

CERTIFICATES TO OPERATE



RECEIVED OCT 28 2010

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2103
www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

October 26, 2010

Mr. Mike Johnson
County Administrator
26022 Administration Center Drive
PO Box 400
Courtland, Virginia 23837

RE: Certificate to Operate, STP
Courtland and Environs Wastewater Treatment Plant
Courtland, VA
VA0061859

Dear Mr. Johnson,

We have received your request for a Certificate to Operate for the above referenced facility. The approved document is enclosed.

Should you have questions, please contact Jim McConathy at 757-518-2165 or via email at james.mcconathy@deq.virginia.gov.

Sincerely,

A handwritten signature in cursive script that reads "Kimberly S. Butler".

Kimberly S. Butler, P.E.
Wastewater Engineer

Cc (sent electronically)
Jim Christian, P.E., Timmons

Department of Environmental Quality
APPLICATION for CERTIFICATE TO OPERATE
Under the Sewage Collection and Treatment Regulations 9 VAC 25-790
and/or the Water Reclamation and Reuse Regulation 9 VAC 25-740

See instructions. Submit 1 copy of this form and any attachments. Form will expand as you enter information.

Project Title: (as it appears on plans) Courtland Wastewater Treatment Plant Replacement		
P.E. Seal Date on Cover: 07/01/09		
Specifications Title and Date: Courtland Wastewater Treatment Plant Replacement, 07/01/09		
Location of Project: 1 mile south of Route 58/Old Bridge Rd.	County/City: Southampton	
Receiving Wastewater Collection System(s): N/A		
Receiving Sewage Treatment Plant(s): N/A		
PROJECT OWNER: Southampton county	RESPONSIBLE ENGINEER:	
Owner Contact Name: Mike Johnson	Name: Jim Christian, P.E.	
Title: County Administrator	Company Name: Timmons Group	
Address: 26022 Administration Center Drive P.O. Box 400 Courtland, VA 23837	Address: 1001 Boulders Parkway Suite 300 Richmond, VA 23225	
Phone: 757-653-3015	Phone: 804-200-6378	
Email: mikejohnson@co.southampton.va.us	Email: jim.christian@timmons.com	
Owner Signature and Date: 10/13/2010		

PTL NUMBER FROM CERTIFICATE TO CONSTRUCT: 24351

Attach Copy of the original Certificate to Construct if issued prior to November 9, 2008. If applicable, provide verification of compliance with any conditions in the Certificate to Construct.

Design Flow: (a) average daily flow (MGD): 1.25 (b) peak flow (MGD): 3.75

For sewage treatment plant, water reclamation or satellite reclamation projects, provide the VPDES/VPA Permit Number: VA0061859

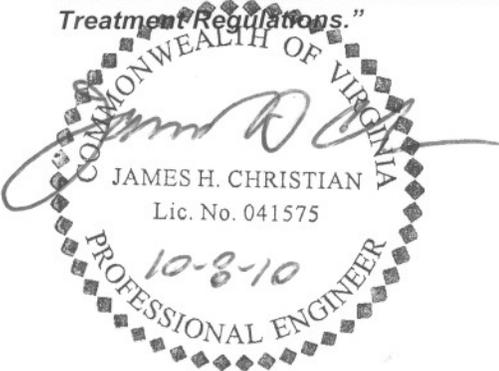
Is a new Discharge Monitoring Report (DMR) or other monthly monitoring report required? Yes No

For Pump Stations, Sewage Treatment Plants, and Reclamation Systems, check Reliability Class: I II III
 NA

Two options are provided for the Statement of Completion, depending on whether the project is being authorized under the Sewage Collection and Treatment Regulations, the Water Reclamation and Reuse Regulations, or BOTH. Please check the appropriate box and then provide signature and seal below as indicated.

The following statement of completion for issuance of a Certificate to Operate under the Sewage Collection and Treatment Regulations must be signed and sealed by the responsible engineer. (DEQ will not conduct a confirming inspection.)

"The construction of the project has been completed in accordance with the referenced plans and specifications or revised only in accordance with 9 VAC 25-790-180.B, and inspections have been performed to make this statement in accordance with Section 9 VAC 25-790-180.C.1 of the Sewage Collection and Treatment Regulations."



Licensed Engineer's Signature and original seal (signed and dated)

The following statement of completion for issuance of a Certificate to Operate under the Water Reclamation and Reuse Regulation must be signed and sealed by the responsible engineer. (DEQ will not conduct a confirming inspection.)

"The construction of the project has been completed in accordance with the referenced plans and specifications or revised only in accordance with 9 VAC 25-740-120-B.2.b. and inspections have been performed to make this statement in accordance with Section 9 VAC 25-40-120.B.3.a. of the Water Reclamation and Reuse Regulations."

Licensed Engineer's Signature and original seal (signed and dated)

.....
For DEQ use only:

In accordance with *Code of Virginia* 1950, as amended, Title 62.1, Section 62.1-44.19, this form, signed by the appropriate DEQ representative, serves as the **Certificate to Operate** for the referenced project.

Kimberly S. Butler Kimberly S Butler 10-26-10 25055
Name Signature Date CTO PTL Number

Department of Environmental Quality Authorized Representative

✓ An Operation and Maintenance Manual must be submitted to the DEQ Regional Office in accordance with 9 VAC 25-790 for sewage treatment plants, 9 VAC 25-740 for water reclamation systems and satellite reclamation systems and VPDES or VPA permit requirements.

For pump stations, an Operation and Maintenance Manual must be maintained for the facility in accordance with 9 VAC 25-790, but is NOT to be submitted to DEQ. The pump station must be operated and maintained in accordance with that manual.



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PT Log No.	24351
Project Name	Courtland WWTP Replacement
Design Capacity (gpd)	1,250,000
Project Type	CTC Application
City / County	Southampton
Design Engineer	Timmons Group - Richmond office
Receiving Plant	Courtland STP
Project Status	Active
Current Status	New / Received
DEQ Reviewer	JRMConathy (TRO)

Current Facilities of Project
Wastewater Treatment Works (New)

Action Code	Action Description	Action Date
N	New / Received	12/12/2008

Project Information

New waste water treatment facility situated adjacent to the existing plant. Initial design flow will be 1.25 MGD with provisions for expansions at 1.25 MGD increments to reach an ultimate flow od 3.75 MGD. Waste water treatment is projected to be compsed of the following components: Strai steo screen, Manual bypass screen, grit collection system, 2 oxidation ditch trians (5 stage Bardenpho type, 2 50' clarifiers, cloth disc filter, UV disinfection, post aeration, effluent pump staio with approx 4700; force main, plant drain pump station, nonpotable water pump station and distribution station, aerobic digestion, dewater centrifuge, emergency standby diesel generator, and RAS/WAS pumping station.



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Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

October 21, 2010

Mr. Mike Johnson
County Administrator
26022 Administration Center Drive
PO Box 400
Courtland, Virginia 23837

RE: Certificate to Operate, Pump Station
Courtland Interceptor Pump Station

Dear Mr. Johnson,

We have received your request for a Certificate to Operate for the above referenced facility. The approved document is enclosed.

Should you have questions, please contact Jim McConathy at 757-518-2165 or via email at james.mcconathy@deq.virginia.gov.

Sincerely,

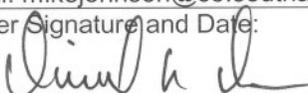
A handwritten signature in cursive script that reads "Kimberly S. Butler".

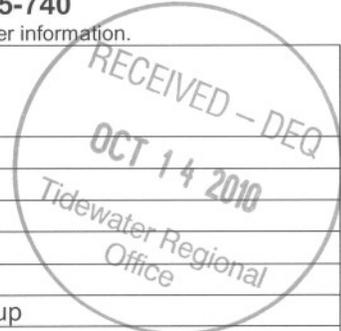
Kimberly S. Butler, P.E.
Wastewater Engineer

Cc (sent electronically)
Wes Hunnius, P.E., Timmons

Department of Environmental Quality
APPLICATION for CERTIFICATE TO OPERATE
Under the Sewage Collection and Treatment Regulations 9 VAC 25-790
and/or the Water Reclamation and Reuse Regulation 9 VAC 25-740

See instructions. Submit 1 copy of this form and any attachments. Form will expand as you enter information.

Project Title: (as it appears on plans) Courtland Interceptor Pump Station	
P.E. Seal Date on Cover: 10/15/08	
Specifications Title and Date: Courtland Interceptor Pump Station, 10/15/08	
Location of Project: 2 miles east of Courtland on Route 58	County/City: Southampton
Receiving Wastewater Collection System(s): Town of Courtland	
Receiving Sewage Treatment Plant(s): Courtland Wastewater Treatment Plant	
PROJECT OWNER: Southampton county	RESPONSIBLE ENGINEER:
Owner Contact Name: Mike Johnson	Name: Wes Hunnius, P.E.
Title: County Administrator	Company Name: Timmons Group
Address: 26022 Administration Center Drive P.O. Box 400 Courtland, VA 23837	Address: 1001 Boulders Parkway Suite 300 Richmond, VA 23225
Phone: 757-653-3015	Phone: 804-200-6385
Email: mikejohnson@co.southampton.va.us	Email: wes.hunnus@timmons.com
Owner Signature and Date:  10/13/2010	



PTL NUMBER FROM CERTIFICATE TO CONSTRUCT: 24350

Attach Copy of the original Certificate to Construct if issued prior to November 9, 2008. If applicable, provide verification of compliance with any conditions in the Certificate to Construct.

Design Flow: (a) average daily flow (MGD): 0.72 (b) peak flow (MGD): 1.8

For sewage treatment plant, water reclamation or satellite reclamation projects, provide the VPDES/VPA Permit Number:
N/A

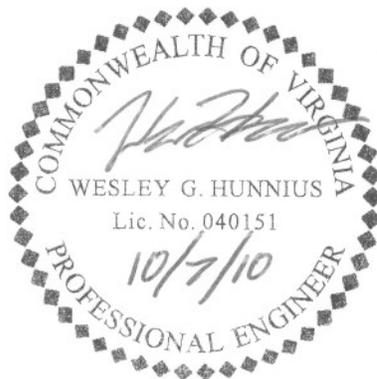
Is a new Discharge Monitoring Report (DMR) or other monthly monitoring report required? Yes No

For Pump Stations, Sewage Treatment Plants, and Reclamation Systems, check Reliability Class: I II III
 NA

Two options are provided for the Statement of Completion, depending on whether the project is being authorized under the Sewage Collection and Treatment Regulations, the Water Reclamation and Reuse Regulations, or BOTH. Please check the appropriate box and then provide signature and seal below as indicated.

The following statement of completion for issuance of a Certificate to Operate under the Sewage Collection and Treatment Regulations must be signed and sealed by the responsible engineer. (DEQ will not conduct a confirming inspection.)

“The construction of the project has been completed in accordance with the referenced plans and specifications or revised only in accordance with 9 VAC 25-790-180.B, and inspections have been performed to make this statement in accordance with Section 9 VAC 25-790-180.C.1 of the Sewage Collection and Treatment Regulations.”



Licensed Engineer's Signature and original seal (signed and dated)

The following statement of completion for issuance of a Certificate to Operate under the Water Reclamation and Reuse Regulation must be signed and sealed by the responsible engineer. (DEQ will not conduct a confirming inspection.)

“The construction of the project has been completed in accordance with the referenced plans and specifications or revised only in accordance with 9 VAC 25-740-120-B.2.b. and inspections have been performed to make this statement in accordance with Section 9 VAC 25-40-120.B.3.a. of the Water Reclamation and Reuse Regulations.”

Licensed Engineer's Signature and original seal (signed and dated)

.....
For DEQ use only:

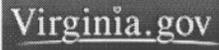
In accordance with Code of Virginia 1950, as amended, Title 62.1, Section 62.1-44.19, this form, signed by the appropriate DEQ representative, serves as the **Certificate to Operate** for the referenced project.

Kimberly S. Butler Kimberly S. Butler 10-21-10 25053
Name Signature Date CTO PTL Number

Department of Environmental Quality Authorized Representative

An Operation and Maintenance Manual must be submitted to the DEQ Regional Office in accordance with 9 VAC 25-790 for sewage treatment plants, 9 VAC 25-740 for water reclamation systems and satellite reclamation systems and VPDES or VPA permit requirements.

For pump stations, an Operation and Maintenance Manual must be maintained for the facility in accordance with 9 VAC 25-790, but is NOT to be submitted to DEQ. The pump station must be operated and maintained in accordance with that manual.



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PT Log No.	24350
Project Name	Courtland Interceptor Pump Station
Design Capacity (gpd)	720,000
Project Type	CTC Application
City / County	Southampton
Design Engineer	Timmons Group - Richmond office
Receiving Plant	Courtland STP
Project Status	Pending
Current Status	CTC Issued
Reliability Class	I
DEQ Reviewer	JRMcConathy (TRO)

Current Facilities of Project
Pump Station

Action Code	Action Description	Action Date
N	New / Received	12/04/2007
null	CTC Issued	01/08/2009

Project Information

Initial design flow is 0.72 MGD. Peak flow is 1.8 MGD. Located on Southampton Parkway (Highway 58) east of town. Will initially serve the new Riverdale Elementary School and the Villages of Southampton Development. Eventual capacity will be 3.2 MGD with installation of larger pumps at a later time. Pump station will eventually contain two pumps each sized to handle initial flows of 1.8 MGD (1250 GPM @ 60` TDH). Smaller capacity pumps will be installed at first. The Station will pump trough 11,000 feet of 16" forcemain with discharge to a new influent pump station serving the expanded waste water treatment plant.

Reliability Classification Worksheet for Sewage Pumping Stations

Pump Station Name: Courtland Interceptor Pump Station

Location: 2 miles east of Courtland on Route 58

Average Daily Design Flow/ Peak Design Flow (MGD/MGD): 0.72/1.80

Complete Part I and Part II of this form, and submit this form with your CTC application. All assessments are based on the average daily design flow of the pump station (not peak flow or current flow).

Part I. Reliability Classification Assessment

1. Is the station located in the Dulles Watershed (9 VAC 25-401) or in the Occoquan Watershed (9 VAC 25-410)?
 If yes, STOP - Reliability is Class I with special construction requirements (see 9 VAC 25-401 and/or 410).
 If no, proceed to Question 2.
2. The default Reliability Classification for all other pump stations within Virginia is Class I. Is the pump station to be constructed to meet Reliability Class I?
 If yes, STOP - Reliability is Class I.
 If no, proceed to Question 3.
3. Is the design average daily flow to the pump station greater than or equal to 0.5 MGD?
 If yes, STOP - Reliability is Class I.
 If no, proceed to Question 4.
4. Is the pump station located in the any of the following localities? **Counties** of Accomack, Charles City, Essex, Gloucester, Isle of Wight, James City, King and Queen, King George, King William, Lancaster, Mathews, Middlesex, New Kent, Northampton, Northumberland, Richmond, Southampton, Surry, Westmoreland or York; or **Cities** of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach or Williamsburg.
 If yes, STOP - Reliability is Class I.
 If no, proceed to Question 5.
5. Is a public water supply surface water intake within 5 miles downgradient of the pump station or within 1 tidal cycle upstream of the pump station?
[Contact the appropriate field office of VDH's Office of Drinking Water
<http://www.vdh.virginia.gov/drinkingwater/contacts/>. Provide VDH with latitude/longitude information for the pump station and the average and peak design flows.]
 If yes, STOP - Reliability is Class I.
 If no, proceed to Question 6.
6. If the pump station were to overflow, is there high probability of public contact with the wastewater? [Is the station close to residential/commercial/institutional areas and/or recreational areas (boat landings, posted swimming/fishing/boating areas, parks) such that an overflow would likely present a public health hazard?]
 If yes, STOP - Reliability is Class I.
 If no, proceed to Question 7.
7. Is average daily design flow to the pump station < 2000 gpd?
 If yes, STOP - Reliability is Class II.
 If no, proceed to Question 8.
8. Is there a perennial surface water located within 1500 ft downgradient of the facility? (Perennial stream defined as a solid blue line on USGS quad map or determined from field investigation.)
 If no, STOP - Reliability is Class II.
 If yes, proceed to Question 9.

9. Does the perennial surface water considered in Question 8 above provide less than a 10:1 dilution (7Q10 receiving water flow to average daily design flow); OR is the perennial surface water a 303d listed impaired segment? [See www.deq.virginia.gov/wastewater/ for location and list of stream gauges, 7Q10 information, and 303d listings]
- If yes to either of the questions, STOP - Reliability is Class I.
- If no, STOP - Reliability is Class II.

Based on the Part I assessment, the designated reliability classification for this pump station is Class I

Note that DEQ has determined that Reliability Class III is not protective of water quality and is not a valid classification for a new pump station.

Part II. Method of Complying with Reliability Classification

For this pump station, select your method of complying with the reliability class requirements.
Reference 9 VAC 25-790-390 through 420.

Reliability Class I:

- Option A: Emergency generator with automatic transfer switch or dual electrical feeds. Class I must monitor main power supply, auxiliary power supply, failure of pump to discharge, and high liquid level in wet/dry wells; a test function must also be provided. On-site audio-visual alarm required with telemetry or autodialer to site manned 24 hours a day.
- Option B: 24 hour emergency storage. Class I must monitor main power supply, failure of pump to discharge, and high liquid level in wet/dry wells; a test function must also be provided. On-site audio-visual alarm required with telemetry or autodialer to site manned 24 hours a day. (24 hour storage based on average daily design flow.)
- Option C: Closing the facility to eliminate generation of sewage. On-site audio-visual alarm required with telemetry or autodialer to site manned 24 hours a day. (Only available to facilities that will close during a power outage such as schools, certain industries, some recreational and park areas.)
- Option D: [Only available for facilities to be owned and operated by a locality, utility, or service authority.] Wet well storage above the high water alarm equal to or greater than documented response time of owner/service provider. Owner/Service Provider has sufficient portable equipment (see 9 VAC 25-790-410 for details). Portable pump and/or portable generator hookup provided. Class I must monitor main power supply, failure of pump to discharge, and high liquid level in wet/dry wells; a test function must also be provided. On-site audio-visual alarm required with telemetry or autodialer to site manned 24 hours a day.
- Option E: For facilities in the Dulles Watershed Only: In addition to complying with Reliability Class I requirements in 9 VAC 25-790, the facility also complies with 9 VAC 25-401-30.D.
- Option F: For facilities in the Occoquan Watershed Only: In addition to complying with Reliability Class I requirements in 9 VAC 25-790, the facility also complies with 9 VAC 25-410-20-F.5.

Reliability Class II:

- Option A: Portable/standby generator (manual transfer switch or quick connect). On-site audio-visual high water alarm.
- Option B: Emergency pump connection (and access to a portable pump). On-site audio-visual high water alarm.
- Option C: Closing the facility to eliminate generation of sewage. On-site audio-visual high water alarm. (Only available to facilities that will close during a power outage such as schools, certain industries, some recreational and park areas.)

Form to be completed and signed by Design Engineer.

Form completed by Wes Hunnius (signature)

Printed name Wes Hunnius, P.E.