoming is a repeat one for a particular LEP;
- (iii) the shortcoming is considered a gross deviation from the norm (e.g., particularly sensitive environmental setting, straightforward and should have known better, etc.); or
- (iv) DEP and the LEP are unable to work out an acceptable resolution on a given case:
- 1. A potential area of concern has not been investigated;
- 2. The degree and extent of soil or groundwater contamination at a release area have not been investigated at all;
- 3. The source of a groundwater plume has not been sufficiently investigated for;
- 4. Poor quality historic environmental data have been solely or largely relied on for demonstrating compliance with remediation standard regulations;
- 5. A potentially significant environmental release is indicated with conflicting information as to whether or not it poses a significant threat to human health or the environment (e.g., is compliant with remediation standards), and there have not been any follow-up investigations of the conflicting information.

Where used above, the term "investigated" means to investigate an area through environmental sampling and testing.

DEP Solutions (9.21.06)

1. <u>Vague Expectations of DEP positions/policies</u> (by DEP staff and by LEPs)

DEP forms not reaching public: DEP WEB page should be primary clearinghouse for DEP documents. Should not rely on EPOC posted forms, docs. on their WEB page - to much filtering by WEB masters.

- → post pertinent documents on DEP WEB page, such as:
 - factsheets
 - audit stuff
 - o Approval cover sheet
 - o written policies (such as "Upgradient Policy")
 - SCGD
 - o and other technical guidance docs.

perhaps a "What's New" button

update on sticky issues current stats
???

- → Generate some type of "Consumers Guide for hiring LEP?
 - FAQ type of process
 - what should CP be asking, looking for in LEP, etc.
 - o references
 - appropriate experience/knowledge for type of site +/or ops
 - contact DEP for actions against LEP (either audit of verification or referral to Board)
- → post LEP roster on WEB.
 - Already prepared to post list (which is OK), and statement re: disciplinary questions...call me

2. Verbal Feedback From Staff [to LEPs]

Need Rob Bell to declare position when it comes to DEP involvement in LEP-lead sites.

- a. Site Characterization issues
 - i. On LEP fishing expeditions, staff should ask initial core questions, such as: Is there a current DEP staff assigned? How many DEP staff have you asked this question?
 - ii. If a question or scenario is presented as a hypothetical, present answer as hypothetical, with the following qualifier.
 - iii. Staff should qualify all answers with a "based on the information provided" type of response if going to respond.

The above could be addressed by management at Agendq, or by Supervisors in District Staff meeting.

b. Application of RSRs

→ presentation to staff on revised RSRs

3. Policy/Procedures/SOPs/Guidelines

ensure that such are disseminated to staff and/or readily accessible. Create user-friendly tool boxes for staff (such as the ELUR Tool Box)

- Verification Screening Guidelines (Tool Box done)
- Verification/Audit SOPs (White paper done)
 - o need Rob Bell sign-off on the above 2 bullets
 - Rob Robinson will present to staff at District Staff Meeting level
- Audit Reports
 - o Brief presentation of Audit Reports at Agenda
- SCGD
- FAQ's (TAG??)
 - perhaps present unique situations/applications to staff @ Agenda's (after fact, not as a fishing for best answer)

4. <u>EPOC Board / LEP Board</u>

→ Fill open positions on LEP Board

5. <u>Audit Program</u>

strengthen audit program with approved SOPs (itemized above); Recognition as a stand-alone program (and not an afterthought); and dedicated staff for conducting audits, drafting reports, etc.



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

LEP Verification Audit Program

(Rev.4/08)

GUIDANCE DOCUMENT FOR 'SCREENING' A VERIFICATION

The following provides a guideline for "screening" a verification rendered by a LEP. Utilizing this guidance to review a verification and supporting information should assist staff in determining if an audit of such verification is warranted.

This guidance document is not intended to supplant working knowledge of the site or professional experience and judgment, but rather to provide a basic outline of standard requirements of a verification and suggestions of what to evaluate.

MAJOR CATEGORIES OF REVIEW

- I. DOCUMENTATION
- II. VERIFICATION REPORT
- III. "RED FLAG" SCREENING

Specific information related to each of the above categories is presented below:

This reference document was created by staff of the Remediation Division of the Department of Environmental Protection for the sole use of the Department. Procedures and processes discussed herein may be subject to change without prior notification.

I. DOCUMENTATION

- A. Proper verification statement (on preferred form if possible)¹
 - 1. Verification must match type of filing on record or the action which was authorized by the Commissioner.
 - 2. LEP seal must be affixed to verification.
 - 3. Site Identification on verification form.
 - a. Name of [former] Establishment
 - b. address
 - c. map, block, lot reference
- B. Verification Report ² (Key components listed below)
 - 1. RSR Compliance Checklist
 - 2. Introduction
 - 3. Final Conceptual Site Model, supported with relevant findings of investigation
 - 4. Receptor Assessment
 - 5. Description of Remedial Activities
 - 6. Quality Assurance / Quality Control
 - Demonstrate of Compliance

C. ELUR (if applicable)

- 1. If an ELUR was recorded to achieve compliance with the RSRs, documentation of the commissioner's approval of the ELUR, and the recording of the ELUR on the land records ("Certificate of Title").
- 2. If a verification rendered to support a Form IV filing indicates that an ELUR will be recorded in order to achieve compliance with the RSRs, then documentation that the ELUR will be applicable, appropriate and that the property owner is prepared to record such on the land records must be provided with the Verification Report. This is discussed in the Verification Report Guidance Document, and includes:

¹ Verification Forms are available on the DEP website; and are also located on the internal s:\Forms\...

^{2 &}quot;Verification Report": A detailed summary report presenting the final CSM (supported with relevant findings) and a presentation and discussion of hoe compliance with the RSRs has been demonstrated. A copy of the Verification Report Guidance Document is included in Section II in this guidance for screening a verification.
Page 2 of 10

- a. Draft Declaration (A-2 Survey is not necessary at this stage; however, a site map should be included which identifies the "Subject Area");
- b. Discussion of the type and applicability of the intended ELUR;
- Written acknowledgement and acceptance of the deed restriction from property owner; and
- d. Discussion of the regulatory status of the draft ELUR.
- 3. A verification rendered pursuant to §22a-133y which indicates an ELUR will be recorded to achieve compliance with the RSRs, must include the same degree of documentation as Item #2.a., b., and c. above.

The verification will not be processed without the proper verification statement. If the above documentation requirements have not been met, contact the LEP to resolve the issue. However, the Department will not accept or consider <u>new</u> documents generated subsequent to the rendering of a verification. Staff should provide the LEP no more than 5 business days to correct the documentation issue.

The LEP will automatically be referred to the Audit Program if the necessary supporting information is not presented.

II. VERIFICATION REPORT

INSERT VERIFICATION REPORT GUIDANCE DOCUMENT

Once it has been determined that necessary supporting information has been included in the Verification Report, the substance of the Report should be screened.

III. "RED FLAG" SCREENING (of Verification Report)

In reviewing the Verification Report, the following should be considered:

- A. <u>Level of Detail</u>: Is there a sufficient level of detail provided in the Verification Report for an appropriate review of the validity of the verification?
- B. SCGD: Was the investigation of the site conducted in accordance with the SCGD³?
 - 1. Were all standard AOC's associated with the type of establishment identified and evaluated?
 - 2. Do the identified COC's make sense for the establishment?
 - 3. Does it appear the LEP had a 3-dimensional understanding of any and all releases before rendering conclusions?
 - 4. Is the groundwater monitoring data sufficient to support the CSM?

To support any type of verification, the LEP must have, at a minimum, sufficient **seasonal groundwater data** to demonstrate s/he has an appropriate 3-dimensional understanding of the hydrology and plume(s).

- C. <u>Logic</u>: Does the Final CSM make sense? Do the findings make sense and support the CSM? → There shouldn't be any <u>significant</u> difference in judgment [DEP v. LEP], therefore if the relevant findings presented to support the Final CSM don't make sense based on the facts, and/or the CSM doesn't make sense based on the findings... this will be a red-flag.
 - 1. Does it make sense that no remedial action was performed? or
 - 2. Did the completed remedial action make sense for the identified release?
 - 3. Do the temporal relationships make sense? (ie:)
 - a. the amount of time any remedial actions were active
 - b. the timing of remedial actions to cessation of post-remedial groundwater monitoring
 - 4. Does the temporal relationship from filing to verification make sense, based on the land use, the previously known environmental condition (as documented in the ECAF), whether remedial measures were taken, and groundwater monitoring requirements.

³ Staff should refer to the Site Characterization Guidance Document, dated September 1, 2007 for detailed requirements.

D. Compliance with Statutory and Regulatory Requirements

→ All Verifications must meet these compliance requirements

- 1. Did the LEP discuss all means / methods used to demonstrate compliance with the RSRs which the LEP indicated on the RSR Compliance Checklist?
- 2. Proper Commissioner Approvals have been requested and received, and applicable Notices, as required by the RSRs, have been submitted (ie:). 4
 - a. Alternative Criteria
 - b. Variances
 - c. ELUR (approval not needed to render an 'initial' verification or a verification pursuant to \$22a-133y)
 - d. Any other necessary Commissioner approval or notice provided to the Commissioner
- 3. Compliance w/all applicable criterion of the RSRs has been demonstrated.
 - a. Standards for Soil Remediation
 - i. Direct Exposure Criteria
 - ii. Pollutant Mobility Criteria
 - b. Groundwater Remediation Standards
 - i. Groundwater Protection Criteria
 - ii. Surface Water Protection Criteria
 - iii. Volatilization Criteria
- 4. Proper application of self-implementing provisions or alternatives to demonstrate compliance with the RSRs were properly followed. This includes, *but is not limited to* the following:
 - a. "Background concentration for soil" 5

If the LEP justified the presence of a substance as a background condition:

- i. Was the substance an identified COC for the site or specific release area?
- ii. Did s/he demonstrate that the sampling to conclude such was sufficient to apply the definition of "background"?

⁴ Reference the "RSR Approval Request or Notice Transmittal Form" for an itemization of necessary Approvals and Notices required per the RSRs. This form is available on the DEP website .A copy is at the end of this Reference Document.

Note: the presence of VOCs in soil are generally <u>not</u> considered a background condition. VOCs such as MEK and acetone (to name a couple) may be present due to natural conditions; however, it is incumbent upon the LEP to provide sufficient documentation and discussion of his/her rationale to demonstrate this is the site-specific scenario.

b. "Policy on Up-Gradient Contamination" (8/28/97):

If the LEP justified the presence of a substance in groundwater as a plume migrating onto the subject site:

- i. Are any of the substances detected in the encroaching plume an identified COC for the subject site?
- ii. Is site characterization sufficient to demonstrate that an on-site release has not contributed to the plume (downgradient of the point at which the plume encroaches on the site)?
- iii. Are the groundwater sampling locations representative of all plumes?
- iv. Seasonal data has been collected to adequately demonstrate that the subject plume is indeed migrating <u>onto</u> the site?
- 5. Public Notification of Remediation⁶ properly published (and copy of such provided).
 - a. A copy of such should have been provided to the Department immediately after publication, but the verification package should still include a copy of the public notice.
 - b. 'Natural attenuation' groundwater monitoring <u>is considered a remedial measure</u>. Therefore, if a verification rendered to support a Form IV indicates that natural attenuation groundwater monitoring is continuing, public notification is required.
 - c. If an ELUR has been recorded, or is intended/pending (as may be the case for an 'initial' verification or a verification rendered pursuant to \$22a-133y), public notice of intent to record an ELUR is required, pursuant to \$22a-133q-

⁵ "Background concentration for soil": as defined in Section 22a-133k-1(6) of the RSRs and in the SCGD.

^{6 &}lt;u>Public Notice of Remediation</u>: A statutory requirement, and an essential mechanism which ensures the general public an opportunity for participation and comment on the proposed remedial measures. All comments from the public submitted to the LEP must be submitted to the Commissioner pursuant to Section 22a-133k-1(d) of the RSRs.

Page 7 of 10

- 1(c) of the RCSA. A copy of such should be included with the verification package.
- 6. Significant Environmental Hazard Notification⁷ was provided, if warranted
- → If staff can follow the logic of the site investigation and remediation;
- → if staff can agree with the LEPs conclusions and CSM; and
- → the documentation is complete and proper,
- $\rightarrow \rightarrow$ the verification may be appropriate, and an audit is not necessary.
- → if staff identifies obvious violations of statutes or regulations;
- → if the Verification Report is incomplete;
- \rightarrow if the final CSM appears to not be validated;
- → if staff identifies apparent significant data gaps or other 'red-flag' issues,
- →→ then: an <u>Audit Recommendation Memo</u> should be drafted and the matter referred to the LEP Verification Audit Program.

Upon completion of the screening of the verification, staff should reference the <u>Procedures for Processing LEP Verifications</u> for appropriate procedures and format references.

⁷ Reference §22a-6u for specific requirements, or fact sheet located on the Remediation Division webpage.

AUDIT ISSUES: SIGNIFICANT DATA GAPS/INAPPROPRIATE APPLICATION OF THE RSRS

DOCUMENTATION

Ve	erification Report
	incomplete / not comprehensive
	referenced supporting documents not available
Co	onceptual Site Model
	not per acceptable standards
	not validated
	Receptor Survey not conducted [prior to rendering verification]

SITE CHARACTERIZATION

OB 2 (5 - 15)	CHARACIERIZATION
Pha	se I Issues
	Description of operations incomplete
	Identification of standard AOCs associated with type of establishment not appropriate
	COCs of establishment not identified
Pha	se II Issues
	AOC(s) identified in Phase I not sampled
	release mechanisms / pathways of migration not considered in sampling plan
	inappropriate sampling techniques
	appropriate COCs not targeted for AOC characterization
	inappropriate number of samples collected per AOC
	insufficient groundwater investigation to evaluate potential impact
Pha	ise III Issues
	release detected, but full extent of soil pollution not defined (3-dimensional characterization of release)
	LEP did not have a full understanding of hydrogeology / plumes
	insufficient number / location of MWs to evaluate each release area/plume
	Hydrologic data not considered or provided
	horizontal/vertical characterization of plume not complete
	no bedrock investigation - or rationale for exclusion
	Receptors identified as "at risk' were not sampled
Gro	oundwater Monitoring
	insufficient seasonal groundwater data to fully understand impact to groundwater
Rei	mediation
	Confirmation sampling of remedial action insufficient
	analytical methodology
	inappropriate COCs targeted

NON-COMPLIANCE WITH STATUTORY AND/OR REGULATORY REQUIREMENTS

tandards for Soil Remediation	RCSA 22a-133k-2		
Direct Exposure Criteria exceeded	22a-133k-2(b)		
Alternative DEC used, but not approved by Commissioner	22a-133k-2(d)(1) & (2)		
DEC not proposed or approved by Commissioner for substance	22a-133k-2)b)(4)(A)		
Pollutant Mobility Criteria exceeded or compliance not demonstrated	22a-133k-2(c)		
Alternative PMC used, but not approved by Commissioner	22a-133k-2(d)(1)&(3) /(5)		
Alternative PMC Dilution/Dilution Attenuation Factor	22a-133k-2(d)(1)&(4) / (6)		
PMC not proposed or approved by Commissioner for substance	22a-133k-2(c)(5)		
Improper application of "Background Concentration in Soil"	22a-133k-1(a)(6)		
"Background Concentration in Soil" used, but Notice not provided	22a-133k-2(a)(2)		
Notice not provided for re-use of Polluted soils on-site	22a-133k-2(h)(3)		
Notice not provided for Site Specific Dilution in GB Area	22a-133k-2(c)(2)(E)(iii)		
Notice not provided for use of TCLP/SPLP results to demonstrate compliance with PMC in GA Area	22a-133k- 2(c)(2)(B)(ii)(cc) or (iii)(bb)		
Groundwater Remediation Standards	RCSA 22a-133k-3		
Groundwater Protection Criteria	22a-133k-3(f)(1)		
GWPC not proposed or approved by Commissioner for substance	. 22a-133k-3(h)(1)		
Surface Water Protection Criteria	22a-133k-3(f)(2)		
Alternative SWPC used, but not approved by Commissioner	22a-133k-3(b(3)(B)		
SWPC not proposed or approved by Commissioner for substance	·		
Notice not provided for use of Site Specific SWPC	22a-133k-3b)(3)(A)		
Volatilization Criteria	22a-133k-3(f)(3)		
Alternative VolC used, but not approved by Commissioner	22a-133k-3(c)(4)(B)		
VolC of substance not proposed for Commissioner approval			
Notice not provided for use of Site Specific VolC	22a-133k-3(c)(4)(A)		
Post-remediation monitoring not completed	22a-133k-3(g)		
Alternative Groundwater Monitoring Plan not approved	22a-133k-3(g)(3)		
Public Notification of Remediation			
Public Notification of Remediation was not properly published	CGS 22a-133x(g) CGS 22a-133y(b) CGS 22a-134a(i)		
All written comments from public were not submitted to Commissioner	RCSA 22a-133k-1(d)		

LEP Solutions (9.21.06)

1. <u>Budgetary Constraints</u>

- a. LEP's (or LEP Company) bid on project [low-balling or ill-conceived projection of costs]
- b. Client caps funds for invest/remed.

Can't control issue. Really comes down to holding LEP accountable for actions. Which directly relates to industry expectations for site characterization; the proper application of the RSRs; a continued and consistent verification screening process and audit program, and re-initiating the referral of appropriate complaints to the LEP Board.

2. No "backbone"

→ provide paper backbone -- ie: clearly written expectations / requirements of LEP in order to demonstrate compliance at a site - so they can point their client to something tangible. [Gail stated during SCGD work, that the LEP's need the SCGD to promote +/or justify their proposals to their clients, etc. RR 8.18.06]

in other words: give the LEPs ammunition to say "No" to client.

- SCGD / RSRs: already in process of refinement
- provide redacted Audit Reports to EPOC
 - Providing copies of Audit Reports to EPOC is OK; however, awaiting legal feedback on whether redaction is necessary.
- post Key Audit Issues with Audit Program WEB page
 - o ie: Screening [audit recommendation] checklist with different header.
- 3. Pressure from client based on their Time Constraints (closing dates, etc.)
 - → lump into 'Backbone' issue...same solution
- 4. <u>Pre-conceptions</u>
 - → adherence to prevailing standards and guidelines, specifically the SCGD, should address this problem.
- 5. <u>Lack of Specific Knowledge</u>/range of experience
 - → Continue to support educational forums for LEPs through EdCom/EPOC
 - Continuing Ed requirements for License (24 ceu's per 2 yr period)
 - EPOC Technical Presentations
 - → Client should ensure that LEP has the type of experience for their site. see proposed "Consumer's Guide for Hiring an LEP"

6. Non-LEP work

- a. Junior staff (inexperience) conducts most of site characterization field work
- → In general, not much DEP can do. This is an LEP in-house comfort level with their junior staff qualifications and abilities.
- → Hold LEP accountable for his/her decisions, services rendered.
- shingle verification (extra pressure, no alliances)
- → Hold LEP accountable for his/her decisions, services rendered.
- 7. <u>Lack of critical review of work</u> submitted either by other firms or of their own junior staff
 - → Hold LEP accountable for his/her decisions, services rendered.
- 8. Ambiguous interpretation of RSRs
 - → Revised RSRs may improve sections of historical ambiguity
 - → publish, post, or send to EPOC acceptable uses/applications of complex, unusual or ambiguous provisions of RSRs
- 9. <u>Peer review</u> [or lack of] prior to rendering verification
 - → LEP has many resources available to them, if they so choose, such as: in-house LEPs, LEP peers, or DEP [for RSR application issues only]. This is an issue of either arrogance, ignorance or embarrassment, and there's not a lot we can do about this.

The ultimate solution to many problems is holding the LEP accountable for their decisions, including public accountability. The inherent incentive to avoid negative consequences related to their actions/opinions is a mighty motivator. Potentially, most of the identified issues will fall into place if the LEPs are consistently and blindly held accountable.

The major tools to address the accountability issue are:

- 1. consistent audit process
- 2. providing public access to disciplinary records (both verification and licensure issues)
 - → embarrassment factor
- 3. Use the established mechanisms to refer Complaints to the LEP Board
 - → endangerment of license factor

POTENTIAL REASONS FOR INFERIOR WORK PRODUCT:

DEP

- 1. <u>Vague Expectations of Regulators (by LEPs)</u>
 - a. site characterization (*SCGD to address)
 - b. Ambiguous interpretation of RSRs
 - c. more site specific comments/review letters (are these necessary?)
 - d. Status reports-requires too much staff time to review/comment on.
- 2. <u>Verbal feedback from staff</u> prior to verification (*FYI to staff re: this topic to address)
 - a. site characterization
 - b. RSR application
- 3. Preconceived judgment of LEP work (based on past submittals)
- 4. <u>Work Load</u> (i.e., unwillingness to perform a critical review, detail of which varies according to staff supervisor)
- 5. Dissemination of information
 - a. Generally unreported Audit Findings (both internally and externally)
 - b. policies, etc.



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

LEP Verification Audit Program

(Rev. 6/08)

Procedures for Processing LEP Verifications

The following outlines DEP's internal procedures for processing LEP Verifications.

I. RECEIPT OF VERIFICATION

A. Supporting Verifications

(verifications submitted to support a Form I, Form II or Form IV filing)

All incoming Property Transfer filings go through an administrative review for completeness of appropriate documentation and for filing fee processing. The Certifying Party will be notified whether the Form is complete within 90 days for a Form I and Form II, and within 30 days for a Form IV. Notification is through an acknowledgment of receipt of a complete filing letter prepared and sent by the Administrative Reviewer [Kim Maiorano].

Form II's, Form IV's, and in some cases Form I's, are submitted with a supporting LEP verification. The "date received" by the Remediation Division is to be stamped on the verification form, and the Administrative Reviewer provides a copy of the verification form to the Audit Program Coordinator (APC) for data management and tracking of the verification.

Upon the Department's acknowledgement of a complete filing, the entire package (including the Verification Report, ECAF, and other documents submitted with the Form filing) are then directed to the appropriate District Supervisor for assignment to staff to screen the Verification Report for applicability.

B. Other Verifications

Verifications submitted post-filing of an ECAF, or not pursuant to the Property Transfer Program, may be submitted directly to the District staff without going through an administrative review process.

Upon receipt of a verification submitted directly to staff, staff is to ensure that the verification form is stamped with the "date received" by the Remediation Division, and provide a copy of the verification form to the APC. If the verification was rendered pursuant to Property Transfer, staff is to replace the original verification with a copy and give original verification form to the Administrative Reviewer.

II. SCREENING

Staff will screen the verification (and supporting documentation) to determine whether or not an audit is warranted. Staff will screen the verification in accordance with the standard procedures established in the "Guidance Document For Screening a Verification".

III. SCREENING TIMELINES

- A. It is the Department's intent to notify the LEP and certifying party, responsible party, or property owner, as applicable, within 60 days of the Department's acknowledgement of complete filing whether or not an audit will be conducted.
- B. For verifications submitted with a Final Remedial Action Report under §22a-133y, the Department must notify the LEP, and the responsible party or property owner (whichever is applicable), within 60 days of the date verification stamped received by the Remediation Division whether or not an audit will be conducted. Audit must be conducted within 6 months of Notice of Audit (NOA).
- C. For verifications submitted pursuant to Public Act 06-184, Section 1(f), ("An Act Concerning Brownfields"), the Department must notify the LEP and applicable certifying party / property owner within 90 days of the date verification stamped received by the Remediation Division whether or not an audit will be conducted.

D. Factors influencing screening timelines:

If staff determines that the documentation of the verification is incomplete², staff should contact the LEP about the missing documentation. If the documentation issue involves the verification form or if the omission was unintentional, staff should provide the LEP no more than 5 business days to correct the documentation issue³. Staff should memorialize this provision with a follow-up e-mail to document the process and time constraints. Because of the short response time provided to the LEP, this should not affect the screening and response requirement of the Department.

Staff is to ensure that any additional documentation is stamped with the "date received" by the Remediation Division.

IV. AUDIT RECOMMENDATION

Based on the screening of the verification, staff will draft an appropriate memo of recommendation. Staff may confer with the APC on the screening at any time.

¹ See Section 4 of this Reference Document

² Documentation is the initial major category of review for a verification, and is described in the "Guidance Document for Screening a Verification" (rev. 4/08).

³ Note: The Department will not accept or consider <u>new</u> documents generated subsequent to the rendering of a verification at this

A. No-Audits

1. No-Audit letters will only be issued for final, site closure type of verifications. These are verifications in which the entire parcel has been characterized in accordance with the SCGD and the LEP has opined <u>full</u> compliance with the RSRs.

If staff does not identify apparent issues related to a 'Final' verification, then:

- staff will draft the <u>Recommendation Memo for No Audit of Final Verification</u> or <u>Recommendation Memo for No Audit of Final "Form IV Verification"</u>, whichever is applicable.
- staff will also draft the Letter of No Audit

Staff will buckslip the <u>Letter of No Audit</u> under cover of the recommendation memo for review and sign-off by the APC, and then direct through the District Supervisor for the applicable Assistant Director's signature.

- 2. If staff does not identify apparent issues with a verification other than a 'Final' verification, then:
 - staff will notify APC and the District Supervisor of intent not to audit, file the verification, and proceed with normal case management requirements.

B. Audits

If staff identifies apparent issues with any verification, then:

- staff will draft the Recommendation Memo for Audit
- C. Staff will buckslip the <u>Recommendation Memo for Audit</u> through District Supervisor to the APC, and provide the verification package [documentation presented by the LEP to support his/her verification] upon request.

AUDIT PROGRAM PROCEDURES

- V. The APC will review the <u>Recommendation Memo for Audit</u> and verification package, discuss questionable issues with staff and issue the <u>Notice of Audit</u> to the LEP and the certifying party, responsible party, or property owner, as applicable.
- VI. The APC will conduct the audit meeting. In most situations, the District case manager will provide technical assistance during the meeting.
- VII. The APC will evaluate and consider all additional information presented by the LEP during the audit process, with assistance from staff if necessary.
- VIII. The APC will draft an Audit Report and the Audit Findings.
- IX. The APC will buckslip the Audit Findings package through the District Supervisor for the Assistant Director's signature.

→ After the Audit Findings has been issued, the audit is closed. Any subsequent statutory requirements of the CP and/or continuation of standard case management will be directed back to District staff.

Appendix H – Environmental Professionals of Connecticut Education Committee Distance Learning White Paper

Distance Learning Summary and Recommendations EPOC Distance Learning Subcommittee September 13, 2011

Connecticut Licensed Environmental Professionals (LEPs) are required to complete continuing education to maintain their licenses. The State Board of Examiners of Environmental Professionals (LEP Board) are evaluating the use of Distance Learning to fulfill continuing education requirements, and an Environmental Professionals of Connecticut (EPOC) subcommittee has been formed to assist with compiling information about Distance Learning. This paper presents the information about Distance Learning accepted by other licensing authorities in Connecticut and in other states, and presents recommendations and options for continuing to use Distance Learning as a component of the LEP continuing education program.

In March 2011, EPOC offered to assist the LEP Board in compiling information on Distance Learning and developing criteria for acceptance of additional Distance Learning courses. The EPOC Subcommittee on Distance Learning met with the LEP Board chairperson Denise Ruzicka and the LEP Program coordinator Kim Maiorano to discuss the subcommittee's role. The meeting resulted in a discussion of a number of key metrics for evaluation of distance learning courses including: 1) the qualifications of the course provider, 2) the quality of the course content and materials, 3) the assessment of the student learning process, 4) student interactivity with the course materials and instructor, 5) the measurement and validation of student contact time, and 6) the validation and certification of student identity. Based on that meeting, the Subcommittee's goal was to evaluate how other licensing agencies assessed these key metrics and to develop recommendations and options for the LEP Board to evaluate future Distance Learning courses.

To benchmark what other states and licensing authorities are using for criteria to evaluate distance learning, the subcommittee compiled information from 23 professional licensing organizations. The subcommittee collected information from licensing authorities similar to the LEP program (e.g, MA LSP, Texas CAPM, NC REC, etc), licensing authorities for professional engineers and professional geologists, and licensing authorities for other professions within Connecticut (e.g., CT doctors, nurses and occupational therapists). The following is a summary of the results of the evaluation of the 23 organizations. Tables with results from each individual organization are attached.

Summary of Distance Learning Information for Other Licensing Authorities

Benchmarks	Summary of 23 Professional Licensing Authorities Surveyed
Distance Learning summary	Most licensing authorities place responsibility on professional to decide what training is appropriate and retain own records (subject to audit) as opposed to approving individual courses. Hours required vary. All allow distance learning. 6 of the 23 surveyed have no Continuing Ed requirement at all.
Distance learning allowed?	all allow
How are sponsors approved (sponsors are organizations that offer courses and have a process for selection and evaluation of the course providers)?	some approve sponsors, but most leave it to the judgment of the professional
How are providers approved (providers are individuals or organizations that teach a course)?	some approve providers, but most leave it to the judgment of the professional
Qualifications of the course provider	Only a few have requirements for the provider. Most leave this up to the professional.
Quality of the course content and materials	Most require training to be applicable to the profession. Some also allow managerial and ethics courses.
Assessment of the student learning process	No requirement for most. A few required either opportunity for interaction with instructor OR assessment of learning (e.g., test)
Student interactivity with the course materials and instructor	No requirement for most. A few required either opportunity for interaction with instructor OR assessment of learning (e.g., test)
Measurement and validation of student contact time	Mostly self regulated
Validation of the student identity	a few require
Are attendance records required	yes for most (usually certificate to be retained by licensee)
Is the course provider required to follow a written outline/syllabus	Generally not
Continuing Education Credits (CEC) Requirements	varies
CEC Requirements (per year)	varies, most in the 12 to 15 range per year
What documentation is required to renew license?	Most require licensee to retain a log and documentation of training, and are subject to audit. Only a few require submittal of documentation.
Results of Audits for Agencies that allow self reporting	Only two agencies asked this question (Maine and NH PE Boards). Both stated that only a very small percentage of licensees failed the audits (less than 5 %). In general, the licensees took the continuing education requirements seriously and met the requirements.

EPOC Recommendations for Distance Learning

After reviewing the requirements from other licensing authorities, and reviewing the CT LEP Regulations, the EPOC Distance Learning Subcommittee compiled recommendations for use of distance learning courses. Those recommendations are presented in the table below:

Benchmarks	EPOC Subcommittee Recommendations for LEP Distance Learning
Distance Learning summary	Allow Distance Learning. In general, we recommend approving sponsors that in turn approve course providers, in addition to approving individual courses for face-to-face and distance learning. In addition to immediate interaction courses (face-to-face and internet courses where the provider can immediately interact with the student), allow self study courses if there is an assessment of learning.
How are sponsors approved (sponsors are organizations that offer courses and have a process for selection and evaluation of the course providers)?	Approve sponsors that, in turn, approve course providers, in addition to approving individual courses for face-to-face and other courses where there is immediate interaction with the provider. Allow sponsors to apply for approval of the LEP Board. Another option would be to accept sponsors and providers that have already been approved by other states. Evaluate Sponsors/Providers on the criteria in the LEP regulation: • Provider must maintain attendance records • Instructor must be technically competent • Course must follow written outline or syllabus • Course must be completed to claim credit
How are providers approved (providers are individuals or organizations that teach a course)?	Continue to allow approval by the LEP Board directly if a provider applies to the Board, and in addition, allow approval of providers by approved sponsors.
Qualifications of the course provider	Rely on sponsors and LEPs to make sure that providers meet minimum criteria of being a "competent instructor knowledgeable in the subject matter".
Quality of the course content and materials	For providers that apply to the LEP Board, approve their content using the current process of course evaluation to assess content. Where sponsors are approved, rely on sponsor to review and accept materials, but also rely on LEPs to select courses that are applicable to profession. LEPs would be expected to select courses that focus on technical and regulatory aspects of investigation and remediation.
Assessment of the student learning process	Don't require assessment of learning for immediate interaction courses. For independent study courses, require that provider include an assessment of learning (test) as a condition of completion of the course
Student interactivity with the course materials and instructor	Allow either proctored or immediate interaction with instructor. For other courses that are self-study, allow credit if there is an assessment of learning to document proficiency after course completion.

Benchmarks	EPOC Subcommittee Recommendations for LEP Distance Learning
Measurement and validation of student contact time	Accept sponsor's methods to measure course times. For providers that apply separately, require them to provide a certification that that the time claimed for the course is consistent with that which is typical of environmental professionals, along with an assessment of time required for the various sections of the course (e.g., similar to an agenda).
Validation of the student identity	Rely on LEPs to self-regulate
Are attendance records required	Require providers to maintain attendance records for immediate interaction courses. Require providers to retain records of assessment of learning for self-study courses.
Is the course provider required to follow a written outline/syllabus	Require sponsors/providers to have an outline or syllabus.
CEC Requirements	The LEP Board may choose to limit distance Learning or self- study courses to some portion of the total number of CEU hours.
What documentation is required to renew license?	Same as current method (licensee provides list of courses taken and certificates of course completion).

Options for Distance Learning

This table presents some other options to assess and approve distance learning courses. The EPOC Subcommittee recommended approach is presented in the middle column and other options are presented in the "Course by Course Specific Approval" column and the "Individual LEP Selects Courses" column.

Key metrics	Course by Course Specific Approval	EPOC Subcommittee Recommendation	Individual LEP Selects Courses
qualifications of the course provider	Review each provider and instructor qualifications individually	Continue to approve providers, but also approve sponsors, and their process to review and accept providers	Inform LEPs that courses do not need to be approved, but instead, LEPs should be responsible for selection of courses that meet the LEP regs requirements.
quality of the course content and materials	Review each course individually	Continue to evaluate and approve individual courses, and in addition, approve sponsors, and their process to review and accept course materials. For approved sponsors' courses, LEPs would make decisions about which courses are applicable for LEP work.	LEPS make decisions about which courses are applicable to LEP work. Courses taken would be subject to audit by LEP Board, but LEP would not be required to take courses only from the LEP Board approved list.
assessment of the student learning process	Allow either face-to- face or internet courses that allow for immediate interaction with instructor	In addition to immediate interaction with instructor courses, also allow other distance learning if there is an assessment of learning (test)	No requirement
student interactivity with the course materials and instructor	Allow either face-to- face or internet courses that allow for immediate interaction with instructor	Also allow other distance learning, but require an assessment of learning (test)	No requirement
measurement and validation of student contact time	Only accept face-to- face or internet immediate interaction with instructor and course is timed by instructor	For other distance learning, allow providers to assign a reasonable time that an average professional would spend for each course, backed up by a certification statement from the provider, and a course agenda.	Allow LEPs to self-report

Key metrics	Course by Course Specific Approval	EPOC Subcommittee Recommendation	Individual LEP Selects Courses
validation and certification of student identity	Require ID or some other certain method	Ask LEPs to self-report	none

Additional Information

Other additional information is presented below and in the attached tables. The additional information includes the following:

- A description of various types of distance learning currently available
- Tables attached that summarize evaluation of the 23 other licensing agencies and their methodologies to address continuing education with details for their programs.

Types of Distance Learning

EPOC recommends that the LEP Board allow many types of distance learning activities including courses where there is immediate interaction with an instructor. For unsupervised or self-study type learning activities EPOC recommends that credit be given for up to 12 hours of credit consistent with the LEP regulations, if there is an assessment of learning with the course. Following is a list and description of many types of learning including distance learning options.

General Classes

Synchronous technology is a mode of delivery where all participants are "present" at the same time. It requires a timetable to be organized. Web conferencing and videoconferencing are examples of synchronous technology, as are direct-broadcast satellite, internet radio, live streaming, telephone, and web-based live seminars. The asynchronous mode of delivery is where participants access course materials on their own schedule and so is more flexible. Students are not required to be together at the same time. The two methods can be combined in the delivery of one course.

Distance Learning with a Facilitator

This may include webinars, live streaming, video-conferencing and any form of online learning where participants are learning with a facilitator or presenter who is in a different physical location.

Hybrid - In Person & Web

Hybrid is the combination of face-to-face and electronic delivery where 50-99% of the course content is electronically delivered. The electronic delivery can be either asynchronous or synchronous.

Interactive Classroom Video (CV)

Interactive classroom video courses are synchronous distance learning and either offer access to a program not offered at a home location or the ability to attend a course at any

location where it is offered. Courses taught via CV are two-way real-time video and audio, also known as interactive television. Examples: College Course, Business to Business, or one company office offering courses for other company offices.

Telecourse

These courses are broadcast over a local television network or cable station. Telecourses are synchronous and typically consist of 30- 60 minute programs shown in blocks each week.

Private Study Activities (Formal Educational)

This includes reading prepared written materials or structured e-learning (without a facilitator).

Independent Studies

Independent study is planned study, highly individualized, not addressable through any other course format.

Media Delivery

These courses are delivered using media such as videotapes, CD's, or DVDs. Media Delivery courses are asynchronous. They may employ content that originally aired on broadcast television.

Print Based

Course is presented via a package of printed materials sent to the student. Student is self-directed with limited instructor interaction.

WWW Online

Instruction for these courses is online using the internet. Most courses are taught using Blackboard, but may also include the World Wide Web, PowerPoint, special software, listservs, and email.

Other Distance Learning Activities that can earn CEUs (Professional Activities)

- Attending online meeting, Teleconference, forum (Webcast (live, on demand)), workshop
- Authoring online material
- Developing an online course or being the Instructor of one
- Self study
- Conduct or attend In house (online) training
- Taking online college course
- Taking formal training short course
- Learning with a CD-ROM
- Watching a Podcast
- Listening to Audio (live, on demand)
- Watching a video
- Telephone seminars
- Conducting a virtual site tour
- Teaching a technical course or program
- Author technical presentation
- Attending a professional meeting
- Authoring technical paper in journal
- Mentoring
- Becoming certified via online courses(obtain professional certificate)
- Participation in professional organization
- Develop Manuals for profession
- Develop a Textbook (ebook)
- Develop chapter in a textbook (ebook)
- Passing exam in discipline
- Participation in professional societies

Sources

https://www.mara.gov.au/Agent-Information/CPD-Activities/Types-of-CPD-

Activities/Distance-Learning/default.aspx

http://courses.vccs.edu/courses/distance

http://courses.vccs.edu/courses/distance?filter=WW-ER

http://en.wikipedia.org/wiki/Distance education

BENCHMARK EDUCATIONAL REQUIREMENTS

Benchmarks	Summary of 23 Professional Licensing Authorities Surveyed	California	CT PE	CT Physicials/Surgeons	CT Nurses	CT Occupational Therapists	Iowa (GP)	MA (PE)	MA LSP	Maine (PG)	ME (PE)
Distance Learning summary	Most licensing authorities place responsibility on professional to decide what training is appropriate and retain own records (subject to audit) as opposed to approving individual courses. Hours required vary. All allow distance learning. 6 of the 23 surveyed have no Continuing Ed requirement at all.	No Continuing Education Requirements	No Continuing education requirements	Doctors must earn 50 credits every 2 years for relicensing. Courses approved by professional medical accociations are acceptable. Physicians keep own records and certify that they have met Continuing Ed requirements	No Continuing Education requirements	Occupational therapists must earn a total of 24 hours of continuing education every 2 years. Classroom, internet and home study programs are acceptable (with a proficiency exam)	DNR requires 12 hours of CEU every 2 years. Courses are provided by State or must be approved by State in advance	No Continuing education requirements	48 hours of continuing education required every 3 years. Must include 12 hours of classes taught by DEP	No Continuing Education requirements	Maine requires PE to obtain 30 PDHs for each 2 year period. Courses, conferences, participation in professional societies, etc. are acceptable as PDHs.
Distance learning allowed?	all allow			Yes		Yes	must be pre-approved by DNR		Yes		Yes
How are sponsors approved?	some approve sponsors, but most leave it to the judgment of the professional			medical education activities include, but are not limited to, courses offered or approved by the American Medical Association (AMA), American Osteopathic Association (AOA), Connecticut Hospital Association (CHA), Connecticut State Medical Society (CSMS), county medical societies (CMSs) or equivalent organizations in other jurisdictions, educational offerings sponsored by a hospital or other health care institution or courses offered by a regionally accredited academic institution or a state or local health department.		NA	courses approved by DNR		courses approved by DEP		NA
Qualifications of the course provider	only a few have requirements for the provider. Most leave this up to the professional.			No requirement		No requirement	Courses generally provided by DNR, others must be pre- approved		NA		None
Quality of the course content and materials	most require training to be applicable to the profession. Some also allow managerial and ethics courses.			relates to profession		relates to profession	must relate to underground tank contamination assessment and corrective action		must relate to remediation		Must be related to Engineering
Assessment of the student learning process	No requirement for most. A few required either opportunity for interaction with instructor OR assessment of learning (e.g., test)			No Requirement		face-to-face contact or assessment of learning required	NA		NA		None
Student interactivity with the course materials and instructor	No requirement for most. A few required either opportunity for interaction with instructor OR assessment of learning (e.g., test)			Not required		No required if there is an assessment of learning	NA		subject to approval of the Board on a cas-by-case basis		None
Measurement and validation of student contact time	Mostly self regulated			self regulated		50 minutes is one hour - self regulated	NA		specific requirements from the LSP Board, although not all classes have proctors		None
Validation of the student identity	a few require			No requirement		No Requirement			NA		None
Are attendance records required	Yes for most (usually certificate to be retained by licensee)			Yes		Yes	Yes		Yes		No
Is the course provider required to follow a written outline/syllabus	Generally not			No		No	Courses generally provided by IA Dept. of Nat. Resources (DNR)		NA	No CEU requirements	No
PDH Requirements	varies varies, most in the 12 to 15 range per year			50 every 2 years 25		24 every 2 years 12	12 PDH in 2 years		48 for 3 years 16	N/A 0	30 PDH for 2 years 15
PDH Requirements (per year) Carry over of credits allowed	varies, most in the 12 to 15 range per year about ½ of licensing authorities allow professionals to carryover credits from one licensing period to the next			No No		No No	No No		No	N/A	15 Yes - 15
what documentation is required to renew license?	most require licensee to retain a log and documentation of training, and are subject to audit. Only a few require submittal of documentation.			licensee retains a log of continuing education and copies of certificates or attendance record documentation. Licensee certifies that they have completed Continuing ed requirements		Licensee must maintain a log of training activities and and documentation of attendance. Only the log is submitted for license renewal.	Form provided by DNR and documentation of courses (copies of certificates, etc)		copies of log and attendance records required to be submitted with license renewal		None - licensee must retain records
	Only two agencies asked this question (Maine and NH PE Boards). Both stated that only a very small percentage of licensees failed the audits (less than 5 %). In general, the licensees took the continuing education requirements seriously and met the requirements.										Maine has experienced very few problems with self reporting. Their estimate was that only 1% or 2% of PEs did not have the correct documentation when audited

1 of 31

BENCHMARK EDUCATIONAL REQUIREMENTS

Benchmarks	NC (REC)	Nebraska (PG)	New York (PE)	NH (PE)	NH (PG)	NJ (PE)	Ohio (PE)	Oklahoma Remediation Consultants	PA (PE and PG)	
Distance Learning summary	Registered Environmental Consultant - Similar to CT LEP program. No Continuing education requirements	No Continuing Education requirements	half of the CEUs must be in "courses" approved by a "sponsor". Other half - acceptable "other educations activities" which includes self study	requires PE to conduct continuing ed activities and maintain a log	24 continuing education hours every two years required in geology (technical, ethical or managerial courses accepted. PG required to maintain records that document continuing education	New continuing ed requirement this year. Appears that NJ will follow NY PE Model.	requires PE to conduct 15 hours continuing ed activities and maintain a log	Licensed Remediation Consultants required to have 16 hours of PSTD-approved continuing professional education every 2 years. Sampling, sampling at tank closures, investigations and remediation or any other activities directed by PSTD must be under the supervision of a Licensed Remediation Consultant.	PA requires 24 PDH of continuing education every 2 years and will allow all credit as online courses. PA does not approve courses - up to Licensee's prefessional judgement. Licensee to maintain records.	
Distance learning allowed?			Yes for both "courses" and "other educational activities"	Yes	Yes	Yes	Yes	Yes	All 24 hours can be taken in online courses. The state of Pennsylvania does not pre-approve any continuing education materials.	
How are sponsors approved?			by regulation, approved sponsoors are IACET or AIA/CES, or an equivalent organization determined by the department and Board for Engineering	No approval. "The Board does Not pre- approve courses. The Board is relying on the professional judgment of the licensee to choose courses which comply with the administrative rules, and enhances the professional kNowledge of the licensee."	NA	Not defined yet	OH PE and surveyors board relies on professional to document that course meets general requirements	Continuing Education courses and providors must be approved by the Oklahoma Petroleum Storage Tank Division.	The board shall not require courses to be preapproved. The board may preapprove course providers. The board shall have final authority regarding approval of courses, credit, PDH value for courses and other methods of earning credit.	
Qualifications of the course provider			Provider must be accredited or qualified to teach courses and accepted by sponsor	NA	The activity shall be led by persons who are qualified by education or experience and monitored by the sponsoring organization.		NA	NA	Per course provider.	
Quality of the course content and materials			must focus on engineering or applicable law or ethics	must be relevent to the practice of engineering but can include technical, ethical or managerial content	Continuing education activities shall be relevant to the practice of geology or no credit shall be awarded. Such continuing education activities may include technical, ethical, or managerial content.	Not defined yet	Must be applicable	NA	must be relevent to professional practice	
Assessment of the student learning process			Sponsor is required to develop a method of assessment and include as part of its application to the State when it applies to be an accepted sponsor	No requirement	Not required.	test required for distance learning courses	No requirement	NA	Per course provider.	
Student interactivity with the course materials and instructor			"courses" require ability to interact with the instructor (doesn't require interaction, just the ability to interact). No requirement for "other educational activities"	Not required	Not required.	Not defined yet	Not required	NA	Not required	
Measurement and validation of student contact time			Sponsor evaluates course contact time	PE maintains a log. Board may audit	PG maintains a log and records that document continuing eduation	Not defined yet	PE maintains a log. Board may audit	NA	No requirement	
Validation of the student identity			Not required, unless sponsor requires	No requirement	Not required.	Not defined yet	No requirement	NA	No requirement	
Are attendance records required			No, unless sponsor requires	licensee must retain certificate of attendance, paid receipt or list of attendees signed by provider	Maintaining records to be used to support continuing education hours claimed shall be the responsibility of the licensee.	Not defined yet	licensee must retain certificate of attendance, paid receipt or list of attendees signed by provider	NA	Yes - and retained by licensee	
Is the course provider required to follow a written outline/syllabus		No CEU requirements	No	No	No, but The content of each activity shall be well organized and presented in a sequential manner	not defined yet	no	NA NA	Not required	
PDH Requirements PDH Requirements (per year)		N/A 0	36 every 3 years 12	22.5	24 every 2 years 12	12	15 15	16 hours every 2 years	24 every 2 years	
Carry over of credits allowed		N/A	No No	Yes (up to 15)	No No	Yes - 12	Yes (up to 15)		Yes, up to 12 credits.	
what documentation is required to renew license?			None - Licensee must certify that they met the continuing education requirements and retain records for 6 years. Stat randomly audits about 5% of licensees	The licensee shall retain attendance verification records for a period of at least 3 years. Such documentation shall be made available to the board for random audit and/or verification purposes. Documentation shall support continuing education hours claimed. Failure to provide documentation for audit verification shall result in disciplinary action.	The licensee shall retain attendance verification records for a period of at least 3 years. Such documentation shall be made available to the board for random audit and/or verification purposes. Documentation shall support continuing education hours claimed. Failure to provide documentation for audit verification shall result in disciplinary action.	Not defined yet	must maintain a log and retain documentation - not required to submit documentation	Licensed Remediation Consultants must provide proof of sixteen (16) hours of PSTD-approved continuing professional education to PSTD every two (2) years.	licensee retains a log of continuing education and copies of certificates or attendance record documentation. No submittal to State is required	
Results of Audits for Agencies that allow self reporting				NH estimated that less than 5% of people audited did not have the required documentation ofr continuing education						

BENCHMARK EDUCATIONAL REQUIREMENTS

Benchmarks	Texas Corrective Action Project Managers	Texas Professional Geoscientist	West Virginia	PMI Project Management
Distance Learning summary	Texas requires 32 hours of continuing education to renew a license as a leaking petroleum storage tank "Corrective Action Project Manager". A Texas Commission on Environmental Quality (TCEQ) member approves of the course provider and each individual course. Professional engineers and professional geoscientists are exempted from the continuing education requirements.	The license requires 15 continuing education credits as PDH. The licensing board does not approve of course providers or courses at this time.	A Licensed Remediation Specialist has a two year license period. Must show evidene of 2 continuing education credits from an EPA approved course or the equivalent acceptable to the secretary.	Professional Can earn credits through college courses; self directed learning; courses from registered providers; courses from other providers; volunteer PM work for professional or community organization. 45 credits required every 3 year renewal
Distance learning allowed?	Yes - Also accepts a variety of learning types of courses including classrom training, training at conferences, training at association meetings, and correspondence course training.	Yes - all credits may be of the distance learning type.	Yes	Yes
How are sponsors approved?	Sponsors and individual coures must be approved by a member of the Texas Commission of Environmental Quality (TECQ) training and technical program staff.	The Board does not pre-approve or endorse any CEP activities. It is the responsibility of each license holder to assure that all PDH credits claimed meet CEP requirements. All activities shall be relevant to the practice of a discipline of geoscience and may include technical, ethical, or managerial content. This position may change after the first two years of the effective date of this rule presumed to be September 1, 2006.	USEPA courses are acceptable. Other courses must be approved by state	For courses, approved by PMI (although credit also given for courses that have not gone through the approval process)
Qualifications of the course provider	The training provider must ensure that qualified instructors or subject matter experts are used in the training delivery, support, and development.	It is the responsibility of each license holder to assure that all PDH credits claimed meet CEP requirements.	USEPA courses are acceptable. Other courses must be approved by state	No requirement
Quality of the course content and materials	Curriculum guides that pertain to basic or core licensing courses and acceptable topics for continuing education for some of the licensing programs are available from the TCEQ Operator Licensing Section. The training should provide the means to accomplish the learning objectives identified and must include visual aids, graphics, and interactivity (and may make use of other approaches) to appeal to diverse learning styles.	acceptable topics for continuing education for some of the zensing programs are available from the TCEQ Operator ensing Section. The training should provide the means to omplish the learning objectives identified and must include aids, graphics, and interactivity (and may make use of other		related to Project Management
Assessment of the student learning process	Yes - Learning assessments - besides being tied to the objectives should be measurable, observable, clearly stated, and focused on student performance. The training should not consist primarily of assesments (such as objective tests).	No	NA	No requirement
Student interactivity with the course materials and instructor	Yes - The course should be designed to allow the instructor, training provider, or subject matter expert to monitor compreshension, give feedback, and determine if the participant successfully completes the course.	No	NA	Not required
Measurement and validation of student contact time	Yes - Approved training should have procedures to verify student contact time with the learning source and successful completion. The procedures are not specified.	No	USEPA courses are acceptable. Other courses must be approved by state and PDH hours assigned by State depending on content and difficulty of the course	self regulated
Validation of the student identity	Yes - Approved training should have procedures to verify student identity.	No	NA	No requirement
Are attendance records required	Not specified. However, the provide must retain and ensure the accuracy of records, electronic or physical, for at least five years to validate successful training completion for licensing and renewal. Training should be verifiable from your records if errors in electronic rosters are found.	Yes	NA	No
Is the course provider required to follow a written outline/syllabus	Yes - specifically, the provider must deliver the training as approved.	No	NA	no
PDH Requirements PDH Requirements (per year)	32	15 15	2 every two years	45 credits in 3 years 15
Carry over of credits allowed	No	Yes - up to 30	·	Yes - up to 20
what documentation is required to renew license?	must submit training certificate with license renewal	Licensee must maintain a log of training activities and and documentation of attendance. Only the log is submitted for license renewal.	Lincense renewal must contain evidence of continuing education course	must maintain a log and documentation
Results of Audits for Agencies that allow self reporting				

of 31

COURSE CERTIFICATION ORGANIZATIONS VS. BENCHMARKS

Course Certifier Standards or Criteria	ANSI-IACET 1-2007 (Note that under this standard a course "Provider" is certified using 10 benchmarks to offer courses, not the content, and does not specifically address online distance learning courses.)	Institute for Higher Education Policy (IHEP) uses 7 benchmarks	Quality Matters uses 8 broad based benchmarks	UCONN Institute for Teaching & Learning ((ITL) uses Online Course Review Rubric adopted by UCONN on 12/12/06 and uses 8 benchmarks
Continuing Education and Training Organization	Yes	Yes - 1) Learning Institution Support for the Online Program		
Responsibility and Control	Yes			
The Learning Environmental and Support Systems	Yes	Yes - 5) Student Support - training, information about resources and assistance.	Yes 6) Course Technology	Yes - 4) Resources & Materials
Learning Event Planning	Yes	Yes -2) Course Development and Materials (guidelines for minimum standards)	Yes -1) Course Overview and Introduction	Yes - 1) Overview & Introduction
Learning Outcomes	Yes	Yes -4) Course Structure - expectations, from the student, course objectives, course completion time.	Yes 2) Learning Objective	Yes - 2) Learning Objectives
Planning and Instructional Personnel	Yes	Yes -3) Teaching/learning (student interactivity) & 6) Faculty Supoort from Institution	Yes 4) Resources and Materials	Yes - 5 & 6) Learner Interaction & Learner Suport
Planning and Instructional Methods	Yes			
Assessment of Learning Outcomes	Yes	Yes - 7) Evaluation and Assessment of Learning	Yes - 3) Assessment and Measurement of Learning.	
System for Awarding CEUs and Maintaining Leaner Records	Yes	Yes - 1) Learning Institution Support for the Online Program	-	
Program Evaluations	Yes	Yes - 7) Evaluation and Assesment of Learning	No	Yes 3) Assessment & Measurement of Learning
Leaner Support	No	No	Yes -5, 7) Leaner Engagement & Support	

CALIFORNIA - REGISTERED ENVIRONMENTAL ASSESSOR

Webpage	http://www.dtsc.ca.gov/REA/index.cfm
Continuing Education	There are no continuing education requirements

CONNETICUT MEDICAL PROFESSIONALS

NURSES	
CEU	No CEU Required for Nurses
PHYSICIAN/SURGEON	
Continuing Medical Education	Effective October 1, 2005, licensed physician/surgeons are required to participate in continuing medical education (CME) activities pursuant to Connecticut General Statutes. Please note the following:
Number of Hours	A licensed physician shall earn a minimum of fifty contact hours of qualifying continuing medical education every two years commencing on the first date of license renewal on and after October 1, 2007. One contact hour means a minimum of fifty minutes of continuing education activity.
Qualifying CMES	Continuing medical education shall be in an area of the physician's practice, reflect the professional needs of the licensee in order to meet the health care needs of the public and include at least one contact hour of training or education in each of the following topics: (A) Infectious diseases, including, but not limited to, acquired immune deficiency syndrome and human immunodeficiency virus, (B) risk management, (C) sexual assault, and (D) domestic violence. Additionally, for registration periods beginning on and after October 1, 2010, coursework in cultural competency is also required.
	Qualifying continuing medical education activities include, but are not limited to, courses offered or approved by the American Medical Association (AMA), American Osteopathic Association (AOA), Connecticut Hospital Association (CHA), Connecticut State Medical Society (CSMS), county medical societies (CMSs) or equivalent organizations in other jurisdictions, educational offerings sponsored by a hospital or other health care institution or courses offered by a regionally accredited academic institution or a state or local health department.
Documentation	Each licensee applying for license renewal will be asked to attest that the licensee satisfies the continuing education requirements. Certificates of completion should not be mailed to the Department at the time of license renewal unless a licensee is specifically directed to do so.
Record Retention	Each licensee shall retain records of attendance that demonstrate compliance with the continuing education requirements, and shall retain such documentation for a minimum of three years following the year in which the continuing education activities were completed. Upon the request of the Department, a licensee shall submit records or certificates of completion of continuing medical education within forty-five days of such request. A licensee, who fails to comply with the continuing education requirements, including failure to maintain proof of course completion, is subject to disciplinary action.
Exemptions	A licensee applying for license renewal for the first time is exempt from the continuing medical education requirements until the licensee's next registration period. Registration period means the one-year period for which a license has been renewed. A licensee who is not engaged in active professional practice in any form or who has a medical disability or illness may be exempt from the continuing medical education requirements, provided the licensee submits to the Department, prior to the expiration of the registration period, a notarized application for exemption. Active professional practice includes, but is not limited to, activities of a currently licensed physician who functions as a medical director of a managed care organization or to any other organization period means the one-year period for which a license has been renewed.
Return to Active Practice Following Exemption	Any licensee who is exempt from continuing medical education requirements for less than two years shall be required to complete twenty-five contact hours of qualifying continuing medical education within the twelve months immediately preceding the licensee's return to active professional practice. Any licensee who is exempt for two or more years shall be required to successfully complete the Special Purpose Examination (SPEX) administered by the Federation of State Medical Boards prior to returning to active practice.
Reinstatement of a Lapsed License	Any licensee who applies for reinstatement of a lapsed license shall submit documentation of having successfully competed twenty-five hours of continuing education within the one year period limmediately preceding application for reinstatement.
OCCUPATIONAL THERAPIST	Immediately proceeding application for reinstatement.
OT Continuing Education	Pursuant to Connecticut General Statutes and the Regulations of Connecticut State Agencies (RSA), each licensee applying for license renewal shall complete a minimum of 24 contact hours of qualifying continued competency activity during the preceding two-year period for which the license is being renewed. A contact hour is a minimum of 50 minutes of continued competency activity. Continued competency activities completed in one registration period shall not be carried over to a subsequent registration period.
Award of Competency Units	1 contact hour for each hour of attendance at academic courses, institutes, seminars, programs, structured didactic in-service training, and scientific meetings directly related to the practice of occupational therapy. A maximum of 6 continued competency contact hours per registration period, shall be awarded for courses taught as an appointed faculty member at a school of occupational therapy accredited by the Accreditation Council for Occupational Therapy Education (ACOTE), provided that teaching is not the licensee's primary role. 10 contact hours per semester credit hour shall be awarded for full-time post-graduate attendance throughout the registration period in an advanced educational program accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). 12 contact hours shall be awarded for the successful completion of the Certification Examination for Occupational Therapist administered by the National Board for Certification in Occupational Therapy (NBCOT) if taken five years or more after graduation. 1 contact hour shall be awarded for each first presentation of a paper, essay or formal lecture in occupational therapy at a training program, an educational meeting or providing professional inservice training or instruction for occupational therapists, occupational therapy assistants and related professionals. 1 contact hour of reach hour of presentation to a maximum of 12 contact hours per registration period shall be awarded for the first presentation only of a scientific or educational exhibit at a professional meeting. 10 contact hours per article in a peer-reviewed professional publication or chapter in an occupational therapy or related professional textbook. 5 contact hours per project for clinical activities in a research project shall be awarded for appointment as a research assistant to a research project in occupational therapy which is funded by state, federal or institutional grant.

Page 6 of 31 Attachment 1

CONNETICUT MEDICAL PROFESSIONALS

OCCUPATIONAL THERAPIST (cont.)		
	8 contact hours per registration period for appointment as a teaching assistant at a school of occupational therapy accredited by the Accreditation Council for Occupational Therapy Education	
Award of Competency Units (cont.)	(ACOTE).	
	1 contact hour for each week of supervision per student supervised by the licensee to a maximum of 12 contact hours per registration period for time served as the primary direct clinical	
	supervisor of a 12-week field work placement for an occupational therapy student or an 8-week field work placement for an occupational therapy assistant student enrolled in a program	
	accredited by the Accreditation Council for Occupational Therapy Education (ACOTE).	
	1 contact hour for 5 hours of review to a maximum of 12 contact hours per registration period for professional manuscript review or editing for journals or textbooks.	
	2 contact hours per 15 clock hours to a maximum of 12 contact hours per registration period for auditing formal academic coursework.	
	Successful completion of an entire continued competency activity shall be required for award of any continued competency contact hours.	
	Activities which will not qualify for award of continued competency contact hours include: professional organizational business meetings; speeches delivered at luncheons or banquets; the	
	reading of books, articles, or professional journals; correspondence courses, and other mechanisms of self-instruction except when used as a component of a home study program; and audio-	
	visual materials, except when audio-visual materials are used as a component of a qualifying continued competency activity identified above.	
	Competency Activities are acceptable provided:	
	The activity involves face-to-face instruction or a home study program. Home study program means continued competency activities clearly related to maintaining skills necessary for the safe	
	and competent practice of occupational therapy that require successful completion of a proficiency examination, and may include distance learning and internet-based educational programs;	
Qualifying Continuing Education		
Activities	The provider implements a mechanism to monitor and document physical attendance at face-to-face instruction or to verify that a licensee completed a home study program as defined above;	
	The provider retains written records for a period of three years including but not limited to: content description; instructor, date(s) of activity; location of activity; list of participants; and number of	
	contact hours;	
	The provider implements a mechanism to evaluate participants' attainment of competency objective and/or participant's assessment of the competency activity. The certificate shall include the	
	participant's name, provider's name, title or subject area of the activity, date(s) and location of attendance; and number of contact hours completed;	
	The activity focuses on content specified above. Each licensee shall obtain a certificate of completion for those activities properly completed, from the provider of continued competency activities. Each licensee shall maintain written	
Documentation/Record Retention	documentation of completion. Certificates of completion and other required documentation shall be retained by the licensee for a minimum of three years following the license renewal due date	
	for which the activity satisfies license renewal requirements.	
	Certificates of completion and other required documentation shall be submitted by the licensee to the department only upon the department's request. Such records shall be submitted to the	
	department by the licensee within 45 days of the department's request. It is not necessary for the licensee to submit documentation of completion of the continuing competency activities in order	
	department by the incerisee within 45 days of the department's request. It is not necessary for the incerisee to submit documentation of completion of the community competency activities in order to renew the license.	
	to fellow the flooring.	
	A licensee who fails to comply with the continued competency requirements may be subject to disciplinary action pursuant to Connecticut General Statutes, Section 20-74g and Section 4-177.	

Page 7 of 31 Attachment 1

IOWA - GPPE

134.2(3) In order to be certified as a groundwater professional, the applicant must complete the two-day risk-based correction action (RBCA) course and pass a certification examination offered STATE OF IOWA - Department of Natural Resources

GROUNDWATER PROFESSIONAL CERTIFICATION APPLICANT INFORMATION:

GROUNDWATER PROFESSIONAL QUALIFICATIONS

	One of the following qualifications must be met for certification as a Groundwater Professional. Applicant must submit a copy of certification or registration that contains a current expiration date. If item #7 is marked, submit a resume containing experience, education, and training that shows he/she meets the minimum requirements.
	Certified by the American Institute of Hydrology as a:
	1. Germed by the American institute of Hydrology as a. Professional Hydrologist;
	Professional Hydrogeologist;
	Professional Hydrologist (Groundwater)
	2. Groundwater Professional certified by the Association of Groundwater Scientists and Engineers (division of the National Water Well Association).
	Industrial Hygienist certified by the American Board of Industrial Hygiene.
	4. Professional Engineer registered in lowa. (Attach Application for PE Exemption From
	5. Professional Geologist certified by a national organization: American Institute of Professional Geologists
	American Institute or Froinstonian Geologists American Association of Petroleum Geologists
Qualifications	Society of Independent Earth Scientists
	6. License, certification, or registration to practice hydrogeology or groundwater hydrology issued by another state in the United States or by a National Organization, provided
	that, at a minimum, a Bachelor's degree from an accredited college and five (5) years of related professional experience is required.
	(Type of Certification, License or Registration)
	(State or National Organization)
	(License, Certification or Registration Number)
	7. Five (5) years of direct or related experience and training as a Groundwater Professional or in the field of earth sciences. A minimum of two (2) years education/training and two
	The person must be able to show the professional application of scientific or engineering judgment, initiative, and application of scientific or engineering principles to execute work
	as a Groundwater Professional. This does not include performance of routine technical activities only, such as: drilling wells, water level measurements, laboratory work, sampling,
	soil excavation, drawing contour level measurements and maps, or compilation of data into a table. The applicant's experience must include using the results of such routine
	technical work in determining underlying geology and hydrogeology, movement of groundwater, composition of groundwater, the presence and movement of any contamination,
	any future impact of contamination, and the design of remediation systems. (Submission of detailed resume required.)
	The applicant must first show qualification with the above criteria by completing and submitting this application and a \$200 certification fee. Upon approval of the application, the
	applicant must complete the 16-hour risk-based corrective action (RBCA) course of instruction and pass the certification examination, except as provided in subrule 134.3(6) of
Course and Examination	applicant mass complete the Tortion inscrussed contective action (Robus) course of instruction and pass the certaintation (a destination) except as provided in subride 134.3(t) of 567-134, lowa Administrative Code. Twelve (12) hours of approved continuing education must be received during each two-year period.
	1007-104, Towa Authinistrative Gode. Twelve (12) flours of approved continuing education must be received during each two-year period.
Application Fee	The certification fee is two hundred dollars (\$200) every two (2) years.
	The following is from 455G.18(8), 1995 Code of lowa: "The Board may provide for exemption from the certification requirements of this section for a professional engineer registered pursuant to chapter 542B, if the person is qualified in the field of geotechnical, hydrological, environmental, groundwater, or hydrogeological engineering."
Iowa Professional	registered pursuant to chapter 9426, if the person is qualified in the field of geotechnical, hydrological, environmental, groundwater, or hydrological engineering.
Engineer Registration	The following is from subrule 567134.3(6), Iowa Administrative Code: "Exemption from examination. The department may provide for an exemption from the certification
Number	learning to low much that the support of the suppor
Number	petroleum underground storage tank fund board as provided in lowa Code section 455G.18(8). The person must be qualified in the field of geotechnical, hydrological,
	environmental, groundwater, or hydrogeological engineering.
Applicable Engineering	An engineering degree in the environmental, civil, hydrogeological and closely related areas may be applicable, if accompanied by direct experience in this field. A transcript of
Applicable Engineering	your college credits is requested.
Engineering Registration	lowa registration in agricultural, chemical, civil, hydraulic, mining/mineral, municipal, environmental, geological, or petroleum classifications will be considered if accompanied by
Classsification	direct, well-defined experience in this field.
Ciasssification	
l <u>-</u> ,	You must have at least two years of direct experience in assessment of leaking underground storage tanks and design of related remediation systems in addition to the applicable
Applicable Experience	degree and registration classification. Documentation in the form of identification of specific projects is required. Include attachments, if additional space is required. Submit to:
	lowa Department of Natural Resources, UST Section, 502 E Ninth, Des Moines, IA 50319-0034
	a. Upon receipt, review and acceptance of the application and certificate fee, the department shall furnish the applicant with a certificate showing the name of the individual and the expiration date.
134.3(4) Certification issuance and renewal	b. In order to remain valid, a groundwater professional certificate must be renewed prior to the expiration date specified on the certificate. Renewal applications must be made on a
	b. In order to remain valid, a groundware professional certificate must be referred prior to the expiration date specified on the certificate. Referred applications must be made or a form provided by the department and must be received by the department or post-free marked at least 60 days prior to the expiration date of the registration or certification then in
	remission of the registration and made so received by the department of postmation of days prior to the department due of the registration of definition in the min
	effect. The renewal application must be accompanied by the registration or certification fee specified in subrule 134 3(2) and proof of completing the continuing education
	effect. The renewal application must be accompanied by the registration or certification fee specified in subrule 134.3(2) and proof of completing the continuing education requirements in 134.3(5).
	effect. The renewal application must be accompanied by the registration or certification fee specified in subrule 134.3(2) and proof of completing the continuing education requirements in 134.3(5). All groundwater professionals are required to complete at least 12 hours of continuing education during each two-year certification period.
134 3/5) Continuing	requirements in 134.3(5). All groundwater professionals are required to complete at least 12 hours of continuing education during each two-year certification period. a. The initial course of instruction required in subrule 134.2(3) may be applied toward the first certification period's continuing education requirements. Continuing education
134.3(5) Continuing	requirements in 134.3(5). All groundwater professionals are required to complete at least 12 hours of continuing education during each two-year certification period. a. The initial course of instruction required in subrule 134.2(3) may be applied toward the first certification period's continuing education requirements. Continuing education credits may not be carried forward to the next certification period.
134.3(5) Continuing education	requirements in 134.3(5). All groundwater professionals are required to complete at least 12 hours of continuing education during each two-year certification period. a. The initial course of instruction required in subrule 134.2(3) may be applied toward the first certification period's continuing education requirements. Continuing education credits may not be carried forward to the next certification period. b. Continuing education must be in the areas relating to underground storage tank contamination assessment and corrective action activities. Courses other than those provided
	requirements in 134.3(5). All groundwater professionals are required to complete at least 12 hours of continuing education during each two-year certification period. a. The initial course of instruction required in subrule 134.2(3) may be applied toward the first certification period's continuing education requirements. Continuing education credits may not be carried forward to the next certification period.

Page 8 of 31 Attachment 1

MASSACHUSETTS LSP AND PE

	MA LSP must have 48 hours of continuing education credits every three years.		
	There are specific requirements for technical and regulatory, as well as DEP-led courses.		
	All courses must be pre-approved by the Board, and proof of completion must be submitted to the Board upon license renewal.		
MA LSPs	SPs The following language regarding distance learning was added to the LSP regulations:		
	Internet Courses. Notwithstanding the specific requirements set forth in 309 CMR 3.09(1) through (9), the Board may, at its discretion, approve for continuing education credit courses offered over the Internet. The Board may, as it sees fit and on a course-by-course basis, impose special requirements and/or conditions on Internet course providers and/or LSPs taking said courses.		
MA PE	MA PE regulations do not include any requirements for continuing education		

MAINE - PG

	1) Initially must pass the National Association of State Boards of Geology (ASBOG) exam. To be eligible to sit for the exam, a candidate must meet the following criteria:
Even Beguiremente	Education: Generally, a candidate must be a graduate of an accredited college or university with a major in geological sciences, or have completed 30 credits in geological sciences at an accredited college or university.
Exam Requirements	Experience: Generally a candidate must have acquired 7 years of experience in responsible charge of geological work, toward
	which an undergraduate degree with 30 credit hours or more in geological science courses shall count as 2 years of training and each year of graduate study in the geological sciences shall count as 1/2 year of training, up to a maximum of 2 years of credit.
_	License Application Fee: \$25
Fees	Criminal Background Check: \$21
	Initial/Annual License Fee: \$170
Continuing Education	No Continuing Education Reguirements

Professional development hours shall be relevant to the practice of engineering. Such continuing education activities may include technical, ethical or managerial material.

Professional Development Hours shall be credited as follows:

- a. One hour for college courses and continuing education courses will be awarded for each contact hour as determined by the College or continuing Education Unit offering the course, if the course is not approved by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. (EAC-ABET). Forty-five hours will be awarded for the successful completion of a one semester-hour EAC-ABET approved college course. Thirty hours shall be awarded for the successful completion of a quarter-hour EAC-ABET approved college course.
- b. One hour will be awarded for professional development in course work, seminars, or professional technical presentations made at meetings, conventions, or conferences for each hour of attendance.

Professional

- c. Teaching or instructing at qualifying courses, seminars, or making technical presentations at meetings shall earn hour credit at twice that of participants. Teaching credit shall be valid for teaching a course or seminar for the first time only. Teaching credit shall not apply to full-time faculty.
- d. Each professional journal, published paper, article or engineering text published within the applicable license period will earn 10 hours of credit.
- e. Active participation in professional or technical societies will earn 2 hours, provided that a registrant serves as an officer or committee member who actively participates within the organization or committee. Professional development hour credit shall not be earned until each year of service is completed and shall be limited to 2 professional development hours per organization.
- f. Filing a patent application will earn ten professional development hours.
- g. The number of hours required to renew a license that was issued for less than the full two year renewal period will be pro-rated by the number of months the license has been in effect, rounded up to the next higher whole number. For example, a licensee who has held a license for six months will be required to obtain 8 Professional Development Hours.
- h. A licensee may earn a maximum of 15 PDH's for the two year renewal period through: Active participation as a pro bono committee member involved in the development, revision or update of standards; specifications; technical instructions or codes intended for use or guidance of professional engineers or for the protection of public health and safety.

Development

NEBRASKA - PG

Exam Requirements	Nebraska PG- Initially must pass the National Association of State Boards of Geology (ASBOG) exam. To be eligible to sit for the exam: Education: Generally, a candidate must be a graduate of an accredited college or university with a major in geological sciences, or have completed 30 credits in geological sciences at an accredited college or university. Experience: Generally a candidate must have acquired 7 years of experience in responsible charge of geological work, toward which an undergraduate degree with 30 credit hours or more in geological science courses shall count as 2 years of training and each year of graduate study in the geological sciences shall count as 1/2 year of training, up to a maximum of 2 years of credit.
Fees	License Application Fee: \$50 Initial License Fee: \$240 Annual Renewal Fee: \$75
Continuing Education	No Continuing Education Requirements

. Why is continuing education important? Licensed professional engineers and land surveyors work in a world of evolving technology, increased consumer expectations and other emerging issues. Practice in this changing environment requires ongoing development of knowledge and skills. It is critical that licensees remain current with changes and developments in the profession to render quality services and to ensure public protection. The Office of the Professions is committed to helping professionals stay up-to-General Information date and informed throughout their professional lives. What is the difference between "licensure" and "registration"? When an individual successfully completes the licensure requirements they are awarded a professional license. The license is valid for life unless it is revoked or surrendered. Professional engineers and land surveyors in New York must register with the State Education Department every three years to practice their profession. . Who is required to take continuing education and how many hours must be completed? Every New York State licensed and registered professional engineer and land surveyor must complete continuing education unless you satisfy the requirements of the public sector exemption outlined in guestion 4 or are newly licensed as outlined in question 6 or 7. Professional engineers will be required to complete 36 hours of continuing education during each three-year registration period. Land surveyors will be required to complete 24 hours of continuing education during each three-year registration period. Each licensee must take continuing education in appropriate subject areas offered by approved sponsors. 4. What are the requirements of the public sector exemption for continuing education for professional engineers? To satisfy the continuing education requirements under the Public Sector Exemption, a licensee must be directly employed on a full time basis by the State of New York; its agencies, public authorities, public benefit corporations or local government units on December 31, 2003, working in a position requiring licensure in engineering, and either represented by a collective bargaining unit or, pursuant to Article 14 of the Civil Service Law, designated managerial or confidential. It a licensee practices engineering (i.e. provides engineering services) in New York State outside the government service described above, the exemption no longer applies. In these situations, the licensee must complete the continuing education requirement of 1 hour/month of required continuing education from the time the services are provided until the next registration period. Thereafter, the licensee must complete the regular continuing education requirement of 36 hours per registration period. This exemption does not apply to licensed land surveyors. 5. When will I be required to report completion of continuing education? Beginning January 1, 2007, professional engineers will be required to complete 36 contact hours of continuing education and land surveyors will be required to complete 24 contact hours of continuing education, during each three-year registration period. 6. I just passed all parts of the licensing examinations and received my first license. Since I am in my first registration period, do I need to complete the continuing education requirements immediately? No, you are not required to complete continuing education during your initial three-year registration period. 7. I was practicing in another jurisdiction and just received my first New York State license and registration. Do I need to begin completing continuing education immediately? Continuing No, you are exempt from taking continuing education during the first 3 years following your initial licensure in New York State. **Education: Who is** . I am licensed in New York State but am not registered (my registration is inactive) and I am practicing my profession in another jurisdiction. Do I need to complete continuing education before I can reactivate my New York Required to Take It? State registration? Yes. To reactivate your New York State registration, you are required to have completed the number of hours applicable to the period of time of your last registration period and to take 1 hour of continuing education for each month your registration is inactive, up to a maximum of 36 hours. Since you are actively practicing your profession, you will be able to count continuing education credits earned up to 36 months prior to the month in which you reactivate your registration. The continuing education must be taken in appropriate subject areas offered by approved sponsors. 9. I am licensed in New York State but am not registered (my registration is inactive) because I have not been practicing my profession in any jurisdiction. Do I need to complete continuing education before I can reactivate my registration? Yes. To reactivate your New York State registration, you are required to have completed the number of hours applicable to the period of time of your last registration period and to take 1 hour of continuing education for each month your registration is inactive, up to a maximum of 36 hours. Since you are not actively practicing your profession, you will only be able to count continuing education credits earned up to 12 months prior to the month in which you reactivate your registration. In addition, you must complete the regular continuing education requirements for the new registration period at a rate of 1 hour per month until your next registration period. The continuing education must be taken in appropriate subject areas offered by approved sponsors. 10. I just received my registration certificate and notice that the registration period is less than three years. Am I required to complete the total number of continuing education hours required by my profession? No, registration periods are adjusted so that renewals occur during the licensee's month of birth. When this happens and your registration period is less than three-years, you must calculate how many hours you are required to complete. To do this, count the number of months of the registration period. You must complete 1 hour of continuing education for each month up to a maximum of 36 hours for professional engineers and up to maximum of 24 hours for land surveyors. For example, suppose your registration period extends from 01/01/05 to 06/30/07. This registration period is a 30-month period, therefore, you are required to complete 30 hours of continuing education if you are a professional engineer or 24 hours if you are a land surveyor. 11. What is an hour of continuing education? An hour of continuing education is one contact hour of at least 50 minutes in duration. Most continuing education providers give credit in hours; however, you may also see credit given in continuing education units. One continuing education unit (CEU) equals 10 contact hours. Therefore, .1 CEU equals one contact hour. To convert CEU's to contact hours, multiply by 10. To convert contact hours to CEU's divide the contact hour by ten. Continuing Individuals completing college-level course work should note that one-semester hour of college level course work equals 15 contact hours and one-quarter hour of college-level course work equals 10 contact hours. **Education Hours** 12. If I complete more hours of continuing education than is required during my registration period, can I use them toward the hours required in my next registration period? No. continuing education hours cannot be carried over to subsequent registration periods. 13. Am I required to complete a certain number of hours of continuing education each year during my registration period? No. You can complete the hours any time during the three-year registration period as long as you have completed the required hours prior to the expiration date of your registration, unless you have had a lapse in your registration. If this is the case, the requirements outlined in question 9 would apply. However, we recommend that you complete courses each year so you are sure to have them completed before it is time to reregister.

Page 13 of 31 Attachment 1

14. What is acceptable continuing education?

Acceptable continuing education includes courses and educational activities.

Courses: A minimum of 18 hours of continuing education must be completed in courses for professional engineers and a minimum of 16 hours of continuing education must be completed in courses for land surveyors. All 36 hours for professional engineers or 24 hours for land surveyors may be completed through acceptable courses.

Educational Activities: A maximum of 18 hours may be in educational activities for professional engineers and a maximum of 8 hours may be in educational activities for land surveyors.

15. What are acceptable courses/educational activities for continuing education?

To be acceptable the courses/educational activities must be:

administered by an approved New York State sponsor (provider) and

in an approved subject area and

in an approved format.

In addition to the requirements above, for a course to be considered acceptable, a student must have the opportunity for **immediate interaction with an instructor/presenter**, e.g. a seminar, workshop, lecture, technical presentation, etc. See question #17 for a listing of approved sponsors and question #18 for a listing of approved subject areas.

Please note: Courses and educational activities requiring the use of a self-reporting form by the sponsor will NOT be accepted for New York State continuing education credit.

16. What are acceptable continuing educational activities other than courses?

Acceptable continuing educational activities include:

Preparing and teaching a course offered by **an approved New York State sponsor (provider) and in an acceptable subject area**. Continuing education hours credited for this activity can include actual instructional time plus preparation time, which may be up to 2 additional hours for each hour taught. Teaching experience will not be accepted if you have taught the course on more than one occasion without presenting substantially new or revised material.

Authoring an article in an **approved subject area** published in a peer reviewed journal or a published book. You will receive 9 continuing education hours for each work published during the registration period.

Making a technical presentation in an **approved subject area** at a professional conference or meeting sponsored by an organization that is an **approved sponsor (provider)**. Continuing education hours credited for this activity can include actual instructional time plus preparation time, which may be up to 2 additional hours for each hour taught. A specific presentation may only be counted once during any given registration period.

Obtaining a patent related to the practice of engineering. You will receive 9 continuing education hours for each patent granted on an invention during the registration period.

Completing self-study program. Self-study must be taken from an **approved provider and in an acceptable subject area** and be structured study that is based on audio, audio-visual, written, online, or other media, and does not meet the criteria established for live instruction described in question 15. In addition, a self-study program must have a testing instrument, which is completed by the licensee and returned to the sponsor for scoring. A passing grade is required before a sponsor may award continuing education credit.

Completing an educational tour in an approved subject area, meaning a structured tour of an instructional nature, provided by an approved sponsor (provider). The tour may not be promotional in nature.

17. How do I know if a sponsor is approved?

The following entities are authorized to ann

The following entities are authorized to approve sponsors of continuing education for New York State professional engineers and land surveyors. If the courses and educational activities are offered by sponsors approved by one of these entities and the subject area of the courses and educational activities meet the requirements in question 18, then the courses or educational activities would be considered approved New York State mandatory continuing education.

Please note: NOT all courses and educational activities offered by an approved sponsor are acceptable for continuing education credit in New York State. Also note: Courses and educational activities requiring the use of a

self-reporting form by the sponsor will NOT be accepted for New York State continuing education credit.

Sponsors recognized by the Landscape Architecture Continuing Education SystemTM (LA CESTM). The Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture

Sponsors recognized by the Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape Architecture Continuing Education System (LA CES) list of recognized sponsors is available at Landscape at Landscape at Landscape (LA CES) list of recognized sponsors is available at Landscape (LA CES) list of recognized sponsors is availabl

American Council of Engineering Companies of New York (ACECNY). ACECNY's list of recognized sponsors is available from ACECNY, 6 Airline Dr., Albany, NY 12205, Phone 518-452-8611; Fax 518-452-1710; orwww.acecny.org/conedu.html

Registered Continuing Education Providers Program (RCEPP). RCEPP's list of registered providers is available from NCEES RCEPP, P.O. Box 1686, Clemson, South Carolina 29633; Phone 800-250-3196; Fax 864-654-6033; orwww.rcepp.com

International Association for Continuing Education and Training (IACET). IACET's list of recognized sponsors is available from IACET, 1620 I St. NW Suite 615, Washington, DC 20006; Phone 202-463-2905; Fax 202-463-8497 orwww.iacet.org

National Council of Structural Engineers Association (NCSEA). NCSEA's list of recognized sponsors is available from NCSEA, 645 N. Michigan Ave., Suite 540, Chicago, IL 60611; Phone 312-649-4600; Fax 312-649-5840; orwww.ncsea.com

The Practicing Institute of Engineering (P.I.E). P.I.E's list of recognized sponsors and procedures is available from P.I.E., 6 Airline Dr. Albany, NY 12205; Phone 518-283-7490; Fax 518-283-7495; orwww.practicinginstitute.org

AlA's Continuing Education System list of recognized sponsors is available from the Continuing Education Program, 1735 New York Avenue NW, Washington, DC 20006-5292; or AlA's Web site at www.aia.org

The Shaw Fund Continuing Education Approved Provider Program. The Shaw Fund list of recognized sponsors is available from the Shaw Fund Approved Provider Program, 146 Washington Avenue, Albany, NY 12210; Phone 518-432-4046; Fax 518-432-4055; or www.nysapls.net

Colleges, universities and other degree granting institutions offering degree (e.g. AAS, BS, MS), certificate or diploma programs carrying degree credit that are registered by the State Education Department or have authority to offer equivalent programs accredited by an acceptable accrediting agency (e.g., ABET). The State Education Department's "Inventory of Registered Programs" includes all degree granting institutions in the State and can be found on SED's site at www.highered.nysed.gov/ocue

The NYS Education Department directly approves sponsors (providers). Pleasesee the list of currently approved sponsors. Further information and an application form are available on this site.

18. What are appropriate subjects for continuing education?

Not all courses and educational activities offered by an approved sponsor are acceptable for continuing education credit in New York State. Courses and educational activities must contribute to the professional practice of professional engineering or land surveying. The subject matter of the course or educational activity must be related to professional practice. Subject areas that are **not so related**, such as, risk management, limiting the design professional's liability, project management related to profitability and maximizing fees, marketing and public relations, insurance, laws related to arbitration, mediation, liens (unless they are related to safeguarding the health, safety, and welfare of the public), real estate, real estate development, expanding a design professional's business, basic Auto CAD, personal development, general office management, accounting/financial planning, succession planning, zoning as it relates to increasing a developer or engineer/land surveyor's profitability, design build (unless it includes information on the laws related to design build and its limitations in New York State) are **non-acceptable subjects**.

Service on Boards and/or professional committees, and active participation in technical and/or professional organizations are not eligible for continuing education credit.

Page 14 of 31 Attachment 1

Continuing
Education Courses
and Educational
Activities Acceptable Subject
Areas and Providers

	Acceptable subjects may include:
	Professional Engineering:
	FTOTESSIONAL ENGINEERING.
	aerospace engineering, agricultural engineering, architectural engineering, bioengineering, ceramic engineering, chemical engineering, civil engineering, construction engineering, control systems engineering, electrical/computer engineering, environmental engineering, fire protection engineering, geological engineering, industrial engineering, manufacturing engineering, mechanical engineering, materials/metallurgical engineering, mining/mineral engineering, naval
	architecture/marine engineering, nuclear/radiological engineering, ocean engineering, petroleum engineering, structural engineering, systems engineering, architecture, land surveying; or other matters of law and/or ethics which contribute
	to the professional practice in engineering and the health, safety, and/or welfare of the public; and in other topics which contribute to the professional practice of engineering as such practice is defined in section 7201 of the Education Law.
	Land Surveying:
	Land surveying methods and techniques; or other matters of law and/or ethics which contribute to the practice of land surveying and the health safety, and/or welfare of the public; and in other topics which contribute to the professional
Continuing	practice of engineering as such practice is defined insection 7203 of the Education Law.
Education Courses	19. Can I study on my own rather than complete courses or educational activities?
and Educational	No. Independent study or informal group "study clubs" and/or "book clubs" of professional engineers or land surveyors that are not approved sponsors cannot be accepted. Continuing education offered by an approved sponsor assures
Activities -	appropriate course format, effective evaluation and necessary record keeping.
Acceptable Subject	20. Are courses limited to a traditional "classroom setting" in which I am in the same room with the instructor?
Areas and Providers (cont.)	No, however you must be able to interact with the instructor. Examples include: a live lecture, a telecourse or teleconference in which you and the instructor can speak directly with each other; a course in which you and the other practitioners discuss a taped presentation with a facilitator's assistance; a computerized course in which you are able to interact directly with the instructor. On the other hand, a televised lecture with no means of direct interaction would not be acceptable
, ,	as a live course even if it were a live telecast. 21. May I count toward my requirement a college level course that I teach?
	Yes. Individuals teaching a college-level course; at a College, university or other degree granting institutions offering degree (e.g. AAS, BS, MS), certificate or diploma programs carrying degree credit that are registered by the State Education
	Department or have authority to offer equivalent programs accredited by an acceptable accrediting agency (e.g. ABET) which is taught over the course of a college semester and is in an approved subject area may receive New York State
	continuing education credit which may be counted once during any given registration period. The number of contact hours accepted for teaching a college course is as follows: one semester hour equals 15 contact hours; one quarter hour 10 contact hours. During a registrant's three-year registration period, a maximum of 18 contact
	hours for engineers and 8 contact hours for land surveyors may be accepted as educational activities for continuing education credit. Any contact hours exceeding the 18-hour requirement for engineers and 8-hour requirement for land
	surveyors may not be carried over to subsequent registration periods.
	Documentation should be obtained from the college or university's department chair or registrar's office, certifying that you taught the course which should include; the title of the course and any identification number assigned; number of
	semester hours completed; name of the college; verification by the sponsor or department chair (registrar) that you taught the course; date and location of the course.
	22. What records will I expect to receive from the continuing education provider and how long am I required to keep them?
	Sponsors must provide a Certificate of Completion to licensees who completed courses or educational activities for continuing education credit. The information on each course or educational activity should be retained in your records for six
	years from the date of completion. For NO reason will self-reporting forms be acceptable for New York State continuing education credit.
	A Certificate of Completion should include the following information:
	title of the course or program, the specific acceptable subject area, and any identification number assigned to it by the sponsor
	number of hours completed
	the sponsor's name and any identifying number
	verification by the sponsor of your attendance
	the date and location of the course or activity
	you taught the course or made a presentation - alternatively, a signed letter from the sponsor indicating you taught the course or made the presentation (including name of the course, when, where, how many hours taught/presented) may be
Record Keeping and	accepted in place of a certificate of completion. 23. What information must I provide the State Education Department when I renew my registration?
Reporting	
	Send your completed registration form, on which you will attest that you completed the required continuing education hours, together with the registration fee, which is currently \$242, and the continuing education fee, which is currently \$45, for a total of \$287.
	24. Do I have to send my continuing education records to the State Education Department when I reregister?
	No. On the registration renewal form you will be required to certify that you have completed the required continuing education. You should retain your continuing education records in your files for a period of 6 years after the date of completion
	of the continuing education. However, you are required to make your continuing education records available for inspection by the Department upon our request. We audit random samples of mandatory continuing education records to assure
	compliance with the continuing education requirement.
	25. What documentation must I provide if my continuing education records are audited?
	Upon request, you must provide the Department with your records of completion for each approved continuing education course or activity. In no cases will self-reporting forms be acceptable for New York State credit.
	26. What if the audit reveals discrepancies?
	You may be subject to charges of professional misconduct. Willfully making or filing a false report is unprofessional conduct, according to section 29.1 of the Rules of the Board of Regents. Penalties may include censure and reprimand, fine,
	and/or suspension or revocation of your license to practice in New York State.
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Page 15 of 31 Attachment 1

27. What if I fail to complete the required number of hours? If you request, the Department, at its discretion, may issue you a conditional registration. The conditional registration is valid for one year only and is not renewable. To be granted a conditional registration you would have to: 1. agree to complete the required hours of continuing education from the previous registration period during the period of conditional registration, 2. complete the regular continuing education requirement at a rate of 1 hour per month, 3. complete and submit the Registration Remittance Addendum, and 4. pay the fee for the conditional registration, which is currently \$287. Record Keeping and At the end of the conditional registration period, you must submit to the Department, your continuing education records certifying that you have completed the required continuing education and pay the regular registration and continuing education fee, which is currently \$287, for the remaining two years of the registration period. Reporting 28. What if I do not meet the continuing education requirement and simply do not renew my registration? (cont.) Your status will remain "not registered" until you meet the continuing education requirement and submit a registration renewal application with the appropriate fee. If you practice your profession while unregistered or after the Department has denied renewal of your registration for failure to report completion of the required hours of continuing education, you are subject to charges of professional misconduct. 29. What if, due to circumstances beyond my control, I am having difficulty meeting the continuing education requirement? The Department may grant an adjustment (not an exemption) to the requirement for: poor health certified by a physician; a specific physical or mental disability certified by an appropriate health care professional; extended active duty with the armed forces of the United States; or extreme hardship which, in the judgment of the Department, makes it impossible for you to comply with the continuing education requirements in a timely manner. You must request an adjustment from the

requirements.

Office of the State Board for Engineering and Land Surveying, by completing and submitting the Registration Remittance Addendum and provide written documentation of the circumstances preventing you from complying with the

Page 16 of 31 Attachment 1

NEW YORK STATE - PE SPONSOR

Continuing Education Sponsor Approval - New York State Education Department Approval as a Sponsor of Engineering and/or Land Surveying Continuing Education Programs (Effective January 1, 2004)

This page explains the requirements for becoming an approved sponsor of continuing education for engineering and/or land surveying in New York State. Once you have read the "Standards" below, please complete the application, Form 1-SB PE/LS (and send it to the address at the end of the application form along with the supporting materials requested. You must also enclose a check made out to the "NYS Education Department" in the amount of \$900. Sponsors are approved for a period of three years. Sponsors are required to keep records on the continuing education programs that they offer. The details concerning the record keeping requirements are included in the "Standards" document.

An organization must comply with the applicable requirements of Section 68.11 and/or68.12 of the Commissioner's Regulations to obtain State Education Department approval as a sponsor of continuing education for professional engineers and/or land surveyors. Sponsors are expected to meet or exceed the standards detailed in this document. Approvals are valid for a period of three years and can be renewed.

Should you have questions concerning the requirements, please contact the State Board for Engineering and Land Surveying.

Inquiries and applications to become an approved sponsor of continuing education (can be obtained from the: New York State Education Department State Board for Engineering and Land Surveying 89 Washington Avenue, 2nd Floor Mezzanine, East Wing Albany, NY 12234-1000 Phone: (518) 474-3817 x140 E-mail: enginbd@mail.nvsed.gov E-mail: lsurybd@mail.nvsed.gov

x140 E-mail: enginbd@mail.nysed.gov E-mail: lsurvbd@mail.nysed.gov		
Standard 1 - Organization	Sections 68.11(i)(3)(ii)(b) and 68.12(i)(3)(ii)(b) of the Regulations of the Commissioner of Education require organizations to document that they are an organized educational entity, or an entity that has expertise in the professional area that will be taught, including but not limited to a post-secondary institutions, engineering and/or land surveying firms, national, state, or local engineering and/or land surveying associations.	
	Sections 7211 and 7212 of the Education Law limit the educational programs a professional engineer and/or land surveyor may use to meet the continuing education to "courses of learning" and "educational activities" which contribute to	
	the practice in professional engineering and/or land surveying. Sponsors must offer courses/activities in one of the subject areas listed below:	
	a. Practice areas for engineers are defined as aerospace, agricultural, architectural, bio, ceramic, chemical, civil, construction, control systems, electrical/computer, environmental, fire protection, geological, industrial, manufacturing,	
	mechanical, materials/metallurgical, mining/mineral, naval architecture/marine, nuclear/radiological, ocean, petroleum, structural, systems, engineering, architecture, land surveying, or other matters of law and/or ethics which contribute	
	to the practice in professional engineering and the health safety, and/or welfare of the public.	
Standard 2 - Courses/Activities		
Courses/activities are offered in appropriate subject areas.	b. Practice areas for land surveyors are defined as land surveying methods and techniques; or other matters of law and/or ethics, which contribute to the practice of land surveying and the health, safety, and/or welfare of the public.	
Courses/activities are offered in appropriate subject areas.	General Management courses and activities related to business rather than the professional aspects (e.g., marketing, accounting, financial planning, investments,) are not acceptable subject areas.	
	In addition, sponsors must:	
	a. maintain and use written procedures to identify, design, and evaluate prospective courses /activities before offering or sponsoring them; and	
	b. maintain and use written procedures to evaluate the effectiveness and overall quality of courses/activities. The procedures shall specify how course/activity attendees participate in evaluation and ways the evaluations are used to	
	update or modify courses/activities. Procedures may include, but need not be limited to, written post-course evaluations by participants. Use of course/activity monitors to attend and assess the quality of courses/activities can be an	
	especially effective evaluation tool.	
	Sections 68.11(i)(3)(ii)(c) and 68.12 (i)(3)(ii)(c) requires sponsors to provide course/activity instructors who are qualified to teach the courses/activities which will be offered, including but not limited to, faculty of a college of engineering or	
Standard 3 - Instructors	land surveying accredited by an acceptable accrediting agency, or instructors who are specifically qualified authorities in engineering and/or land surveying, as determined by the Department with assistance from the State Board for	
Instructors are qualified to teach the courses/activities which	Engineering and Land Surveying, to conduct such courses.	
will be offered.	Sponsors must assure that instructors meet this standard and must:	
Will be different	a. maintain and use written criteria and procedures to select instructors, including job descriptions, intended to assure that every instructor is qualified by training and/or experience to teach the course/activity; and	
	b. maintain and use written procedures to evaluate instructors' performance. Both attendees' written evaluations and assessments by course/activity monitors may appropriately be part of the evaluation of instructors' performance.	
Standard 4 - Assessment of Learning	Sections 68.11(i)(3)(ii)(d) and 68.12 (i)(3)(ii)(d) require sponsors to have "a method of assessing the learning of participants."	
Sponsor has a method of assessing the learning of	Sponsors must maintain assessment methods that (1) are appropriate to the course/activity objectives and educational methods, and (2) measure the extent to which the objectives were accomplished. These methods may include, but	
participants.	need not be limited to, post-tests, questionnaires, and attendees' evaluations. Course/activity monitors may also be effective components of a method of assessing learning.	
	Sections 68.11(i)(3)(ii)(e) and 68.12 (i)(3)(ii)(e) require that sponsors "maintain records for at least six years from the date of completion of coursework or educational activities, which should include, but not be limited to, the name and	
	curriculum vitae of the faculty, a record of attendance/participation of the licensed professional engineer and/or land surveyor in such course work or educational activity, and the number of contact hours for completion of the course work	
	or educational activity."	
	Sponsors must create and maintain for at least six years the following records for each course or educational activity:	
	a. the date and location of the course/activity;	
	b. the name and curriculum vitae of the instructor/presenter;	
	c. the objectives and learning methods of the course/activity;	
	d. the outline of the course/activity, the assessment methods used, and the number of contact hours of the course/activity;	
Standard 5 - Records	e. a summary of any evaluation of the course/activity;	
Sponsor will maintain records for at least six years from the	f. copies of all promotional materials used in a course/activity;	
date of completion of coursework/activity.	g. any evaluation of the need for the course/activity; and	
	h. the list of licensed practitioners in attendance, including the profession(s) in which each is licensed.	
	Sponsors must provide a Certificate of Completion to licensed practitioners who have completed a course/educational activity for continuing education credit. A Certificate of Completion must contain the following information:	
	a. attendee's name	
	b. title of the course, program, or educational activity and any identification number assigned to it by the sponsor	
	c. number of hours completed	
	d. the sponsor's name and the NYSED Sponsor Number	
	e. verification by the sponsor of attendance	
	f. the date and location of the program, course, or educational activity	

NEW YORK STATE - PE REGULATIONS

	a. Definitions. As used in this section, acceptable accrediting agency means an organization accepted by the department as a reliable authority for the purpose of accreditation at the postsecondary level, applying its criteria for granting
Definitions	accreditation in a fair, consistent and nondiscriminatory manner, such as an agency recognized for this purpose by the Council for Higher Education Accreditation.
	b. Applicability of requirement.
	1. Each licensed professional engineer, required under Article 145 of the Education Law to register with the department to practice in New York State, shall comply with the mandatory continuing education requirements as prescribed
	subdivision (c) of this section, except those licensees exempt from the requirement or who obtain an adjustment to the requirement pursuant to paragraph (2) of this subdivision or who are subject to a different requirement pursuant to
	section.
	2. Exemptions and adjustments to the requirement.
	i. Exemptions. The following licensees shall be exempt from the continuing education requirements, as prescribed in subdivision (c) this section:
Applicability of the Requirement	a. licensees for the triennial registration period during which they are first licensed to practice engineering in New York State, except those first licensed to practice engineering in New York State pursuant to an endorsement of a license another jurisdiction; and
Applicability of the Requirement	b. licensees whose first registration date following January 1, 2004 occurs prior to January 1, 2005, for periods prior to such registration date; and
	c. licensees who are not engaged in the practice of engineering as evidenced by not being registered to practice in New York State, except as otherwise provided in subdivision (e) of this section to meet the requirements for the re
	practice in New York State.
	ii. Adjustments to the requirement. An adjustment to the continuing education requirement, as prescribed in subdivision (c) of this section, may be made by the department, provided that the licensee documents good cause that pre-
	compliance, which shall include, but not be limited to, any of the following reasons: poor health certified by a physician; or a specific physical or mental disability certified by an appropriate health care professional; or extended active
	the Armed Forces of the United States; or other good cause beyond the licensee's control which in the judgment of the department makes it impossible for the licensee to comply with the continuing education requirements in a timel
	c. Mandatory continuing education requirement. 1. General requirement.
	1. General requirement.
	i. During each triennial registration period, meaning a registration period of three years' duration, an applicant for registration shall complete at least 36 hours of continuing education acceptable to the department, as defined in para-
	this subdivision, provided that at least 18 hours of such continuing education shall be in courses of learning, and no more than 18 hours of such continuing education shall be in other educational activities as prescribed in paragraph
	subdivision. Any licensed professional engineer whose first registration date following January 1, 2004 occurs less than three years from that date, but on or after January 1, 2005, shall complete continuing education hours on a pro
	at the rate of one hour of acceptable continuing education per month for the period beginning January 1, 2004 up to the first registration date thereafter. Such continuing education shall be completed during the period beginning January 1, 2004 up to the first registration date thereafter. Such continuing education shall be completed during the period beginning January 1, 2004 up to the first registration date thereafter. Such continuing education shall be completed during the period beginning January 1, 2004 up to the first registration date thereafter.
	2004 and ending before the first day of the new registration period or at the option of the licensee during any time in the previous registration period.
	ii. Proration. Unless otherwise prescribed in this section, during each registration period of less than three years' duration, an applicant for registration shall complete acceptable continuing education, as defined in paragraph (3) of the section of the secti
	subdivision and within the limits prescribed in such paragraph, on a prorated basis at a rate of one hour of continuing education per month for such registration period. 2. Requirement for certain licensees.
	2. Requirement for certain licensees.
	i. In accordance with section 7211(1)(d) of the Education Law, a licensee shall be deemed to have satisfied the continuing education requirement prescribed in paragraph (1) of this subdivision, if the licensee meets the following continuing education requirement prescribed in paragraph (2) of this subdivision, if the licensee meets the following continuing education requirement prescribed in paragraph (3) of this subdivision, if the licensee meets the following continuing education requirement prescribed in paragraph (4) of this subdivision, if the licensee meets the following continuing education requirement prescribed in paragraph (4) of this subdivision, if the licensee meets the following continuing education requirement prescribed in paragraph (4) of this subdivision, if the licensee meets the following continuing education requirement prescribed in paragraph (4) of this subdivision, if the licensee meets the following education requirement prescribed in paragraph (4) of this subdivision, if the licensee meets the following education requirement prescribed in paragraph (5) of the licensee meets the following education requirement prescribed in paragraph (6) of the licensee meets the following education requirement prescribed in paragraph (6) of the licensee meets the following education requirement prescribed in paragraph (7) of the licensee meets the following education requirement prescribed in paragraph (7) of the licensee meets the licensee me
	a. On December 31, 2003, the licensee was directly employed on a full-time basis by the State of New York; or agencies, public authorities, or public benefit corporations of the State of New York; or local government units of
	York in a position requiring licensure in engineering and is represented by a collective bargaining unit or designated management or confidential pursuant to Article 14 of the Civil Service Law at all times when so employed; and
	b. either:
Continuing Education	1. the licensee has continuously been employed in a position or successor positions described in clause (a) of this subparagraph, and since January 1, 2004, has not otherwise practiced engineering in New York State in any oth
	outside of such employment; or
	2. the licensee has left employment described in clause (a) of this subparagraph, and since January 1, 2004, has not practiced engineering in New York State in any other capacity outside of employment in a position described in of this subparagraph.
	of this subparagraph. ii. A licensee who does not meet the conditions prescribed in clauses (a) and (b) of subparagraph (i) of this paragraph shall be required to complete acceptable continuing education, as defined in paragraph (3) of this subdivision, as
	one hour of continuing education per month from the date the condition is not met until the next registration date. Thereafter, the licensee shall complete the regular continuing education requirement prescribed in paragraph (1) of the next registration date.
	subdivision.
	3. Acceptable continuing education. To be acceptable to the department, continuing education shall meet the requirements of this paragraph. Such continuing education must be in the subjects prescribed in subparagraph (i) of this p
	and be the types of learning activities prescribed in subparagraph (ii) of this paragraph.
	i. Subjects. Acceptable continuing education shall contribute to professional practice in engineering and shall have as its focus one or more of the following subjects:
	a. aerospace engineering, agricultural engineering, architectural engineering, bioengineering, ceramic engineering, chemical engineering, civil engineering, construction engineering, control systems engineering, electrical/comput
	engineering, environmental engineering, fire protection engineering, geological engineering, industrial engineering, manufacturing engineering, mechanical engineering, materials/metallurgical engineering, mining/mineral engineer architecture/marine engineering, nuclear/radiological engineering, ocean engineering, petroleum engineering, structural engineering, systems engineering, architecture, land surveying; or other matters of law and/or ethics which c
	the professional practice of engineering and the health, safety, and/or welfare of the public; and
	b. in other topics which contribute to the professional practice of engineering as such practice is defined in section 7201 of the Education Law.
	ii. Types of learning activities. Acceptable continuing education shall be the types of learning activities prescribed in this subparagraph and be subject to the limitations prescribed in this subparagraph.
	a. Courses of learning. Acceptable continuing education shall be courses of learning offered by a sponsor approved pursuant to subdivision (i) of this section, which may include, among others, the following courses offered by an
	sponsor: university and college courses, and professional development and technical training courses.
	b. Other educational activities. Acceptable continuing education shall be the following other educational activities, provided that no more than 18 hours of continuing education in a registration period shall consist of such other educational activities.
	activities:
	1. preparing and teaching a course offered by a sponsor of continuing education to professional engineers, approved pursuant to subdivision (i) of this section, provided that such teaching shall not be acceptable where the licen taught the course on more than one occasion without presenting new or revised material. Continuing education hours that may be credited for this activity may include actual instructional time plus preparation time which may be
	taught the course on more than one occasion without presenting new or revised material. Continuing education hours that may be credited for this activity may include actual instructional time plus preparation time which may be additional hours for each hour of presentation;
	2. authoring an article published in a peer-reviewed journal or a published book. A licensee shall receive nine continuing education hours for each written work published during the registration period.
	3. making a technical presentation at a professional conference sponsored by an organization that is a sponsor of continuing education to professional engineers, approved pursuant to subdivision (i) of this section. Continuing education to professional engineers, approved pursuant to subdivision (ii) of this section.
	hours that may be credited for this activity shall include actual instructional time, plus preparation time which may be up to two additional hours for each hour taught.
	4. obtaining a patent related to the practice of engineering. A licensee shall receive nine continuing education hours for each patent granted on an invention during the registration period.
	5. completing a self-study program, meaning structured study, provided by a sponsor approved pursuant to subdivision (i) of this section, that is based on audio, audio-visual, written, on-line, and other media, and does not include the subdivision (ii) of this section, that is based on audio, audio-visual, written, on-line, and other media, and does not include the subdivision (iii) of this section, that is based on audio, audio-visual, written, on-line, and other media, and does not include the subdivision (iii) of this section, that is based on audio, audio-visual, written, on-line, and other media, and does not include the subdivision (iii) of this section, that is based on audio, audio-visual, written, on-line, and other media, and does not include the subdivision (iii) of this section, that is based on audio-visual, written, on-line, and other media, and does not include the subdivision (iii) of this section, that is based on audio-visual, written, on-line, and other media, and the subdivision (iii) of this section, that is based on audio-visual, written, on-line, and other media, and the subdivision (iii) of this section, the subdivision (iii) of this section, the subdivision (iii) of this section, the subdivision (iii) of this section (iii) of this
	instruction, transmitted in person or otherwise, during which the student may communicate and interact with the instructor and other students; and
	6. completing an educational tour, meaning a structured tour of an instructional nature provided by a sponsor approved pursuant to subdivision (i) of this section.
Renewal of Registration	d. Renewal of registration. At each re-registration, licensed professional engineers shall certify to the department that they have either complied with the continuing education requirements, as prescribed in this section, or are subject to
	exemption or adjustment to such continuing education requirements, as prescribed in subdivision (b) of this section. e. Requirement for lapse in practice.
	e. Requirement for lapse in practice. 1. A licensee returning to the practice of engineering after a lapse in practice, as evidenced by not being registered to practice in New York State, whose first registration date after such lapse in practice and following January 1, 2004
	than three years from January 1, 2004, but on or after January 1, 2005, shall be required to complete:
Lapse in Practice	i. at least one hour of acceptable continuing education for each month beginning with January 1, 2004 until the beginning of the new registration period, which shall be completed for a licensee who has not lawfully practiced engineer
Eupoc III i Iuonoe	
Lapse III Tactice	continuously in another jurisdiction throughout such lapse period, in the 12-month period before the beginning of the new registration period; and for the licensee who has lawfully practiced engineering continuously in another jurisdi
Lapse III I lactice	continuously in another jurisdiction throughout such lapse period, in the 12-month period before the beginning of the new registration period; and for the licensee who has lawfully practiced engineering continuously in another jurisdiction throughout such lapse period, in the new registration period or at the option of the licensee in the period beginning 36 months before the commencement of the new registration period and ending at the conclusion of such registration

Page 18 of 31

NEW YORK STATE - PE REGULATIONS

	ii. for a licensee who has not lawfully practiced engineering continuously in another jurisdiction throughout such lapse period, at least 12 hours of acceptable continuing education in each successive 12-month period of the new registration period; and for a licensee who has lawfully practiced engineering continuously in another jurisdiction throughout such lapse period, the regular continuing education requirement during the new registration period.
	2. Except as prescribed in subparagraph (i) of this paragraph for registrations therein specified, the licensee who returns to the practice of engineering after a lapse in practice in which the licensee was not registered to practice in New York State and did not lawfully practice engineering continuously in another jurisdiction throughout the lapse period, shall be required to complete:
Lapse in Practice (cont.)	i. the continuing education requirement applicable to the period of time the licensee was registered in the licensee's last registration period; and
	ii. at least one hour of acceptable continuing education for each month of lapsed registration up to a maximum 36 hours, which shall be completed in the 12 months before the beginning of the new registration period; and
	iii. at least 12 hours of acceptable continuing education in each succeeding 12-month period, after such registration is reissued, until the next registration date.
	3. Except as prescribed in subparagraph (i) of this paragraph for registrations therein specified, the licensee who returns to the practice of engineering after a lapse in practice in which the licensee was not registered to practice in New York
	State but did lawfully practice engineering continuously in another jurisdiction throughout the lapse period, shall be required to complete:
	i. the continuing education requirement applicable to the period of time the licensee was registered in the licensee's last registration period; and ii. at least one hour of acceptable continuing education for each month of lapsed registration up to a maximum of 36 hours, which shall be completed in the new registration period, or at the option of the licensee in the period beginning 36
	months before the commencement of the new registration period and ending at the conclusion of the new registration period; and
	iii. the regular continuing education requirement during the new registration period.
	f. Conditional registration.
	. Conditional regionation.
	1. The department may issue a conditional registration to a licensee who attests to or admits to noncompliance with the continuing education requirements of this section, provided that such licensee meets the following requirements:
One Prince Device Conferen	i. the licensee agrees to remedy such deficiency within the conditional registration period;
Conditional Registration	ii. the licensee agrees to complete the regular continuing education requirement at the rate of one hour of acceptable continuing education per month during such conditional registration period; and
	iii. the licensee agrees to complete additional continuing education during such conditional registration period, which the department may require to ensure the licensee's proper delivery of professional engineering services consistent with the
	licensee's practice of engineering.
	2. The duration of such conditional registration shall not exceed one year and shall not be renewed or extended.
	g. Licensee records. Each licensee subject to the requirements of this section shall maintain, or ensure access by the department to, a record of completed continuing education, which includes: the type of learning activity, title of the course if a
Licensee Records	course, subject of the continuing education, the number of hours completed, the sponsor's name and any identifying number (if applicable), attendance verification if a course, participation verification if another educational activity, and the date
Licensee Necorus	and location of the continuing education. Such records shall be retained for at least six years from the date of completion of the continuing education and shall be available for review by the department in the administration of the requirements of
	this section.
	h. Measurement of continuing education study. Continuing education credit shall be granted only for acceptable continuing education, as prescribed in subdivision (c) of this section. For continuing education courses, a minimum of 50 minutes
Measurement of Continuing Education Study	shall equal one continuing education hour of credit. For credit-bearing university or college courses, each semester-hour of credit shall equal 15 continuing education hours of credit, and each quarter-hour of credit shall equal 10 continuing
	education hours of credit.
	i. Sponsor approval.
	1. To be approved by the department, sponsors of continuing education to licensed professional engineers in the form of courses of learning or self-study programs shall meet the requirements of either paragraph (2) or (3) of this subdivision.
	2. The department shall deem approved as a sponsor of continuing education to licensed professional engineers in the form of courses of learning or self-study programs:
	i. a sponsor of continuing education that is approved by the International Association for Continuing Education and Training (IACET), or the Practicing Institute of Engineering, or the American Institute of Architects Continuing Education System
	(AIA/CES), or an equivalent organization determined by the department with assistance from the State Board for Engineering and Land Surveying to have adequate standards for approving sponsors of continuing education for professionals
	regulated by Title VIII of the Education Law that include but are not limited to standards that are equivalent to the standards prescribed in clauses (3) (ii) (a), (c), and (d) of this subdivision; or
	ii. a postsecondary institution that has authority to offer programs that are registered pursuant to Part 52 of this Title or authority to offer equivalent programs that are accredited by an acceptable accrediting agency.
	3. Department review of sponsors.
	i. The department shall conduct a review of sponsors that apply for approval to offer continuing education to licensed professional engineers in the form of courses of learning or self-study programs that are not deemed approved pursuant to
	the requirements of paragraph (2) of this subdivision.
	ii. Organizations desiring to offer courses of learning or self-study programs based upon a department review under this paragraph shall submit, with the fee as set forth in subdivision (j) of this section, an application for advance approval as a
	sponsor at least 90 days prior to the date of the commencement of such continuing education that documents that the organization:
Sponsor Approval	a. will offer courses of learning or self-study programs in one or more of the subjects prescribed for acceptable continuing education in subparagraph (c) (3) (i) of this section;
	b. is an organized educational entity or an entity that has expertise in the professional areas that will be taught, including but not limited to, postsecondary institutions that are not already deemed approved pursuant to subparagraph (2)(ii) of
	this subdivision, and national, state, or local engineering associations;
	c. provides course instructors who are qualified to teach the courses which will be offered, including but not limited to, faculty of a college of engineering accredited by an acceptable accrediting agency; or instructors who are specially
	qualified authorities in engineering, as determined by the department with assistance from the State Board for Engineering and Land Surveying, to conduct such courses;
	d. has a method of assessing the learning of participants, and describes such method; and
	e. will maintain records for at least six years from the date of completion of coursework, which shall include, but shall not be limited to, the name and curriculum vitae of the faculty, a record of attendance of licensed professional engineers in
	the course if a course, a record of participation of licensed professional engineers in the self-study program if a self-study program, an outline of the course or program, date and location of the course or program, and the number of hours for
	completion of the course or program. In the event an approved sponsor discontinues operation, the governing body of such sponsor shall notify the department and shall transfer all records as directed by the department.
	iii. Sponsors that are approved by the department pursuant to the requirements of this paragraph shall be approved for a three-year term.
	iv. The department may conduct site visits of, or request information from, a sponsor approved pursuant to the requirements of this paragraph to ensure compliance with such requirements, and a sponsor shall cooperate with the department
	permitting such site visits and in providing such information.
	A determination by the department that a consequence of this consequence of this consequence is not according to the sequence of this consequence is not according to the sequence of the sequ
	v. A determination by the department that a sponsor approved pursuant to the requirements of this paragraph is not meeting the standards set forth in this paragraph shall result in the denial or termination of the approved status of the sponsor is. Fees.
	j. Fees. 1. At the beginning of each registration period, a mandatory continuing education fee of \$45 shall be collected from licensees engaged in the practice of engineering in New York State, except for those exempt from the requirement pursuant
	clauses (b)(2)(i)(a) and (c) of this section. This fee shall be in addition to the registration fee required by section 7206 of the Education Law.
Fees	2. Licensees applying for a conditional registration, pursuant to the requirements of subdivision (f) of this section, shall pay a fee that is the same as and in addition to, the fee for the triennial registration required by section 7206 of the Education
	Law. In addition, such licensees shall pay the \$45 mandatory continuing education fee.
	3. Organizations desiring to offer continuing education to licensed professional engineers based upon a department review, pursuant to paragraph (i)(3) of this section, shall submit an application fee of \$900 with the application requesting the
	issuance of a permit from the department to become an approved sponsor of continuing education to licensed professional engineers in the form of courses of learning or self-study programs. Application for a three-year renewal of the permit
	shall be accompanied by a fee of \$900.
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Page 19 of 31

NEW HAMPSHIRE - PE

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WHEN DO I HAVE TO BEGIN ACCUMULATING PROFESSIONAL DEVELOPMENT HOURS AND HOW MANY DO I NEED?	All New Hampshire licensed Professional Engineers must satisfactorily demonstrate 30 professional development hours per biennial renewal period. All Professional Development Hours must be earned in the licensees renewal time frame, except for carry over credits awarded in their previous renewal period. New licensees are exempt from accumulating Professional Development Hours during their first license cycle. New licensees cannot earn carry over credits or and should not report PDH's during their first renewal cycle.
WHAT IS A PROFESSIONAL DEVELOPMENT HOUR (PDH)?	A Professional Development Hour (PDH) is equivalent to one contact hour. One continuing education unit (CEU) equals ten PDH's.
HOW CAN I EARN THE REQUIRED PROFESSIONAL DEVELOPMENT HOURS?	Professional Development Hour activities must be relevant to the practice of engineering and should include technical, ethical or managerial content. PDH units may be obtained through successful completion of college courses, participation on committees of professional or technical societies, on-line or correspondence courses, seminars, workshops, teaching, vendor demonstrations, in-house trainings, patents, publication of technical papers or professional/technical presentations made at meetings, conventions, or conferences. PDH units may also be earned by publishing a professional journal or textbook and through the award of patents. The criteria for professional development activities is outlined in administrative rules Eng 403.05 and 403.06.
DO I HAVE TO SUBMIT MY COURSES IN ADVANCE TO THE BOARD FOR APPROVAL?	The Board does not pre-approve courses. The Board is relying on the professional judgment of the licensee to choose courses which comply with the administrative rules, and enhances the professional knowledge of the licensee.
HOW LONG MUST I KEEP DOCUMENTATION OF CONTINUING PROFESSIONAL DEVELOPMENT?	The licensee will be responsible for all record keeping. Documentation must be maintained for four years. Copies of documentation may be requested by the board for random audit purposes per Eng. 403.07 (c), (d).
HOW DO I REPORT MY PROFESSIONAL DEVELOPMENT HOURS TO THE BOARD?	The renewal form contains a log for Professional Development Hours earned or you may renew on-line at https://nhlicenses2.nh.gov/professional/ Logs are also available for your personal use on the Board's web site at www.state.nh.us/jtboard/pece.htm Upon renewal, licensees will list the credits claimed, courses taken and certify that they have complied with the continuing professional development renewal requirements of Eng 403.
ARE CARRY OVER CREDITS ALLOWED?	If you exceed the 30 PDH units required in any biennial period up to 15 PDH's may be carried forward into the subsequent renewal period, per Eng 403.01,(c).
IS IT EXPENSIVE TO COMPLY WITH THE REQUIREMENT FOR CONTINUING PROFESSIONAL DEVELOPMENT?	That depends on your individual selections. The licensee will be responsible for choosing programs that will meet the needs of their scope of practice; therefore it is up to the professional judgment of the licensee to choose the programs that would most benefit their practice. In-house trainings given by your employer or vendor demonstrations may count towards or possibly fulfill your PDH requirement.
ARE THERE EXEMPTIONS TO THE PDH REQUIREMENT?	New licensees shall be exempt for their first renewal period. Licensees who list their occupation as retired on the renewal form and certify that they are no longer practicing professional engineering will be exempt from PDH requirements. Licensees on temporary active duty in the armed forces of the United States exceeding 120 consecutive days in a year are exempt. Licensees with proof of disability, or other extenuating circumstances may be exempt, however they must apply to the Board for their specific exemption, per Eng 403.08, 403.09.
WHAT ARE THE REQUIREMENTS FOR LICENSEES WHO ARE RESIDENTS OF OTHER STATES?	If the licensee documents that they have met the continuing professional development requirements of their home state, New Hampshire requirements will be deemed satisfied. If the licensees home state has no provision for continuing professional development the licensee will be required to meet the requirements of the State of New Hampshire per Eng 403.03.
HOW DO I KEEP TRACK OF THE COURSES AND SEMINARS I HAVE ATTENDED?	You will find a continuing professional development activity log for your own use on our web site at www.state.nh.us/jtboard/pece.htm
I LET MY LICENSE LAPSED OVER 12 MONTHS HOW DO I REINSTATE IT?	If your license lapsed before June 30, 1997 you may submit a reinstatement application, pay all applicable fees, no PDH's are required at this time. If your license lapsed after June 30, 1997, you must file a reinstatement application, pay all applicable fees and submit a Continuing Professional Development Log with the 45 PDH's required per Eng 403.04.
WHERE DO I OBTAIN INFORMATION ABOUT CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMS?	Your local and national engineering societies, colleges and universities, professional trade organizations or your employer may have information about Continuing Professional Development Programs. As a courtesy to licensees the Board maintains a Continuing Professional Development listing on our web site at www.state.nh.us/jtboard/calendar.htm with links to various organizations and educational institutions, you can also find a list of professional associations that may offer PDH's at www.nh.gov/jtboard/org.htm.
HAVE AUDITS OF COMPLIANCE WITH CONTINUING PROFESSIONAL DEVELOPMENT GUIDELINES BEEN CONDUCTED?	The Board conducted annual audits of compliance with continuing education requirements from 2000 - 2010. 5% of licensees were randomly chosen to provide proof of compliance with Administrative Rules Eng 403, Continuing Professional Development. Audits are conducted on a yearly basis.
HOW WERE LICENSEES CHOSEN FOR THE AUDIT?	A neutral third party was retained to query the Board's database for a random selection of licensees. No Board members or staff participated in selection of licensees for the audit.
HOW ARE AUDITS CONDUCTED?	Licensees randomly chosen for the audit are notified by US mail of the requirement to provide verification to the Board of 30 Professional Development Hours claimed on their renewal and are given approximately 30 days to submit verification. Once verification is
ARE THE AUDITS A SUCCESS?	received it is reviewed for compliance and the licensee is notified of the audit results. Yes, the majority of licensees audited submitted the requested documentation completely, accurately and in a timely manner. Every effort was made to work with licensees chosen for audit to assist them with providing proper documentation. Upon completion of the audits, the majority of licensees audited are able to provide verification of compliance.
WHAT ISSUES AROSE AS PART OF THE 2010 AUDIT?	Several licensees failed to retain verification records as required per Administrative Rule Eng 403.07 (c) and had to go back to the course sponsors or organizations and request documentation be reissued. There were no disciplinary actions as a result of the 2010 audit; all licensees were in compliance!
	Eng 403.01 Renewal Requirements. (a) A renewal application shall not be accepted for filing unless the licensee indicates on the renewal application, and under penalty of unsworn falsification, that he/she has completed the minimum required hours of approved professional development hours required by 403.01 (b) and lists the specific basis for each credit. (b) Each licensee shall obtain at least 30 professional development hours of approved continuing education courses during the biennial renewal period as a condition of license renewal. (c) If a licensee exceeds the requirement, a maximum of 15 professional development hours may be carried forward into the subsequent renewal period. Eng 403.02 Continuing Professional Development Requirements for New Licensees. New licensees shall be exempt from obtaining professional development hours for their first biennial renewal period.
	Eng 403.03 Requirements for Reciprocity. Licensees who are residents of jurisdictions other than New Hampshire shall meet the continuing professional development or equivalent requirements of their resident jurisdiction. The requirements for the State of New Hampshire shall be satisfied when a non-resident licensee provides evidence of having met the requirements of their resident jurisdiction that has no continuing professional development requirements, the resident shall meet the requirements of the State of New Hampshire. Eng 403.04 Reinstatement. An applicant may bring an inactive licensee to active status by obtaining 15 additional professional development hour units for a total of 45, but only upon payment of any and all outstanding renewal and reinstatement fees as specified in
	Eng 302.03. Additional credits shall be for the current reinstatement period only, none may be carried over into the licensee's subsequent biennial renewal period. Eng 403.05 Professional Development Hour Requirements. Professional development hours shall meet the following criteria:
PART ENG 403 CONTINUING PROFESSIONAL DEVELOPMENT	(a) Continuing education activities shall be relevant to the practice of engineering or no credit shall be awarded. Such continuing education activities may include technical, ethical, or managerial content; (b) The content of each presentation shall be well organized and presented in a sequential manner; and
	(c) There is a provision for individual participant course/program registration including information required for record keeping and reporting. Eng 403.06 Professional Development Hour Credits. Professional development hours shall be credited as follows:
	(a) A maximum of 6 professional development hours shall apply to activity on a state or national board of licensure;
	(b) Courses/programs awarded one college semester hour of credit shall equal 45 professional development hours based on course credit established by the college or university;
	(c) Courses/programs awarded one college quarter hour shall equal 30 professional development hours;
	(d) Courses/programs awarded one continuing education unit shall equal 10 professional development hours; (e) Credit shall be awarded for one hour of professional development in course work, seminars, or professional technical presentations made at meetings, conventions, or conferences for each hour of attendance. Attendance at qualifying programs presented at
	professional and/or technical society meetings shall earn professional development hour units for the actual time of each program; (f) Teaching or instructing qualifying courses or seminars or making presentations at technical meetings shall earn professional development hours credit at twice that of participants. Teaching credit shall be valid for teaching a course or seminar for the first time only. Teaching credit shall not apply to full-time faculty;
	(g) Each professional journal, published paper, article or published engineering text book shall equal 30 professional development hours; (h) Active participation in professional or technical societies shall equal 2 professional development hours and shall require that a registrant serve as an officer and/or actively participate in a committee of the organization. Professional development hour credits
	shall not be earned until each year service is completed and shall be limited to 2professional development hours per organization; (i) Credit awarded for one patent shall equal 10 professional development hours; and
	(j) Professional development credits shall not be recognized for any repeat program attended or completed.

e 20 of 31 Attachment 1

NEW HAMPSHIRE - PE

E	Eng 403.07 Record Keeping.
	a) The responsibility of maintaining records to be used to support credits claimed shall be the responsibility of the licensee.
(1	b) Records required shall contain at least the following documentation:
	1) A log showing the type of activity claimed, sponsoring organization, location, instructor's or speaker's name, and professional development hours credits earned; and
	2) Attendance verification records in the form of completion certificates or other documents supporting evidence of attendance such as:
	a) Signed attendance receipts;
	b) Paid receipts; or
	c) A copy of a listing of attendees signed by a person sponsoring the course or program or the course/program provider.
	c) The licensee shall retain attendance verification records for a period of at least 4 years. Such documentation shall be made available to the board for random audit and/or verification purposes. Documentation shall support professional development hours claimed.
PART ENG 403 CONTINUING PROFESSIONAL DEVELOPMENT	Failure to provide documentation for audit verification shall result in disciplinary action.
(CONT.)	d) Not less than 5% of the licensees shall be randomly selected each year by the board for compliance with Eng. 403.01.
E	Eng 403.08 Exemptions. A licensee may be exempt from the professional development educational requirements for any of the following reasons:
	a) A licensee serving on temporary active duty in the armed forces of the United States for a period of time exceeding 120 consecutive days in a year shall be exempt from obtaining the professional development hours required during that year.
(1	b) Licensees who list their occupation as "retired" on the board approved renewal form and who further certify that they are no longer receiving remuneration from providing professional engineering services shall be exempt from the professional development hours
re	required.
E	Eng 403.09 <u>Waiver of Professional Development Hours Deadline</u> . A licensee may request waiver of professional development hours deadlines provided that a petition to that effect is filed at least 30 days before the expiration of the biennial professional
d	development hours period in question, or that late filing is justified by a showing of good cause. Good cause shall include accident, illness or other circumstances beyond the control of the licensee. No waiver petition shall be granted which does not propose a specific
	imetable for completing specific courses which will meet the petitioner's professional development hours deficiency.
	Eng 403.10 Noncompliance. Failure to submit documentation required per Eng 403.07 (c) and (d) which establishes that said requirements were so completed, shall after notice and opportunity for hearing, result in disciplinary action including license suspension
	or revocation unless a waiver petition has been timely filed and duly granted by the board.

^{*}The Joint Board makes no warranty, express or implied, as to whether this document is correct,

NEW HAMPSHIRE - PG

	24 hours biennially based on date of licensure
	New licensees shall obtain 12 continuing education hours for their first biennial renewal period.
	Hours for continuing education activities shall be awarded as follows:
	(a) A maximum of 2 continuing education hours per year shall apply to activity on a state or national board of licensure;
	(b) Courses/programs awarded one or more college semester credit hours, with a passing grade where grades are issued, shall equal 15 continuing education hours per credit
	hour based on course credit established by the college or university;
	(c) Courses/programs awarded one or more college quarter hours, with a passing grade where grades are issued, shall equal 10 continuing education hours per credit hour
	based on course credit established by the college or university;
	(d) Courses/programs awarded one or more continuing education
	units by the course sponsor, with a passing grade where grades are issued, shall equal 10 continuing education hours per CEU;
	(e) One hour of credit shall be awarded for each hour of continuing education in course work, seminars, or professional technical presentations made at meetings, conventions,
Completion Requirements	or conferences for each hour of attendance;
	(f) Field trips organized and run by professional and/or technical societies or in conjunction with meetings, conventions, or conferences shall be awarded one continuing
	education hour for each hour of duration, up to 8 continuing education hours per day.
	(g) Teaching or instructing qualifying courses or seminars or making presentations at technical meetings shall earn continuing education hours at a rate twice that of
	participants. Teaching credit shall be valid for teaching a course or seminar for the first time only. Teaching credit shall not apply to full-time faculty teaching courses that are part
	of their normal teaching load;
	(h) Each professional journal article, published paper, published geological map, or published geology text book shall equal 16 continuing education hours;
	(i) Active participation in professional or technical societies shall equal one continuing education hour per year and shall require that the licensee serve as an officer and/or
	actively participate in a committee of the organization. Continuing education hours shall not be earned until each year of service is completed and shall be limited to 2 continuing
	education hours per organization, with a maximum of 4 continuing education hours per renewal period;
	(j) Continuing education hours shall not be awarded for any repeat activity attended or completed.
Audit Potential	Not less than 5 percent of the licensees shall be randomly selected each year by the board for compliance with Geo 403.01.
	Continuing education activities shall meet the following criteria:
I	(a) Continuing education activities shall be relevant to the practice of geology or no credit shall be awarded. Such continuing education activities may include technical, ethical,
0	or managerial content;
Course of Study	(b) The content of each activity shall be well organized and presented in a sequential manner
	(c) The activity shall be led by persons who are qualified by education or experience and monitored by the sponsoring organization; and
	(d) There is a provision for individual participant registration which shall include information required for record keeping and reporting
	(a) Maintaining records to be used to support continuing education hours claimed shall be the responsibility of the licensee.
	(b) Records shall contain at least the following documentation:
	(1) A log showing:
	a. The type of activity claimed;
	b. Sponsoring organization;
	c. Address;
	d. Contact information;
	e. Location;
Proof of Completion	f. Instructor's or speaker's name and title, and
	g. Number of continuing education hours earned.
	(2) Attendance verification records in the form of completion certificates or other documents supporting evidence of attendance such as:
	a. Signed attendance receipts;
	b. Paid receipts;
	c. A copy of a listing of attendees signed by the program provider;
	(c) The licensee shall retain attendance verification records for a period of at least 3 years. Such documentation shall be made available to the board for random audit and/or
	verification purposes. Documentation shall support continuing education hours claimed. Failure to provide documentation for audit verification shall result in disciplinary action.
	(a) A licensee serving on temporary active duty in the armed forces of the United States for a period of time exceeding 120 consecutive days in a year shall be exempt from
	obtaining 12 of the continuing education hours required.
	(b) Licensees experiencing disability, illness, or other extenuating circumstances which would prevent the licensee from completing the required continuing education hours shall
	apply in writing to the board for specific exemption. Relevant supporting documentation shall be furnished to the board when necessary for a fair and informed determination by
	the board.
Exceptions	Geo 403.09 Waiver of Continuing Education Deadline. A licensee may request waiver of continuing education deadlines provided that a petition to that effect is filed at least 30
	days before the expiration of the biennial continuing education period in question, or that late filing is justified by a showing of good cause. Good cause shall include accident,
	illness or other extenuating circumstances beyond the control of the licensee which actually prevents the licensee from satisfying the continuing education requirements. No
	waiver petition shall be granted which does not propose a specific timetable for completing specific activities that will eliminate the petitioner's continuing education deficiency.
	Geo 403.10 Noncompliance. Failure to complete continuing education requirements in a timely fashion, or failure to submit documentation which establishes that said
	requirements were so completed, shall after notice and opportunity for hearing, result in disciplinary action pursuant to Geo 402.02 unless a waiver petition has been timely filed
	and duly granted by the board.

NEW HAMPSHIRE PG AND PE

	Licensees must earn 24 CEHs for each renewal period.
	No restriction related to on-line courses in PG regulations, and PGs are referred to on-line course providers are listed on the PE Board's
	website when a request is made.
NH PGs	There is no pre-approval requirement for courses.
	Licensee is required to maintain a log of continuing education credits, as well as verification of attendance.
	Licensee is required to submit the log of continuing education activity at the time of license renewal, but not proof of attendance. Proof
	of attendance must be maintain for 3 years in case of audit.
	Licensees must earn 30 PDHs for each renewal period.
	No restriction related to on-line courses, and online course providers are listed on the PE Board's website.
ļ ļ	There is no pre-approval requirement for courses.
	Licensee is required to maintain a log of continuing education activity and verification of attendance, which must be available, if audited.

NEW JERSEY - PE

1. What are the Board's continuing education requirements for professional engineers?

The Board's L. 2009, c. 294 requires professional engineers licensed in New Jersey to complete continuing education. The effective date of the new law is January 12, 2011. Thus, a licensee will be required to acquire continuing professional competency credits effective January 12, 2011. A current licensee shall be required to obtain, on or before April 30, 2012, 15 continuing professional competency credits, two of which shall be in professional practice ethics, on or before April 30, 2012 to meet the requirements for the 2012-2014 biennial renewal period

P.L. 2009, CHAPTER 294, approved January 17, 2010 Assembly, No. 3835 (First Reprint) I AN ACT concerning continuing professional competency 2 requirements for professional engineers I, amending P. L.1983, 3 c.3311 and supplementing P.L.1938, c.342 (C.45:8-21 et seq.). 4 5 BE IT ENACTED by the Senate and General Assembly of the State 6 of New Jersey: 1 8 1. (New section) The State Board of Professional Engineers 9 and Land Surveyors shall require each person licensed as a 10 professional engineer, as a condition for biennial licensure pursuant II to P.L.1938, c.342 (C,45:8-21 et seq.) and P. L.1972, c.108 (CA5: 112

1), to complete not more than 24 credits of continuing professional 13 competency relating to the practice of professional engineering, as 14 provided in section 2 of this act, during each biennial registration 15 period. 16 11 2. (New section) a. The board shall: 18 (1) Establish standards for continuing professional competency 19 in professional engineering, including the subject matter and 20 content of courses of study, which shall be in conformity with a 21 national model, such as that of the National Council of Examiners 22 for Engineering and Surveying; 23 (2) Approve educational programs offering credit towards the 24 continuing professional competency in engineering requirements; 25 and 26 (3) Approve other equivalent educational programs, including, 21 but not limited to, meetings of constituents and components of 28 professional engineering associations and other appropriate 29 professional and technical associations when an engineering I [or] 30 topic I is presented as a principal part of the program, examinations, 31 papers, publications, technical presentations, teaching and research 32 appointments, technical exhibits, management, leadership or ethics 33 courses, and correspondence courses on engineering topics where a 34 final examination is required and shall establish procedures for the 35 issuance of credit upon satisfactory proof of the completion of these 36 programs. EXPLANATION -Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and Is intended to be omitted in the law. Matter underlined thus is new matter. Matter enclosed In 7.;Perscript numerals has been adopted as follows: ! Assembly ARP committee amendments adopted May 7, 2009.

A3835 [IR] 2 b. In the case of education courses and programs, each hour of 2 instruction shall be equivalent to one credit. 3 'c. Two of the 24 credits of continuing professional competency 4 required pursuant to section 1 of this act shall be in professional practice ethics.

Continuing Education

7 3. (New section) The board shall: 8 a. Establish procedures for monitoring compliance with the 9 professional engineering continuing professional competency requirements; and 11 b. Establish procedures to evaluate and grant approval to 12 providers of continuing professional competency in professional 13 engineering. 14 4. (New section) The board may, in its discretion, waive 16 requirements for continuing professional competency in 17 professional engineering on an individual basis for reasons of 18 hardship such as illness or disability, service in the armed forces of 19 the United States of America, retirement of the license, or other good cause. 21 22 5. (New section) The board shall not require completion of 23 professional engineering continuing professional competency 24 credits for initial registration. 26 6. (New section) a. The board shall not require completion of 27 professional engineering continuing professional competency 28 credits for any licensure periods commencing within 12 months of 29 the effective date of this act. b. The board shall require completion of professional 31 engineering continuing professional competency credits on a pro 32 rata basis for any licensure periods commencing more than 12 but 33 less than 24 months following the effective date of this act. 34 7. (New section) The board [shall] may accept as proof of 36 completion of continuing professional competency program 37 credits'~ 38 !hl documentation submitted by a person licensed as a 39 professional engineer or by any entity offering a continuing professional competency program approved by the board pursuant 41 to section 2 of this ace~ 42 b. any other proof acceptable to the board!. 43 44 [8. Any person who fails to complete the continuing professional competency requirements established pursuant to 46 section I of this act shall be liable to a civil penalty of not more 47 than \$500, or additional hours of continuing professional

A3835 [IRJ 3 I competency in professional engineering, or both, as imposed by the 2 board, for a first offense. A second or subsequent offense by a 3 licensee shaH be considered professional misconduct pursuant to the 4 provisions of P.L.1938. c.342 (C.4S:8-27 et seg.) and P.L.1978. S c.73 (C.4S:1-14 et seg.) 11 6 7 18. (New section) Notwithstanding the provisions of section 1 of 8 P.L.J993, c.39 (C.4S:8-3S.2) and section 1 of this act, the board 9 shall require each person licensed as both a professional engineer 10 and a land surveyor, as a condition for biennial certification, to JI complete not less than 36 credits of continuing professional 12 competency relating to the practice of professional engineering and 13 land surveying, with not less than 12 credits to be completed in 14 professional engineering and not less than 12 credits to be IS completed in land surveying, I 16 17 9. (New section) The board shall allow a professional engineer 18 to carryover a maximum of 12 continuing professional competency 19 credits to the next biennial licensure period. 20 21 110. Section 18 of P.L. 1983, c.337 (C.4S:3A-IS) is amended to 22 read as follows: 23 18. a. Except as provided in subsections b. and c. of this section, 24 two years from the effective date of P.L. 2008, c.77 (C.45:3A-16 et 25 al.) and every two years thereafter, each person licensed to practice 26 landscape architecture in this State shall ccrtify to the board, upon a 27 form issued and distributed by the board, that the person has 28 attended, or participated in not less than 24 hours of continuing 29 education in landscape architecture as follows: college postgraduate 30 courses, lectures, seminars, or workshops, as approved by the board 31 or any other evidence of continuing education which the board may 32 approve. 33 b. Two years filom the effective date of P.L.2008, c.77 34 (C.45:3A-16 et al.) and every two years thereafter, each architect 35 who is licensed to practice landscape architecture pursuant to 36 subsection d. of section II of P.L.1983, c.337 (C.45:3A-8), shall 37 certify to the board, upon a form issued and distributed by the 38 board, that the person has attended or participated in not less than 39 12 hours of continuing education in landscape architecture as 40 follows: college postgraduate courses, lectures, seminars, or 4 I workshops, as approved by the board or any other evidence of 42 continuing education which the board may approve. 43 c. Two years filom the effective date of P.L.2008, c.77 44 (C.45:3A-16 et al.) and every two years thereafter, each 45 professional engineer who is licensed to practice landscape 46 architecture purcuent to subsection due facction LL of P. L. 1092, 47 a 227 (C. 45:24, 9), shall contify to the board, upon a form issued 49 and distributed by the board, that the

A3835 [IR] 4 1 participated in not less than [24] 12. hours of continuing education 2 in landscape architecture as follows: college postgraduate courses, 3 lectures, seminars, or workshops, as approved by the board or any 4 other evidence of continuing education which the board may 5 approve. I 6 (cf: P.L.2008,c.17,s.15) 7 8 1[10.] iLl This act shall take effect on the 360th day following 9 enactment, but the board may take such anticipatory administrative 10 action in advance as shall be necessary to effectuate the purposes of 11 this act. 12 13 14 15 16 Mandates professional engineers to complete continuing 17 professional competency requirements during each biennial 18 licensure period.

OHIO - PE

Continuing Education Policy Guidelines	Thr Board's Attendance Documentation, Acceptable Hours webpage: http://www.peps.ohio.gov/LinkClick.aspx?link=171&tabid=57
Guidennes	mi board's Attenuance Documentation, Acceptable nours webpage. http://www.peps.onio.gov/clinkclick.aspxrmix=171atable=57
Who Must Comply?	Section 4733.151 of the Ohio Revised Code requires all registered professional engineers and professional surveyors annually complete 15 hours of continuing education to be eligible for renewal of their registration. Continuing Professional Development (CPD) hours shall be relevant to the practice of engineering or surveying and must include technical, ethical or managerial material.
	A registrant is exempt from the CPD requirements during the first calendar year of registration. Each registrant thereafter must earn 15 hours of continuing education.
Annual Requirement	Registration expiration is December 31. Continuing education must be earned between the dates of January 1 and December 31.
	A person registered as both a professional engineer and professional surveyor shall complete at least five of the fifteen hours in engineering-related coursework or
	activities and at least five of those fifteen hours in surveying-related coursework or activities.
	If the registrant earns more than the required 15 hours in any renewal period, a maximum of 15 of the remaining hours may be carried forward into the following renewal period.
	Acceptable CPD hours for registered professional engineers and registered professional surveyors include: Successful completion or auditing of college credit courses relevant to the practice of engineering or surveying.
	Successful completion of additing of college cledit courses relevant to the practice of engineering of surveying.
	Successful completion of continuing education courses offered by a professional or trade organization, university or college, or offered in-house by a corporation relevant to the practice of engineering or surveying.
	Completing or attending a seminar, conference, convention or workshop, relevant to the practice of engineering or surveying.
	Successful completion of online courses relevant to the practice of engineering or surveying.
	Successful completion of structured engineering or surveying related LEED coursework, with credit granted for verified class attendance on an hour-for-hour basis, provided the coursework meets the requirements of Ohio law.
	Authoring published papers, articles or books (to be used only once and only in the year that it was published). Teaching or instructing relevant courses, seminars or workshops for the first time only.
Qualifying Activities	For full time faculty teaching at a college or university a total of 15 hours may be claimed one-time only for teaching an engineering or surveying course in an ABET accredited curriculum.
	Being an officer or active committee member of an engineering or surveying society.
	Attending satellite downlink video courses where attendance is verified and program material meets requirements.
	Completing advanced computer software instructional courses that relate to the improvement of one's profession or business.
	Advanced computer software instruction courses do not include spreadsheet, word processing, presentation, or web design software (e.g. Excel, Word, Dreamweaver, etc.).
	Spreadsheet courses can be accepted only if the course incorporates engineering or surveying applications. Documentation must prove that engineering or surveying applications were included in the spreadsheet course.
	Technical articles found in publications, trade journals, or trade magazines requiring successful completion of a test — the Board will allow a maximum of 3.0 hours per year. Patents granted in the United States. (to be used only once and only in the year that it was awarded).
	Faterins glantee in the office states, to be used only once and only in the year that it was awarded). Financial Management courses.
	International inflammation with the control of the
	Elementary and entry-level training normally expected to have been completed by registered engineers and registered surveyors prior to registration.
	Regular full-time employment.
	Any level of computer courses in spreadsheet, word processing, presentation, or web design software (Excel, Word, Dreamweaver, etc.).
	Real estate courses, financial planning, foreign language courses, attending trade show displays.
	Self directed study. Topics not relevant to the engineering or surveying profession.
Nonqualifying Activities	Topics for feedback of the disjustering of surveying profession. Personal self-improvement.
	Attending general committee or business meetings as required by your employment.
	A patent or a published book, article, or paper prior to the applicable reporting period.
	Speed Reading courses.
	Live web seminars — the Board will not allow credit for live web seminars unless the provider is able to verify and confirm attendance and participation.
	State-specific courses that are specific to, and based on, another state's laws, rules, policies and practices. The Board does not give credit for examinations.
	The Board does not give criterion or examinations. 1 university or college semester hour = 45 CPD hours
	1 university or college quarter hour = 30 CPD hours
	1 continuing education unit (CEU) = 10 CPD hours
	1 published paper, article or book (only in the year published) = 10 CPD hours
CPD Conversion Hours	1 patent awarded (ONLY U.S. patents in the year awarded) = 10 CPD hours
	1 year of service as an officer or active committee member of a professional or technical society or association = 2 CPD hours 1 year of participation on the Ohio professional surveyor exam workshop committee or member of the Board's expert panel = 2 CPD hours
	1 year or participation of the Onlo professional sourceyor exam workship committee of member of the Board's expert paner = 2 CFD hours 1 hour of attendance at a conference, seminar or workshop = 1 CPD hour
	1 contact hour of teaching a class for the first time (NOT full time faculty) = 1 CPD hour
	The registrant shall be responsible for maintaining records to support his or her own professional development hours. Records required include, but are not limited to:
	A log showing the type of activity claimed, sponsoring organization, location, duration, instructors or speaker's name and hours earned.
Record Keeping	Documents supporting evidence of attendance: completion certificates, attendance log or other documents supporting evidence of completion.
	Records must be maintained for a period of three years. Such documentation shall be made available to the Board for random audit and/or verification purposes. Documentation must support the professional development hours
Reinstatement	claimed. A registrant may reinstate an inactive status by obtaining all delinquent CPD hours and by meeting the requirements set forth in Ohio Administrative Code section 4733-25-01.
Remstatement	A regionalit may remisiate an inactive status by obtaining an definiquent CFD flours and by meeting the requirements set forth in Onlo Administrative Code Section 47.35-25-01.
	An exemption from the CPD requirement may be granted if a registrant is on active duty in the U.S. military. A request must be made in writing to the Board including official documentation of military active duty.
Exemptions	In limited cases, the Board may grant an exemption from the CPD requirement because of a medical condition and/or reason.
	You must contact the Board for a Medical Waiver Request form; it is not online. The form must then be completed and a written letter of explanation must be submitted to the Board for approval.
	In accordance with Ohio Revised Code section 4733.151, completion of the required continuing professional development hours is a condition of licensure renewal.
Noncompliance	No registrant will be renewed until the requirement is satisfied. If, after renewal, it is found that the registrant did not comply with these requirements, disciplinary proceedings will be initiated.
	Registrants found to have provided false information or documentation to the Board will be referred to the Attorney General's office.

OKLAHOMA - LICENSED REMEDIATION CONSULTANTS

Governing Commission	http://www.occ.state.ok.us/
License Form	http://www.occeweb.com/ps/Licenses_forms.htm
Rules for Licensing	
(from part 7)	http://www.occeweb.com/ps/Forms/Rules/Chapter29.pdf
Continuing Education Requirements	(d) Licensed Remediation Consultants must provide proof of sixteen (16) hours of PSTD-approved continuing professional
(from part 7)	education to PSTD every two (2) years.
	http://www.occeweb.com/ps/Forms/Licensing%20Forms/Remediation%20Consultant%20Courses.pdf
	Credits: 1 hour = 1 hour. Send in course; their chief technical officer makes a decision as to whether it is acceptable based on
Course and Providers	its technical merits and relevance

PENNSYLVANIA - PG

Requirements Website	http://www.pacode.com/secure/data/049/chapter37/chap37toc.html
	24 hours by September 30th of odd years. (first renewal 2011)
Completion Requirements	All 24 hours can be taken in online courses. The state of Pennsylvania does not pre-approve any continuing education materials.
	In order to accommodate licensees who are just now learning of this deadline, the board has decided to grant a moratorium from disciplinary action for anyone who has not completed the 24 CE credits by the Sept. 30, 2011, renewal date provided any and all CE credits short of the mandatory 24 are completed by April 1, 2012. If you fail to make up the CE deficit by the April 2012 deadline, you will be facing disciplinary action and you will not be permitted to double count CE earned after the September deadline for the following renewal cycle. Any CE credits earned as far back as Oct. 1, 2009, will be acceptable at the time of renewal.
	Continuing Professional Competency Requirements: (a) In order to safeguard life, health and property and to promote the public welfare, the practice of professional engineering, professional land surveying and professional geology in this commonwealth requires continuing professional education.
	(b) Each licensee shall be required to meet the continuing professional competency requirements of this section as a condition for licensure renewal. Continuing professional competency obtained by a licensee should maintain, improve or expand skills and knowledge obtained prior to initial licensure, including law and ethics applicable to the profession, or develop new and relevant skills and knowledge. No credit shall be given for a course in practice building or office management.
	(c) Each licensee shall be required to obtain twenty-four PDH units during the biennial renewal period. If a licensee exceeds the requirement in any renewal period, a maximum of twelve PDH units may be carried forward into the subsequent renewal period. PDH units may be earned as follows:
	(1) Successful completion of college courses relevant to professional practice.
	(2) Completion of continuing education courses relevant to professional practice.
	(3) Completion of correspondence, televised, videotaped and other short courses or tutorials relevant to professional practice.
	(4) Completion of seminars, employer-sponsored courses, workshops or professional or technical presentations made at meetings, conventions or conferences
	relevant to professional practice.
	(5) Teaching, presenting or instructing in any of the activities listed in clauses (1), (2), (3) and (4).
Course of Study	(6) Authoring published papers, articles or books relevant to professional practice.
Course or Study	(7) Obtaining patents relevant to professional practice.
	(d) (1) Except as provided in clause (2), units of other types of credit shall be converted to PDH units as follows:
	(i)One college or unit semester hour shall equal forty-five PDH units.
	(ii)One college or unit quarter hours shall equal thirty PDH units.
	(iii)One continuing education unit shall equal ten PDH units.
	(iv)One hour of professional development in course work, seminars or professional, technical presentations made at meetings, employer-sponsored courses, conventions or conferences shall equal one PDH unit.
	(v) Each published paper, article or book shall equal ten PDH units.
	(v) Each patent obtained shall equal ten PDH units.
	(2) Teaching any of the activities listed in clause (1)(i), (ii), (iii) and (iv) shall equal double the amount of PDH units provided for in those subclauses. Teaching credit shall be awarded for teaching a course or seminar but shall not be awarded to full-time faculty members in the performance of their duties at their employing institutions.
	(e) The board shall not require courses to be preapproved. The board may preapprove course providers. The board shall have final authority regarding approval of courses, credit, PDH value for courses and other methods of earning credit. Credit determination for activities listed in subsection (d)(1)(v) and (vi) shall be the responsibility of the licensee. The board shall accept credits earned in other jurisdictions if the activity otherwise complies with this section.
Due-f-f	The licensee shall be responsible for maintaining records to be used to support credits claimed. Required records shall include all of the following:
Proof of	(1) A log showing the type of activity claimed, sponsoring organization, location, duration, instructor's or speaker's name and PDH credits earned.
Completion	(2) Attendance verification records in the form of completion certificates or other documents supporting evidence of attendance.
	A licensee may be exempt from the requirements of this section for any of the following reasons:
Exceptions	(i) licensee serving on temporary active duty in the armed forces of the United States for a period of time exceeding one hundred twenty consecutive days in a year
	shall be exempt from obtaining the professional development hours required during that year.
	(ii) A licensee experiencing physical disability, illness or other extenuating circumstances as reviewed and approved by the board may be exempt. Supporting
	documentation must be furnished to the board.
	An individual applying for initial licensure and registration shall be exempt from the requirement set forth in subsection (a) for the licensure period immediately
	following initial licensure and registration. As part of the process to reactivate a licensee, a licensee must obtain all delinquent PDH units, except that under no
	circumstances shall a licensee be required to obtain more than the biennial renewal requirement.

PENNSYLVANIA - PG AND PE

	Licensees must earn 24 PDHs for each renewal period. All 24 PDHs may be earned via on-line courses.
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	There is no pre-approval requirement for courses, but the board may preapprove course providers.
	The licensee shall be responsible for maintaining records to be used to support credits claimed. Required
	records shall include all of the following:
Continuing Education	(1) A log showing the type of activity claimed, sponsoring organization, location, duration, instructor's or
Requirements	speaker's name and PDH credits earned.
	(2) Attendance verification records in the form of completion certificates or other documents supporting
	evidence of attendance.
	Proof of completion does not need to be submitted at the time of license renewal.
	A maximum of 12 hours may be carried over from one renewal period to the next.
	PDH = professional development hours

TEXAS - CORRECTIVE ACTION PROJECT MANAGER

Continuing Education Requirments	http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=30&rl=185
What is required	Complete 32 hours of approved continuing education
Approved Course Providers	http://www.tceq.texas.gov/assets/public/licensing/LPST_providers.pdf
Commission Website	http://www.tceq.state.tx.us/
Training Approval Guidelines	http://www.tceq.texas.gov/publications/rg/rg-373.html/at_download/file

TEXAS - GEOSCIENTIST

Requirements	
Website	http://www.tbpg.state.tx.us/continuingeducation.html
**************************************	15 PDHs annually based on the licensees date of birth. Of the 15 PDH, at least:
Completion	-1 PDH must be in professional ethics, roles and responsibilities of professional geologists.
	Anyone renewing a Professional Geoscientist license on or after September 1, 2006, must obtain 15 hours of continuing education. (Note: Any qualifying continuing education
	hours taken from September 2004 onward can be used for the 2006 yearly requirement.)
Requirements	
	Online courses are accepted. However, the Board does not pre-approve or endorse any CEP activities. It is the responsibility of each license holder to assure that all PDH
	credits claimed meet CEP requirements. All activities shall be relevant to the practice of a discipline of geoscience and may include technical, ethical, or managerial content.
	The Board shall not pre-approve or endorse any CEP activities during the first two years after the effective date of this rule. It is the responsibility of each license holder to assure
	that all PDH credits claimed meet CEP requirements.
	(1) Successful completion or auditing of college credit courses.
	(2) Successful completion of continuing education courses, either offered by a professional or trade organization, university or college, or offered in-house by a corporation,
	other business entity, professional or technical societies, associations, agencies, or rganizations, or other group.
	(3) Successful completion of correspondence, on-line, televised, videotaped, and other short courses/tutorials.
	(4) Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, or conferences
	sponsored by a corporation, other business entity, professional or technical societies, associations, agencies, or organizations, or other group.
	(5) Teaching or instructing as listed in paragraphs (1)-(4) of this section.
	(6) Authoring published papers, articles, books, or accepted licensing examination items.
	(7) Active participation in professional or technical societies, associations, agencies, or organizations, including:
	(A) Serving as an elected or appointed official;
	(B) Serving on a committee of the organization;
	(C) Serving in other official positions.
	(8) Patents Issued.
Course of Study	(9) Engaging in self-directed course work.
oouroo or orday	(10) Software Programs Published.
	All activities shall be relevant to the practice of a discipline of geoscience and may include technical, ethical, or managerial content.
	The conversion of other units of credit to PDH units is as follows:
	(1) 1 College or unit semester hour - 15 PDH
	(2) 1 College or unit guarter hour - 10 PDH
	(3) 1 Continuing Education Unit - 10 PDH
	(a) . Gorinianing Education City 10 . D.
	(4) 1 Hour of professional development in course work, seminars, or professional or technical presentations made at meetings, conventions, or conferences - 1 PDH
	(5) 1 Hour of professional development through self-directed course study (Not to exceed 5 PDH) - 1 PDH
	(6) Each published paper or article - 10 PDH and book - 45 PDH
	A. A. L. Carrier and M. Carrier and A. Carrier and
	(7) Active participation, as defined in paragraph (f)(7), in professional or technical society, association, agency, or organization (Not to exceed 5 PDH per year) - 1 PDH
	(8) Each patent issued - 15 PDH
	(9) Each software program published - 15 PDH
	(10) Teaching or instructing as described in subsection (f) (5) of this section - 3 times the PDH credit earned.
	The license holder is responsible for maintaining records to be used to support credits claimed. Records required include, but are not limited to:
	1. A log, on a form provided by TBPG, showing the type of activity claimed, sponsoring organization, location, duration, instructor's or speaker's name, and PDH credits earned;
	and
	2. Attendance verification records in the form of completion certificates, receipts, attendance roster, or other documents supporting evidence of attendance.
	The license holder must submit CEP certification on the log form provided by TBPG and a list of each activity, date, and hours claimed that satisfy the CEP requirement for that
	renewal year when audited. A percentage of the licenses will be randomly audited each year.
Proof of Completion	CEP records for each license holder must be maintained for a period of three years by the license holder.
	CEP records for each license holder are subject to audit by the board or its authorized representative.
	Copies must be furnished, if requested, to the Board or its authorized representative for audit verification purposes.
	1. Supplied make 50 remnormed, in requestion, to the board of no dutification representative for dutification purposed.
	2. If upon auditing a license holder, the Board finds that the activities cited do not fall within the bounds of educational, technical, ethical, or professional management activities
	related to the practice of geoscience; the board may require the license holder to acquire additional PDH as needed to fulfill the minimum CEP requirements.
	1 Totaled to the process of geodesines, the board may require the house following additional F bit to necessary to think the millimit of Tequire method.

WEST VIRGINIA - LRS

West Virginia Licensed Remediation Specialist (LRS) website	http://www.dep.wv.gov/dlr/oer/voluntarymain/lrs/Pages/default.aspx
License Requirements	http://www.dep.wv.gov/dlr/oer/voluntarymain/lrs/Pages/LRS.aspx
Continuing Education	http://www.dep.wv.gov/dlr/oer/voluntarymain/Documents/60CSR3%20VRRA%20rule%206-5-09.pdf 5.4.a. A licensed remediation specialist in good standing may have his/her license renewed every two years A renewal application shall include evidence of continuing education in the environmental remediation field. Such evidence may include two education credits from a US EPA-approved course or any other equivalent experience acceptable to the secretary.

Note: They permit distance learning

You submit course material to their director and he approves or not

You can propose the number of credits and he approves or changes it. It is a function of what the director believes they are worth. It is not one hour = one hour.