VERMONT

Vermont Department of Environmental Conservation
Watershed Management Division
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Montpelier VT 05620-3522
www.watershedmanagement.vt.gov

Agency of Natural Resources

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AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES

Pursuant to Section C.2.2 of the VT Stream Alteration General Permit (Reporting activities not requiring an application)

Project Number: **SA-06-** 29 **-2015**

Applicant Name: Berlin Volunteer Fire Department

Mailing Address: 338 Paine TPKE N, Berlin, VT 05602 Phone: (802) 839-0255

Project Location 44°14'25.3", -73°35'43.1" Email: Miles@berlinfiredepartment.org
dryhydrantguy@yahoo.com

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:

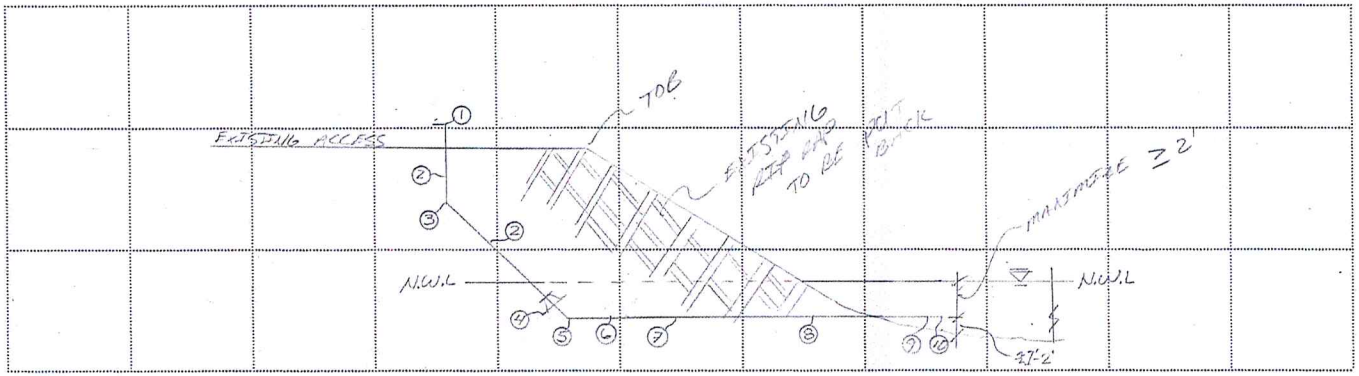
1. This project authorizes installation of a dry hydrant on the Dog River.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
   a) The project will be completed and approved as shown on the plan dated 9/9/14, prepared by Troy Dare, and approved by the Vermont Agency of Natural Resources.
   b) The project will not adversely affect the public safety by increasing flood hazards.
   c) The project will not significantly damage fish life or wildlife.
   d) The project will not significantly damage the rights of riparian owners.
   e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
   f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
   g) The ANR River Management Engineer is notified by phone or email when construction begins and when the project is complete.
   h) In-stream working dates for all GP activities are from July 1st through October 1st; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
   i) This authorization has been posted for three days public comment. This authorization constitutes final approval.

If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

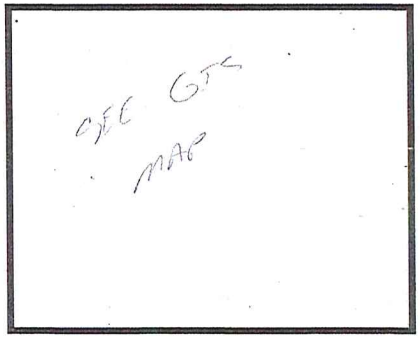
If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Signed this 17th day of June, 2015 This permit expires October 1, 2015.
David K. Mears, Commissioner
Department of Environmental Conservation

by: _____
Jaron Borg, River Management Engineer



Scale: 1"= 10'



Site Map
Not To Scale

Dry hydrant installations on a river or stream should ALWAYS: 1) Make sure the construction work is clean & neat. 2) If needed only use clean stone fill. 3) All exposed soil shall be seeded and mulched immediately upon project completion. 4) While working in shallow steams use a hay bale or sand bag cofferdam system. 5) In-stream construction is generally limited to June 1st to October 1st (and maybe more restrictive in specific streams). 6) Permitting is required for any in-stream work. Municipalities shall apply for the appropriate permit by contacting the Vermont ANR River Management Stream Alteration Engineer in your area.

Design Flow (GPM): 1630

Approx. Water Volume: UNLIMITED

Summer: —

Winter: —

See Attached Location/GIS Map

Bill Of Materials

#	Description	No.	Unit	Unit Cost	Total
1	90° DRY HYDRANT HEAD	1	EA	250.00	250.00
2	6"ϕ SCH 40 PVC PIPE	20	LF	6.00	120.00
3	6"ϕ SCH 40 PVC 45° ELBOW	1	EA	25.00	25.00
4	8"ϕ x 6"ϕ SCH 40 PVC REDUCER	1	EA	80.00	80.00
5	8"ϕ SCH 40 PVC 45° ELBOW	1	EA	80.00	80.00
6	8"ϕ SCH 40 PVC PIPE	20	LF	8.00	160.00
7	8"ϕ STEEL x 8"ϕ PVC MECHANICAL COUPLING	1	EA	150.00	150.00
8	8"ϕ SCH 40 STEEL PIPE	21	LF	30.00	630.00
9	8"ϕ SCH 40 STEEL 45° ELBOW	1	EA	100.00	100.00
10	HOODED INLET FABRICATION + MATERIALS (SEE PICS & SCHEMATIC)	—	—	—	500.00
	LABOR	—	—	—	500.00
	Miscellaneous	—	—	—	500.00
	Excavation	8	HR	150.00	1200.00
	Total				$4295.00

Notes

- This design does **NOT** certify your rural water supply site for a 2% (50 year return period) drought condition. For the Insurance Services Office to give credit for this water supply it must meet the Suction Supply requirements of the Fire Suppression Rating Schedule as to accessibility, availability, needed fire flow, duration, pumper capacity and distances. The 2% drought volume must be determined by a Vermont registered /licensed professional engineer, hydrologist, or similarly qualified person.

APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 06/17/2015
BY
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT# SA06-29-2015 ISSUED HEREWITH

BERLIN 2014 RFP NEW.
WESTON MOBILE HOME PARK

VERMONT RURAL FIRE PROTECTION TASK FORCE
Vermont Association of Conservation Districts (VACD)
Rural Fire Protection Program - Randolph, VT 05060

Drawn by: TROY DARE
Reviewed by:
Date: 9/9/14 Sheet 1/5

Rural Water Supply (RWS) Site Assessment Form

(Revised 5/9/14)

Date: 7/24/14 Town: BERLIN County: WASH Fire Department: BERLIN
Site Name: WESTONS MOBILE HOME PARK Site ID Number: BERLIN 2014/NEW
Approx. Access/Standpipe Location: AT 12 Long: 72°35'43" W Lat: 44°14'25" N
Property Owner/Address: ELLERY PACKARD
Largest Fire Load/Flow within 1000ft COMMERCIAL/RES 1.5mi radius: COMMERCIAL/RESIDENTIAL
Site Assessment Completed by: NICOL DANE Project: 2014 RFP GRANT PROGRAM
Needed Fire Flow (if known): 1000 gpm Existing RWS Repair ☐ Out of service Date: _____
Town/FD Agreements Needed (if applicable): Landowner ☑ Grant ☑ Other ☐ _____

Water Source: DOG Lake Pond Wetland (River) Stream Brook
Recommended System: ~~Dry Hydrant~~ Basin Pressure (Wet) Drafting
Type of Recharge: stream seep spring groundwater (river)
Rate of Recharge: Poor Fair Good (Excellent)
Site Accessibility: Asphalt (Dirt) Parking Area (Driveway) Other: _____
Depth (if known): Minimum: 3 ft Maximum: 6 ft
State Fish & Wildlife Access ☐ **NOTE:** RWS Technician must be present for all F&W installations.

Lift @ NWL: 12-13 ft Horizontal Distance: 29 - 30 ft Elevation (approx.): 550 ft
Connection Information: Hose: ☐4.5" ☐5" ☑6" Thread Size: ☐4.5" ☐5" ☑6" » ☐Male ☑Female ☐Storz
Estimated Flow Rate of System (from New Hydrant Flow Spreadsheet): 1030 gpm

Water Source Information & Calculations for fire purposes (estimate):
Volume (static water bodies) = Surface Area x intake depth x 7.48gal/cf x (2/3)
Surface Area: — ft x — ft = — sf (☐From GIS Software)
Volume: Area — sf x (Intake depth — ft - 2ft) x 7.5gcf x (0.67) ≈ — gal
Volume in Winter months ≈ — gal

Note: Thickness of ice must be deducted from the intake depth value for winter months volume. If not known at time of survey use 2ft.

Flow (flowing water bodies)(at time of survey) = Q = Area x Velocity (attach survey and
Cross sectional Area — sf x Velocity — f/s x (60sec/min) x (7.5gal/cf) = UNLIMITED gpm

Permitting/Signoff Needed: Permitting Applications and Contact Information: www.vtwaterquality.org
☑Stream Alteration/ Water Quality (State) ☐Lakes and Ponds (State) ☐Wetlands (State) ☐Army Corps (Federal)
☐Cultural Resources (Federal) ☐F&W Access (State)
Integrity: Dist ☑ Intact ☐ Unknown ☐ Landform Slope: ≈ 0%
Date Cultural Resources Review Completed (if applicable): _____
Notes: _____

Field Notes: STEEL HOODED INLET

Field Sketch:

SEE GIS MAP

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BY _____
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0 25 50 100 150 200 Feet

Berlin 2014 New
72°35'43.128"W 44°14'25.297"N
System can be located anywhere in the area shown