

Agency of Natural Resources
Department of Environmental Conservation

Facilities Engineering Division
Old Laundry Building
802-241-3742

MEMORANDUM

To: All Engineering Consultants providing services to clients who are or will be receiving Step I, II and/or Step III Phase State Revolving Loans, Grants or EPA STAG funds, or funding provided by the "American Recovery and Reinvestment Act of 2009".

From: Larry Fitch, P.E., Director

Date: March 20, 2009

Subject: **Required Engineering / Owner Agreement Forms and billing/invoicing format – for all Engineering Services provided by engineering consultants to loanees and grantees**

Commencing immediately, this office will only review and approve Engineering Step I (feasibility study/report and preliminary design), Step II (Final design) and Step III (bidding and construction) phase services which are in one of the following formats:

- For construction contract(s) probable cost estimates less than the Small-Large contract threshold established by the FEE Allowance for Small Projects:

VT DEC-FED NEW "Simplified" Standard Engineer/Owner Step I & II Engineering Services Agreement version dated March 2009.

VT DEC-FED NEW "Simplified" Standard Engineer/Owner Step III Engineering Services Agreement version dated March 2009.

- For construction contract probable cost estimates greater than the Small-Large contract threshold established by the FEE Allowance or based on difficulty and/or complexity as determined by the FED:

EJCDE E-510 Standard form of Agreement between Owner and Engineer for Professional Services – FUNDING AGENCY EDITION (Copyright 2002 NSPE for EJCDC) with required strike-out of the paragraph in Exhibit A – Part 1, A.1.05.aA.14 – "Disagreements between Owner and Contractor", and the deletion of Exhibit H, "Disputes Resolution" which shall not be included in any agreement being funded by this department.

This action is taken because:

Over the past years, the Vermont Water Supply Division (WSD) and the FED staff responsible for reviewing, commenting on and/or approving engineering services agreements to be financed through grants or loans provided by DEC have been challenged by the appropriateness of certain clauses and conditions inserted in the Agreements. Some of these clauses erase or limit professional liability and others indemnify and hold harmless engineer's actions and decisions beyond the normal standards of practice. In some instances, provisions have usurped the Owner's authority and their responsibility for making decisions on matters that have direct financial implications for their projects. Many times clauses have been crafted by engineering professional associations for their membership and in other instances, by the engineering consultant's attorney. Such clauses tend to always shift the risk onto other parties, thereby unbalancing the shared risk principles by which our program has been successfully managed for decades.

To enable the WSD and FED staff to concentrate their reviews on the scope of service, level of effort and appropriateness of Fees, I have standardized the Engineer/Owner Agreement forms so that the opportunity for insertion of unallowable clauses is removed, thus speeding up our staff review and document approval time and avoiding delays which would result from our need for State's legal staff to review the drafted agreements.

This action is also taken in response to the demands that will be placed on existing state staff who will be responsible for the successful management of program funds to received from the American Recovery and Reinvestment Act of 2009.

Allowable Engineering Fees for Step I & II and Step III project phase services:

We will continue to use the DWSRF Guideline Document Number 9 – "Engineering Allowance for DWSRF Projects" published by the WSD (11/27/2007) and the October 3, 2003 Guidance Document – EJCDC Engineering Agreements published by the FED. These documents reference a single estimate of probable construction cost threshold for distinguishing between a Small Project and a Large Project. In April 2001, that cost estimate threshold was set at \$ 713,300 and has not been adjusted since. On January 1, 2009, and every January 1st hereafter, this estimate of probable construction cost threshold will be adjusted based upon the Engineering News Record (ENR) Construction Cost Index published by this organization.

As of January 1, 2009, the estimate of probable construction cost threshold for "Small – Large" projects is adjusted to \$ 970,090 for all engineering Step I & II and Step III Services Agreements executed after January 1, 2009.

The fee allowance curve was developed from data collected from a wide range of projects; from simple water and sewer line projects to more complex CSO and treatment plant projects. The fee allowance was not intended to be used as the starting point for developing the engineering step fees. It has unfortunately become just that for some engineering consultants. We had expected that simple water line and sewer line engineering fees would fall well below the fee limit and that complex projects would be close to but not above the maximum. That has not happened in recent years. To let the market make the necessary adjustments, within the near future, this office will be publishing the summary of each engineering Step I & II and Step III engineering

Agreements we approve, similar to our posting of the BID tabs for construction contracts. This and other similar information will soon be found on these websites.

FED website - <http://www.anr.state.vt.us/dec/fed/fed.htm>
WSD website - <http://www.anr.state.vt.us/dec/watersup/wsd.htm>

Billing / invoicing for Step I & II and Step III Engineering Services:

On July 23, 2008, I issued a directive regarding the billing or invoicing format required to be utilized by loanees or grantees expecting to receive reimbursement from the Finance Section of this office. I want to emphasize that the billed or invoiced service line items under the various categories under each of the three phases must be identical to that written in the State's Agreement and Amendment approval letters. There will be no exception. By identifying the percent (%) of each line item service, the Engineers, Owners, State project management staff and the FED – Finance staff will systematically know the status of completion (and budget) of each service line item (similar but not identical to following construction progress payments throughout the completion of work). Loan or Grant reimbursement for engineering service line items in each category will be approved up to but not exceeding 100% of each of the individual LS or NTE approved amount. It is no longer acceptable to bill or invoice above the 100% of one engineering service line item of a category because another engineering service line item in the same or another category under-ran that category total. In this instance, an engineering Amendment is required to amend the previously approved service line item limit under the category.

The "Certification Statement" that must accompany each invoice/bill now also attests that the services billed/invoices represent complete accountability for actual services performed through the date of the bill/invoice. Retroactive billing/invoicing for services claimed to have been performed but not included in the previous bill/invoice is programmatically disallowed. What this means is that the FED will no longer entertain review for approval, engineering Amendments for services that have been already performed without an Amendment and State prior approval. You should advise the Owner, your client, so that they also understand that State prior approval is necessary to ensure funding eligibility.

ATTACHMENTS:

- **FED Required format for Step I & II and Step III Engineering services billing/invoicing**
- **FED April 23, 2008 guidance on the use of the Standard EJCDC E-510 Form of Owner and Engineer Agreement for Professional Services (funding edition).**
- **FED "Simplified" Standard Step I / II and "Simplified" Standard Step III – OWNER and ENGINEER professional services Agreement form for "Small Projects".**
- **January 1, 2009 – GUIDANCE DOCUMENT UP-DATE – ENGINEERING FEES**

Engineering Consultant's Letterhead

To: _____

Date: _____
 Payment Request No. _____
 Engineer's Invoice No. _____
 Billing period: _____ to _____

Project #: Project Title: _____
 State Loan and/or Grant No.: _____

List all engineering service categories as they appear in the approved Agreement. If a lump sum (LS) fee, identify the total \$ for each service, the total previously billed, the amount due this billing period and the % complete including this billing. If a not-to-exceed (NTE) fee, identify personnel, hourly billing rate, hours and reimbursable expenses. If under a single service category there are multiple line item services with corresponding NTE amounts, all line item services must be listed and tracked monthly to reflect the amount previously billed, amount due this period, total amount to date and % complete of line item based on the amount identified in the Agreement.

Engineering Step & Service Summary*

Agreement date: _____

<u>Step I Phase</u>	<u>Previously Billed</u>	<u>Due this period</u>	<u>Total to date</u>	<u>%</u>
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Feasibility Study and Report

Agreement: \$ _____ (LS)	\$ _____	\$ _____	\$ _____	_____
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Other:

List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
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Amendments:

List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
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Preliminary Design:

Agreement: \$ _____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
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Other:

List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
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Amendments:

List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
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TOTAL Step I Phase	\$ _____	\$ _____	\$ _____	_____
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Agreement date: _____

<u>Step II Phase</u>	<u>Previously Billed</u>	<u>Due this period</u>	<u>Total to date</u>	<u>%</u>
Final Design				
Agreement: \$ _____ (LS)	\$ _____	\$ _____	\$ _____	_____
Other:				
List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
Amendments:				
List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
TOTAL Step II Phase	\$ _____			
TOTAL		\$ _____	\$ _____	

Agreement date: _____

<u>Step III Phase **</u>	<u>Previously Billed</u>	<u>Due this period</u>	<u>Total to date</u>	<u>%</u>
Bidding Services				
\$ _____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
Construction Basic (including 1 year performance evaluation and 11th month inspection when required)				
\$ _____ (LS)	\$ _____	\$ _____	\$ _____	_____
Resident Project Representative:				
\$ _____ (NTE)	\$ _____	\$ _____	\$ _____	_____
Other:				
List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
Amendments:				
List each service, \$ ____ (LS or NTE)	\$ _____	\$ _____	\$ _____	_____
TOTAL Step III Phase	\$ _____	\$ _____	\$ _____	

****Special Services** sub-consultant and/or Other NTE services:** provide the same billing/invoice information under the appropriate engineering service listing (attach copy of their bill/invoice), if these services are not included under an approved Lump Sum services category. (note: the maximum allowable Engineer's mark-up is 8%)

**** Construction Contract** – "Date of Issuance" of the Notice to Proceed: _____
Original Construction Contract Completion date: _____
Latest Amended Construction Contract Completion date: _____

Certification statement: I certify that the invoices for services provided from the date of the Agreement through this date of billing are to the best of my knowledge and belief, complete, in accordance with the Agreement and any Amendments executed by the Owner and Engineer and as approved for funding by the State of Vermont.

By: _____
(Engineer's signature)