

**RESPONSIVENESS SUMMARY**  
**HYDROELECTRIC PROJECT WATER QUALITY CERTIFICATION PROCEDURE**  
**December 21, 2009**

Pursuant to Section 38 of the Vermont Recovery and Reinvestment Act of 2009, the Agency of Natural Resources has adopted a procedure for the processing of water quality certification applications for hydroelectric projects. A draft version of the procedure was placed on public notice through November 4, 2009. Comments were received from EPA, legislators, hydropower developers, environmental groups, and interested individuals. Following is a summary response to those comments.

For those interested in facilitating hydropower development in Vermont, the two central issues are the expediting the processing of an application, having a level of predictability about the outcome, and making development affordable. Very few of the commenters have had experience with the permit process, but felt as a general matter that timing and affordability are important factors in bringing new renewable energy projects on line. The Agency agrees.

The water quality certification process fits within a federal licensing process. The federal process has specific steps and timing requirements that include and subordinate the certification process. It is important to note that the Federal Power Act preempts state jurisdiction under Vermont's environmental laws. Consequently, the water quality certification is the only environmental "permit" issued by the Agency. Certification is a federal action that is delegated to the State by EPA. The preemption does remove the challenges inherent in having to deal with several individual permit programs. Further, the Agency has a coordinated internal review that is handled by the Department of Environmental Conservation (DEC) and includes working with outside reviewers in sister agencies like EPA, the U.S. Fish and Wildlife Service, and the Corps of Engineers, as well as identified stakeholders, such as municipalities and environmental groups.

Before the Agency can draft a water quality certification decision, it must have an adequate record before it. Depending on the site and the project, production of the record can be expensive, especially if it entails special studies, such as instream flow studies or water quality sampling/modeling. Many projects, however, can be designed to avoid extensive studies. Similarly, less sensitive sites can be selected. Consistent with this concept, the public notice draft has been revised to include a section (Section 13. *Expedited Process*) recognizing the opportunity to fast track and reduce the permitting costs for conduit projects and certain run-of-river projects using existing dams. The maximum processing time for those applications will be 120 days after they are deemed substantively complete. It should be noted that the public notice requirements for a tentative decision (publication in a newspaper, 30-day notice period for a hearing, if held, and receipt of comments, and related revision of the decision) utilize a good portion of the processing time. These projects may also avoid special instream flow studies, which, in addition to expense, necessitate summer field work for data collection and related delays.

In response to criticisms that the certification process is unduly protracted and can take years, the Agency reviewed certification process for new projects that were certified in the 1980s. The average processing time from the receipt of the application was six months. Almost half the projects were certified within four months. For projects that took longer, the delays were normally attributable to the application having been filed before the studies or even the fundamental design were complete. Subsequent to the 1980s, certification processing has been limited to the relicensing of old hydroelectric projects. These licensing processes have often been complex and litigious and are not illustrative of how long it will take the Agency to review simple run-of-river projects.

Section 4 addresses the timing for certification applications. Some commenters expressed an interest in filing applications as early as possible. The Agency has revised Section 4 to reflect the earliest timing that it believes would meet two objectives: reasonable assurance that the application will be substantively

complete and provide prospective developers with a decision early enough to avoid protracting the federal process. The federal process itself only requires the certification application to be filed after the issuance of Notice of Ready for Environmental Analysis, which means FERC has determined that there is a sufficient record for it to do a National Environmental Policy Act (NEPA) review. In the draft procedure, the Agency proposed allowing those using the Integrated Licensing Process to file as early as the date the license application is filed. The final procedure also allows those applying for an exemption to file earlier. Applications can be filed when there is a specific project proposal and supporting information and study results. This would include whatever mitigation the developer believes to be appropriate. Since many of the projects will involve an existing dam on the applicant's property, these proposals may qualify for exemptions and the opportunity for earlier certification applications. The Agency would like to avoid receiving applications are not well thought out and lacking supporting information. This would only hamper the Agency's efforts to expeditiously process complete applications.

Another revision made to the draft procedure is to reduce the maximum time before applicants are notified of administrative completeness for the applications. The Agency will endeavor to respond within one week of receipt of the application.

The Agency is committed to working proactively with developers to best adapt their projects to the river resource and continues to encourage developers to work through issues during the pre-application process. The Agency set up an initial review process two years ago to identify issues and potential study needs in a cooperative manner with the developer and federal and state agencies. The Agency recognizes that there are a relatively limited number of undeveloped sites that are both economically feasible and can make a meaningful contribution of renewable energy.

### **Responses to Specific Comments**

(comments may be paraphrased)

**Comment:** *Information to Include in a Section §401 Water Quality Certification Application for a New or Repowered Hydroelectric Project (Appendix A)* should be turned into an application form.

**Response:** Appendix A is a listing of the baseline information needed to review and process an application. This information is normally contained in the federal application. Under Section 5. *Application Requirements*, the certification review will use the federal license application as supporting documentation. This eliminates the need for applicants to produce two separate documents, and reduces the Agency's effort by not having to review a certification application and then a license application. Applicants for an exemption will, however, be able to compile the information contained in Appendix A and file it with the application form to initiate the certification review. Alternatively, they can wait and use the exemption application itself. The Appendix will be made available as a Microsoft Word document for applicants that want to use the list for formatting their applications.

**Comment:** One problem with the new version however, is that ANR asks for a jurisdictional decision from the Corps of Engineers. It is onerous, burdensome and inconsistent with other guidance from ANR.

**Response:** Although the Agency disagrees with the description of the jurisdictional opinion as difficult to obtain, it has removed it from Appendix A. Most new projects are likely to trigger Corps jurisdiction, and the Agency will coordinate its review with the Corps to avoid conflicting requirements and to reduce the potential for revisions to the project design after issuance of the certification. This is in the interest of the applicant and efficient permitting.

**Comment:** The problem with the deceptively simple "Draft Application Form" is that Section 4 requires a completed FERC application. We understand ANR does not want to duplicate the FERC process or

have applications filed too early in the process before necessary information is developed, but we feel an expedited process can be written which allows a mature application to be considered if it provides the objective information that ANR requires.

**Response:** As discussed above, the Agency has revised the procedure to allow early applications for projects that will be seeking a FERC exemption. The traditional licensing process often entails additional information requests made by FERC after the license application is filed. Since these requests can result in new information relevant to the certification process, the Agency is asking that those certification applications be filed after the FERC notice of ready for environmental review. This is consistent with FERC's regulations. For projects using the new integrated licensing process, additional information requests are less likely after the filing of the license application, and the Agency will be accepting certification applications earlier as a consequence.

**Comment:** An applicant should be able to request the §401 water quality certification (WQC) and obtain the state WQC *first, prior* to submission of their FERC license request. Having a WQC in hand facilitates much of the federal process thereby encouraging timely consideration of these projects. If needed, the WQC can be amended, as the procedure states and ANR has done previously.

**Response:** The FERC regulations do not require the filing of certification applications until fairly late in the licensing process, and technically do not require certifications for exempt projects. The need for a certification is not triggered until a FERC license application is filed. Hydroelectric projects frequently evolve from the time of the initial meetings with Agency staff. Projects often change significantly in response to input from the public, other resource agencies, such as the Army Corps of Engineers and U.S. Fish and Wildlife Service, and stakeholders, as required by the FERC process. The prospect of multiple reviews and subsequent amendment(s) to a certification for one project would result in delays and confusion for project proponents and would be an inefficient use of increasingly scarce state resources. The Agency is, however, amenable to processing exemption applications prior to the filing of the FERC application. Under the FERC regulations an applicant is required to consult with the Agency and other resource agencies as to information and study needs and appropriate mitigation. With concurrence of the resource agencies, certain consultation requirements can be waived or shortened. Those opportunities exist whether or not a certification has been issued. The Agency will make every effort to quickly process applications with well designed projects, thorough studies, resource agency and stakeholder support, and complete applications.

**Comment:** I believe there are no other instances where ANR requires any federal application be completed prior to requesting a §401 WQC. Why was this proposed for hydro?

**Response:** There are three other permit programs in DEC that certify projects under Section 401: the wetlands program, the shoreland encroachment permit program, and the stream alterations permit program. The programs each vary in how they process certifications. None of the programs have certification application forms or written procedures. The practice of both the wetland program and hydrology program has been to base decisions on draft or final federal applications. Of the four programs that issue water quality certifications, projects addressed by the hydrology program tend to be the largest and most complicated with the greatest potential for the significant environmental impacts.

**Comment:** The procedure is incomplete in regards to the legislation, which asked for preliminary terms and conditions. These were not supplied.

**Response:** The legislation states, “[t]he application form may require information addressing...the preliminary terms and conditions that an applicant shall be subject to if a federal Clean Water Act Section 401 certification is issued for a proposed hydroelectric project.” The Agency has listed some of the

typical condition requirements in Section 3.2(6). Certification conditions, including requirements regarding flows, operational protocols, monitoring and reporting, and fish passage facilities are site specific in nature. As such, it is difficult to fashion an application form which sets forth the conditions applicable to a specific project. The Agency is currently working on a 401 Certification Hydroelectric Guidance document which will include examples of water quality certification conditions. The Agency hopes that the guidance will assist applicants in completing their applications and understanding conditions that may be applied to a project.

**Comment:** I am quite disappointed that the SHIPP areas of agreement, particularly the three tiered system for applying the default flow standard and the five areas of agreement for the revision of the flow procedure were not addressed in the draft.

**Response:** The legislation set forth in 10 V.S.A. §1006, requires the Agency to focus on the certification application process. In contrast, the SHIPP process focused on the question of whether flow standards should be amended by rule. The Natural Resources Board SHIPP (Stakeholder Hydroelectric Interested Parties Process) was triggered by Act 92, Section 37 of the 2008 session of the legislature: *The natural resources board shall, in a process separate from the planned revision to the Vermont water quality standards, evaluate the need to amend by rule the conservation flow standards for the water quality review of proposed hydroelectric facilities.* This process related to the hydrologic standards contained in the Vermont Water Quality Standards and the 1993 Agency flow procedure, not the water quality certification application process. The Board stated that it would revise sections of the VWQS relevant to the hydrologic standards during the triennial review. The three tiers discussed during the SHIPP process categorized proposed run-of-river projects as projects that qualify for the use of the default standard; projects that will require site-specific studies; and projects which are not approvable. The Agency will make that determination on a project and site specific basis.

**Comment:** I am concerned with items on the draft application that request information about issues that are not included in the WQS (Water Quality Standards), specifically aesthetics of structures and noise.

**Response:** The Vermont WQS specifically require the Agency to manage state waters in a manner that protects designated uses of the waters. These uses include aesthetics. See the management objectives for Class A and B waters VWQS Sections 3-02, 3-03, and 3-04. The Agency's 1993 Flow procedure states that "[i]n general, minimum flows adequate to maintain fisheries interests are sufficient to simultaneously maintain acceptable aesthetic qualities and recreational uses."

**Comment:** Section 1 of the draft procedure could incorporate other VT ANR policies which support hydro, such as those found in the small hydro report, ANR's climate change initiatives which recognize the benefits of hydro for greenhouse gas reductions, and initiatives by Governor Douglas that asked ANR to take the lead for a *"simple, predictable and environmentally sound process for completing a water quality certification review for mini-hydroelectric projects."*

**Response:** The procedure has been drafted in a neutral manner. It neither advocates for hydropower development nor emphasizes the significant environmental and societal costs of hydropower development. Other commenters implored the Agency to be an "impartial regulator" cognizant of the importance of these long-term decisions on water quality and the public trust resources.

**Comment:** The procedure lacks clear standards for approval. ANR guidance for other §401s delineate these standards. Section 11 could be changed to:

The Department may determine in certain cases that the blanket water quality certification is appropriate. The Secretary of the Agency may only approve a water quality certification when it is found that:

- a. The existing water use involves use of the water body by aquatic biota, fish, or wildlife, and the proposed activity would not have a significant impact on those values.
- b. Where the existing water use involves use of the water body for recreation in or on the water, fishing, water supply or commercial enterprises that depend directly on the preservation of any existing level of water quality, the proposed activity would not result in significant degradation of the existing use. Thus, the applicant must show that the existing uses and values, and the level of water quality necessary to protect those uses and values, are maintained.

**Response:** The standards are as specific as the water quality standards. The quoted text relates to the anti-degradation provisions of the water quality standards, specifically the protection of existing uses. Protection of existing uses under the water quality standards is only one component of the Section 401 review. The text is actually excerpted from the 1997 standards and is no longer in the standards. The Agency is in the process of developing guidance which discusses the application of the VWQS to hydroelectric projects.

**Comment:** I have been told that there has been no new river hydro in Vermont in 25 years. If true, this is clear indication that we are regulating the introduction of river hydro power to death.

**Response:** The decline is a national phenomenon related mostly to a the lack of financial incentives, decreased overall energy costs, and a reduction in the number of good sites relative to the number available before the PURPA amendments to the Federal Power Act in 1978, which caused a large number of new sites in Vermont and other states to be developed.

**Comment:** The proposed procedure ignores cumulative impacts. As such, a revision should include an active and prescriptive evaluation of cumulative impacts on a stream from both upstream and downstream impoundments or facilities.

**Response:** Appendix A has been revised to include information on the relationship of a proposal to other facilities on a stream or in the basin, as appropriate.

**Comment:** ANR should consider the addition of an electronic distribution list for interested parties regarding 401 certification processes. This addition will allow parties the opportunity to follow, and where appropriate, comment on proposed projects.

**Response:** The Agency is required to maintain a list of interested parties for water quality certification tentative decision notices pursuant to the rules governing NPDES and certification applications (Vermont Water Pollution Control Permit Regulation (VWPCPR)). Both the Agency and FERC encourage developers to involve stakeholders early in the process to identify and resolve issues. As it improves its website, the Agency will make more information available on existing and proposed hydropower projects. FERC's eLibrary is also an excellent resource for tracking projects.

**Comment:** Expanding on the requirements of the anti-degradation review in this procedure is necessary to ensure that each applicant clearly understands the importance of the anti-degradation review to 401 certification.

**Response:** The anti-degradation implementation procedure has not yet been completed. When it is, the Agency will clarify application of anti-degradation to new hydropower proposals.

**Comment:** It is not clear why anti-degradation is not mentioned in Section 1, but is instead discussed separately in Section 7.

**Response:** A reference to anti-degradation has been added to Section 1.

**Comment:** Section 401(a) (2) describes the role of EPA and the federal licensing agencies in projects which may affect the quality of waters in other states. A brief description of this process would be useful in Section 6.

**Response:** Notification of EPA in addition to other affected states has been added to Section 6. CWA §401(a)(2) provides for a separate federal process to address interstate water quality issues. That federal process begins after the federal agency (e.g., FERC or the Corps) receives both the license/permit application and the state certification. Since it is not part of the certification process, the Agency has chosen not to describe it in the procedure. Hopefully, the need for use of the (a)(2) process may be avoided by proper coordination between the states during the certification process. The (a)(2) process has never been triggered in Vermont.

**Comment:** Could the Agency summarize for the legislature and the lay public the substantive difference of the new procedure from the old procedure?

**Response:** There was no written procedure or guidance for applicants in the past. The only formal rules relevant to processing certification applications are in the Vermont Water Pollution Control Permit Regulations. These rules have been cited to in the new procedure. To a large extent, the new procedure codifies DEC's best practices for processing certification applications, clarifying it for the public. New concepts or practices which are reflected in the procedure include timelines for applications under the various FERC application processes, an application form with an optional information list, a ten day acknowledgement timeline, and an expedited process section.

**Comment:** The ANR draft requests, "*Full description of headpond water level management, with and without flashboards in place (if used).*" It was my understanding that flashboards would not be allowed to be added to an existing dam. So this language should be rewritten to remove the language that seems to allow the use of flashboards where none is used now.

**Response:** This related primarily to relicensing of dams where flashboards are currently used. There is nothing that bars an applicant from proposing to use flashboards at a new project, however, an increase in impoundment height may not be approvable under the VWQS. The individual proposal would be evaluated based on the facts of the case.

**Comment:** A set of guidelines designed to encourage hydro production would include specific parameters regarding water flow, buffer zones, flood mitigation and other factors that lend themselves to quantitative consideration under 10 VSA Chapter 41. I do not presume every factor lends itself to objective review, but I do believe a specific set of guidelines can be developed to provide more visibility and predictability to potential developers.

**Response:** The Agency is working on providing enhanced guidance on its website. As discussed above, it does advise prospective developers on mitigation options for individual projects at any time in the process. The Agency also has a 1993 procedure for setting conservation flows, and this was the subject of the Natural Resources Board's SHIPP.

**Comment:** There should be an appropriate appeals process that provides recourse in case of disagreements.

**Response:** The mechanism for appeals is already established under state law. The Agency's certification decision is appealable to the Environmental Court pursuant to 10 V.S.A. § 8504.