

Vermont Agency of Natural Resources  
Department of Environmental Conservation  
Water Quality Division  
Stormwater Management Program

**Stormwater Procedure For Public Linear Transportation Projects**

**Background**

Discharges of stormwater runoff from new, expanded and redeveloped impervious surfaces are regulated pursuant to 10 V.S.A. Sections 1264 and 1264a, the Stormwater Management Rule, and the Stormwater Management Rule for Stormwater-Impaired Waters. When proposed new, expanded or redevelopment of impervious surfaces reaches the permit thresholds set out in rule, discharges of regulated stormwater runoff from these impervious surfaces must obtain permit coverage consistent with the treatment and control standards in the Vermont Stormwater Management Manual (Manual).

This procedure describes how the Department will review expansions, redevelopment and temporary impervious surfaces for linear projects. This procedure only applies to stormwater discharges to waters that are non-stormwater impaired waters and only applies to state stormwater permits.

**Requirements of Stormwater Management Rule and Manual Relating to Expansions, Redevelopment and Temporary Impervious Surfaces**

Expansions

Section 18-302 of the Stormwater Management Rule states that:

*(a) (a) For discharges of regulated stormwater runoff to waters that are not stormwater impaired waters, the Secretary shall require that:*

*(1) Discharges of regulated stormwater runoff from new development and expansions obtain an individual permit or coverage under a general permit consistent with the treatment standards for new development in the Vermont Stormwater Management Manual.*

The Manual provides that discharges of stormwater runoff from expansions must meet five treatment criteria, including water quality, groundwater recharge, channel protection, overbank flood control and extreme flood control. The Manual provides waivers from the recharge, channel protection and flood control requirements in certain circumstances. Credits may be used to reduce or eliminate water quality and recharge volumes for non-structural practices where applicable.

The Department has historically viewed minor roadway expansions as strictly new development, even when such expansions involve only a minor widening over a substantial length. The newly expanded portions of such roadways are constructed within existing right-of-way and are typically subjected to the same constraints as redevelopment projects.

### Redevelopment

Section 18-201 of the Stormwater Management Rule defines “redevelopment” as follows: *“Redevelopment means the reconstruction of an impervious surface where an impervious surface currently exists, when such reconstruction involves substantial site grading, substantial subsurface excavation, or modification of existing stormwater conveyance such that the total of impervious surface to be constructed or reconstructed is greater than the minimum regulatory threshold. Redevelopment does not mean management activities on impervious surfaces, including any crack sealing, patching, coldplaning, resurfacing, paving a gravel road, reclaiming, or grading treatments used to maintain pavement, bridges and unpaved roads. Redevelopment does not include expansions.*

Section 18-302 also sets forth the treatment and control standards for discharges of stormwater runoff from redevelopment as follows:

*(a) For discharges of regulated stormwater runoff to waters that are not stormwater impaired waters, the Secretary shall require that:*

*(2) Discharges of regulated stormwater runoff from redeveloped impervious surfaces obtain an individual permit or coverage under a general permit consistent with the following:*

*(A) The existing impervious surface shall be reduced by a minimum of 20%; or*

*(B) a stormwater treatment practice shall be designed to capture and treat 20% of the water quality volume treatment standard specified in the Vermont Stormwater Management Manual from the existing impervious surface; or*

*(C) a combination of (A) and (B) that when combined equal a minimum 20% reduction/treatment.*

Redevelopment is not subject to the requirements for channel protection, groundwater recharge and flood control. The Manual provides credits that may be used to reduce or eliminate water quality volume for non-structural practices where applicable.

The Department has historically interpreted the Rule to define redevelopment as strictly limited to those situations in which impervious surfaces are redeveloped precisely within the footprint of the existing impervious surface. Any reconfiguration of the impervious surface, such that it resulted in impervious surfaces being constructed where there was

none, has been deemed an expansion. These areas of expanded new impervious surface were not deemed “redevelopment” even when they replaced existing impervious surface as part of a larger redevelopment project, or when projects resulted in no or minor increases in net impervious coverage. Examples of these situations include the redevelopment of existing roads involving realignment or expansions of the road, and urban redevelopment projects where existing parking and building locations are modified to meet current design goals such as moving a building to meet set-back standards, and providing for consolidated green space.

The Department’s historical interpretation of the Rule does not consider the fact that these so-called new impervious surfaces are part of a redevelopment project that typically has more constraints (e.g. existing infrastructure, limited space) than a new, greenfield type of development. This interpretation also fails to provide incentives to remove existing unneeded impervious surfaces because credit for removal of impervious surface is only given towards the treatment requirements for redevelopment.

### Temporary Impervious Surfaces

The Stormwater Management Rule does not distinguish between permanent impervious surfaces and temporary impervious surfaces associated with construction. Consequently, under a strict interpretation of the Stormwater Rule, temporary impervious surfaces such as haul roads, and bypass roads associated with bridge replacement, are potentially subject to the same treatment standards as new, permanent impervious surfaces. Temporary impervious surfaces associated with highway projects face substantial physical constraints in siting operational stormwater treatment practices.

### **Clarification of Stormwater Permitting Requirements for Expansions, Redevelopment and Temporary Impervious Surfaces**

This Procedure clarifies the stormwater permitting requirements for redevelopment projects that involve relatively minor changes in the location of impervious surfaces; redevelopment projects involving minor expansions of impervious surfaces; highway expansion projects; and temporary impervious surfaces associated with construction. The Department believes that application of this Procedure will provide the level of environmental protection required by the Manual and Rule. This Procedure is not intended to supersede any exemptions in the Stormwater Rule or General Permit 3-9015; redevelopment of less than one acre of impervious surface is non-jurisdictional. Additionally, this Procedure may be used in conjunction with other procedures, including the Site Balancing Procedure.

### **Redevelopment and Minor Expansions Associated with Redevelopment**

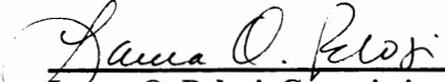
The Department will interpret the term “redevelopment” to mean the reconstruction of existing impervious surface, and it shall include minor changes in the location of the reconstructed impervious surfaces provided they are in the project limits, and provided there is no net increase in impervious surface. “Redevelopment” shall also be interpreted

to include reconstruction projects involving minor increases in the total of impervious area, up to a 20% net increase in impervious surface. However, in cases where redevelopment involves a net increase in impervious surface, the treatment standard for "Water Quality Volume" (WQv) shall be 30% of the WQv for the redeveloped impervious areas for up to a 10% increase in impervious surface. For projects with an increase of 11% to 20% in impervious surface, the treatment standard shall be 35% of the WQv. This portion of the procedure does not apply to projects with a greater than 20% net increase in impervious surface. Under previous interpretations a redevelopment project would provide 20% of the WQv for the strictly redeveloped portion, and 100% of the WQv for any expanded portion. Applying the 30% treatment standard to the 10%-increase category of projects would result in a minor increase in the amount of impervious area treated for a typical 1-acre project, however project designers would have greater flexibility in developing the most cost-effective stormwater system. Additionally, Channel Protection Volume, Recharge Volume, Overbank Flood (QP10), and Extreme Flood Control (QP100) standards would continue to be waived for redevelopment projects. However, in cases where a project had a net increase in impervious surface, and the increased impervious surface exceeded one acre discharging to any one receiving water, the Channel Protection, QP10, and QP100 standards will apply, pursuant to existing thresholds and exemptions.

### **Temporary Impervious Surfaces**

Temporary impervious surfaces associated with the construction phase of a project shall not be considered regulated impervious surface provided the impervious surface is in existence for a period not to exceed three years, and provided the project is in compliance with a valid authorization under the Construction General Permit 3-9020 or an Individual Construction Stormwater Discharge Permit. For such temporary impervious surfaces, the Secretary shall retain the right to require compliance with any of the five treatment standards of the Vermont Stormwater Management Manual in when necessary to protect water quality.

### **Adopted**

  
Laura Q. Pelosi, Commissioner

4/8/09  
Date