

## **Section 13 - Coordination with Virginia Department of Environmental Quality (DEQ) for Certificate to Construct and Certificate to Operate**

A. Introduction - As a result of significant staffing reduction within DEQ in 2008, requirements by DEQ were implemented in an attempt to streamline their approval process for applications of Certificates to Construct (CTC) and Certificates to Operate (CTO). DEQ also identified a variance procedure for those projects that are non-capacity related or maintenance related work. Projects that have been identified by DEQ as requiring a CTC and CTO include new sewage treatment works, new sewage pump stations and force mains in excess of 2,000 gallons per day (gpd), new sanitary gravity sewers in excess of 40,000 gpd, any project that increases or decreases capacity and major modifications to sewage treatment works. In addition, water reuse related projects that require CTC and CTO under the Water Reclamation and Reuse Regulations (9 VAC 25-740.120.B.1.) include new industrial or municipal reclamation systems, new municipal satellite reclamation systems and reuse water storage. This Section describes when to use each of the four listed approaches to obtain either a CTC and/or state sales tax exemption status for qualifying projects.

1. FIRMS shall have HRSD (HRSD's Chief of Technical Services and/or HRSD Permits Manager) review and approval prior to submitting CTC and CTO to VDEQ.

B. Approval CTC Process for State Water Quality Improvement Fund (WQIF) Projects - This involves DEQ's full engineering review process. Approval steps and specifics follow:

1. Submission of Preliminary Engineering Report (PER) or Final Engineering Report (FER).
  - a. Specifics for PER as listed below.
    - i. Suggested outline in 9 VAC 25-940.
    - ii. Must address any additional items required by WQIF.
    - iii. One hard copy initially to Office of Wastewater Engineering (OWE), WQIF, Virginia Revolving Loan Fund (VRLF) if needed plus one Portable Document Format (PDF) copy of final to OWE.
    - iv. Review time 30-60 days per submittal
  - b. Specifics for FER as listed below:
    - i. Details in GM 07-2011
    - ii. All calculations, site plan, hydraulic profile, etc.
    - iii. Geared toward design build project
    - iv. One hard copy to WQIF, OWE, VRLF (if needed) initially
    - v. One PDF and one hardcopy of final plans and specifications to OWE
    - vi. Review time 30-60 days per submittal
    - vii. Conditional CTC issued on FER
    - viii. Plans and specifications due 180 days prior to the desired issuance of a CTO
    - ix. Deficiencies found in plans and specifications must be corrected regardless of status
2. Other submissions to include:

- a. Plans and Specifications
  - b. Design calculations with explanatory text as needed
  - c. Certification statement for non-WQIF funded components
  - d. One hard copy to OWE, WQIF, VRLF (if needed) initially (half size preferred)
  - e. One PDF and one hardcopy of final plans and specifications to OWE
  - f. Review time 30-60 days per submittal
3. Submission of a Statement of Completion for CTO.
    - a. FIRM should contact DEQ 30-60 days prior to issuing Statement of Completion to coordinate inspection.
    - b. The inspection will be scheduled as close to the Statement of Completion issuance date as possible
    - c. Upon confirmation of the project's compliance with the CTC and after Statement of Completion is received, a CTO is issued by DEQ.
  4. DEQ recommendations for full approval process:
    - a. Use proven technology or have design basis well established
    - b. Provide complete submittal packages
    - c. Provide complete contact information
    - d. Bring up potentially controversial issues early
    - e. Provide background and goal of project
    - f. Provide separate calculations
    - g. QA/QC all work
- C. Abbreviated Administrative Process for Non-WQIF Projects - Projects that fall into this category include; Municipal Sewage Treatment Works, Sewage Collection Systems, Reclamation Systems and Satellite Reclamation Systems.
1. Approval process involves:
    - a. Submission of an Application
    - b. Attachments (if applicable)
      - i. Project Description
      - ii. Pump Stations – Reliability Class Worksheet
      - iii. Downstream owner acceptance
      - iv. Justification for variances from SCAT Regulations
    - c. Apply after Plans and Specifications Complete
    - d. Apply after VPDES permit obtained
    - e. For Sewage Treatment Plants (STPs), design flow must match permitted flow
    - f. FIRM must provide signature and seal on certification statement
    - g. FIRM assumes responsibility for compliance with design regulations
  2. CTO for Projects NOT receiving WQIF funds:
    - a. Submission of an Application
    - b. Application contains a Statement of Completion
    - c. FIRM signs Statement of Completion to certify construction complete in substantial compliance with CTC
    - d. Provide original to DEQ Regional Office

- e. Processed by Water Permit Staff
- f. Application is signed by DEQ and becomes the CTC or the CTO
- g. Turnaround time about 2 weeks
- h. If needed, the CTO will trigger issuance of a new DMR

D. Approval Process for Non-WQIF Project That Involve Greater Than a 25% Capacity Increase or Decrease - Projects that fall under this process include new, replacement, or relocated sanitary sewer mains and force mains that are to be larger or smaller in diameter than the original pipelines; and new or rehabilitated sanitary sewage pumping stations with capacity increase/decrease. This process follows the steps of the Abbreviated Administrative Process for Non-WQIF projects as detailed above with the addition of the following requirements:

- 1. Demonstrate that the Project meets/exceeds the HRSD Regional Sewage Flow Projection Table or was designed to another standard to be described in the CTC request letter.
- 2. HRSD has adequate downstream capacity to convey and treat the flows.
- 3. HRSD has consulted with the affected Locality and there are no detrimental impacts.
- 4. In order to satisfy these additional requirements, a letter shall be submitted to DEQ that contains the elements in the template letter. The Director of Engineering for HRSD will sign the letter that is to be submitted to DEQ.
  - a. Pressure reducing pumping stations (PRS) in Exhibit A;
  - b. Pumping station replacement in Exhibit B;
  - c. New or replacement pipeline in Exhibit C.

E. Relocation, Replacement-In-Kind, Maintenance or Emergency Projects - The FIRM as an agent for HRSD will request a review exemption from DEQ.

- 1. A template letter is included as Exhibit D.

F. On-line Resources within DEQ for Approval Process - The following web address (<http://www.deq.virginia.gov/Programs/Water/Forms.aspx>) contains the application forms for the Administrative Approval as well as the ability to track the status of a project submitted for CTC or CTO.

## Exhibit A

Date:

Mr. Robert Smithson, Jr.  
Virginia Department of Environmental Quality  
Tidewater Regional Office  
5636 Southern Boulevard  
Virginia Beach, VA 23462

Re: HRSD Example PRS Replacement Project  
Notification of Approval and Capacity Verification in accordance  
with SCAT Regulation 9 VAC 25-790-90. CTC Application

Dear Mr. Smithson,

This letter is in reference to the project listed above and accompanies an application for a Certificate to Construct (CTC). Our request is supported by the following information:

The purpose of this project is to upgrade a pressure reducing station by adding an additional pump. The existing PRS is designed for 4,500 gpm at 70 feet. This project will not be adding new flows to the system; however it will allow additional flow to be conveyed.

The attached Hydraulic Analysis Review Team (HART) report provides flow and pressure conditions used to develop design conditions for this project. This analysis has been performed using available information and tools including the calibrated capacity assessment version of the dynamic regional hydraulic model. It is intended to provide a reasonable design basis for sizing replacement interceptor system infrastructure that, for various reasons, needs to be implemented prior to the approval of the Regional Wet Weather Management Plan (RWWMP).

The HRSD infrastructure downstream from this project has been reviewed and has been verified to have adequate capacity to convey and treat the current flows associated with this project. The PER dated \_\_\_\_\_ documents the criteria and analysis used in the verification of capacity. Furthermore, the facilities associated with this project will be included in the analyses conducted for the Regional Wet Weather Management Plan.

HRSD, in consultation with the City / County of \_\_\_\_\_, has reviewed the project scope, the design basis and the sewer system impacts of this proposed project. In addition, HRSD has received all necessary approvals and associated permits.

Sincerely,

Bruce W. Husselbee, P.E.  
Director of Engineering

CC: Chief of Planning and Analysis  
Chief of South / North Shore Interceptors

## Exhibit B

Date:

Mr. Robert Smithson, Jr.  
Virginia Department of Environmental Quality  
Tidewater Regional Office  
5636 Southern Boulevard  
Virginia Beach, VA 23462

Re: HRSD Example PS Replacement Project  
Notification of Approval and Capacity Verification in accordance with  
SCAT Regulation 9 VAC 25-790-90. CTC Application

Dear Mr. Smithson,

This letter is in reference to the project listed above and accompanies an application for a Certificate to Construct (CTC). Our request is supported by the following information:

The purpose of this project is to replace an aging pump station which has become an operational challenge to maintain and the need to address the structural integrity of the existing wet well. The existing station has a firm capacity of \_\_\_\_\_ gpm at \_\_\_\_\_ feet. This project will not be adding new flows to the system; however it will allow additional flow to be conveyed. HRSD proposes the new \_\_\_\_\_ PS to be designed for an interim peak flow of \_\_\_\_\_ gpm at \_\_\_\_\_ feet.

The HRSD infrastructure downstream from this project has been reviewed and has been verified to have adequate capacity to convey and treat the current flows associated with this project. The PER dated \_\_\_\_\_ documents the criteria and analysis used in the verification of capacity. Furthermore, the facilities associated with this project will be included in the analyses conducted for the Regional Wet Weather Management Plan.

HRSD, in consultation with the City / County of \_\_\_\_\_, has reviewed the project scope, the design basis and the sewer system impacts of this proposed project. In addition, HRSD has received all necessary approvals and associated permits.

Sincerely,

Bruce W. Husselbee, P.E.  
Director of Engineering

CC: Chief of Planning and Analysis  
Chief of South / North Shore Interceptors

## Exhibit C

Date:

Mr. Robert Smithson, Jr.  
Virginia Department of Environmental Quality  
Tidewater Regional Office  
5636 Southern Boulevard  
Virginia Beach, VA 23462

Re: HRSD Example IFM Replacement Project  
CIP #Ex-001  
Notification of Approval and Capacity Verification in accordance with  
SCAT Regulation 9 VAC 25-790-90. CTC Application

Dear Mr. Smithson,

This letter is in reference to the project listed above and accompanies an application for a Certificate to Construct (CTC). Our request is supported by the following information:

The purpose of this project is to relocate the existing \_\_\_\_ inch Interceptor Force Main (IFM) under the river due to conflicts with the proposed bridge construction with a \_\_\_\_ inch IFM. This project will not be adding any new flows to the interceptor system and is increasing the pipe size to match the existing pipe diameter at the downstream connection point of the project. The project design flow rate is \_\_\_\_ gpm with a design pressure of \_\_\_\_ feet.

The HRSD infrastructure downstream from this project has been reviewed and has been verified to have adequate capacity to convey and treat the design flows from this project. The Preliminary Engineering Report dated \_\_\_\_\_ documents the criteria and analysis used in the verification of capacity. Furthermore, the facilities from this project will be included in the analyses conducted for the Regional Wet Weather Management Plan.

HRSD, in consultation with the City / County of \_\_\_\_\_, has reviewed the project scope, the design basis and the sewer system impacts of this proposed project. In addition, HRSD has received all necessary approvals and associated permits.

Sincerely,

Bruce W. Hesselbee, P.E.  
Director of Engineering

CC: Chief of Planning and Analysis  
Chief of South / North Shore Interceptors

Exhibit D

Date:

Mr. Robert Smithson, Jr.  
Virginia Department of Environmental Quality  
Tidewater Regional Office  
5636 Southern Boulevard  
Virginia Beach, VA 23462

RE: (HRSD Project Name & Facility Number)

Dear Mr. Smithson,

HRSD is in the process of finalizing the design of (Project Description, Location and Purpose).

As the design engineer, we are acting on HRSD's behalf to coordinate the approval by permitting agencies. We do not believe that a review by the Virginia Department of Environmental Quality (VDEQ) for this project is necessary because it is a maintenance project whereby there is no change in pipe diameter or capacity. If you concur, please sign below and return a signed copy of this letter.

Should you have any questions or comments, please contact me at (Consultant's contact information).

Sincerely,

(Consultant's name & title)

VDEQ waives the requirements for a CTC/CTO based on the information presented in the letter dated (date) for the (name of project) project in (city).

If any portion of the scope of the project changes, HRSD and/or the contractor shall contact the VDEQ Regional Office to determine if the CTC/CTO waiver is still valid.

\_\_\_\_\_  
Virginia Department of Environmental Quality

\_\_\_\_\_  
Date

**End of Section**