These regulations are promulgated by NYSDEC and are used to established the surface and groundwater classifications, and contain the standards of water quality and purity for New York State.

Part 701 of these regulations is used by NYSDEC to classify streams and lakes according to their best usage, e.g., Class C-fishing. Part 702 establishes the criteria and procedures for deriving the water quality standards and guidance values contained in Part 703. Part 703 of these regulations contains the actual water quality standards and guidance values used by NYSDEC to establish effluent limitations, to evaluate permit applications, and to investigate potential water quality violations in the field.

Included in Part 703 are the standards for dissolved oxygen, dissolved solids, coliforms, pH, color, odor and turbidity. The narrative turbidity standard is of particular importance for all NYSDOT construction and maintenance projects (6 NYCRR Part 703.2). The standard for turbidity is - "No increase that will cause a substantial visible contrast to natural conditions". This standard applies during construction and maintenance operations (as do all standards) even if NYSDOT has obtained all required water quality-related permits from regulatory agencies.

Part 703 also contains the standards for groundwater quality and groundwater effluent limitations. These standards should be considered when evaluating potential impacts to surface and groundwater for projects located over NYSDEC designated Primary Water Supply or Principal Aquifers (see Section 4.4 - "Aquifers"), particularly if an on-site septic system is involved.

Part 704 contains the criteria and standards governing thermal discharges to the waters of New York State. In general, large day-to-day temperature fluctuations should be avoided and no discharge at a temperature over 70 degrees Fahrenheit is permitted to trout streams. These standards were derived with co-generation power plants in mind, however NYSDEC staff use this criteria to evaluate large projects with thermal discharges to trout waters. In project design, large areas of impervious surface, that can raise the temperature of impacting rainfall, should not be designed so as to release this warm water directly into a trout water. Article 15 - Protection of Waters, and SPDES General Stormwater Permit GP-93-06 require NYSDOT to consider the potential impacts of thermal discharges to surface waters.
These standards should be considered, as appropriate, by NYSDOT design staff when preparing Erosion and Sediment Control Plans and Stormwater Pollution Prevention Control Plans, as one of the primary objectives of these plans is to comply with these water quality standards. Procedures for when and how to prepare these plans are discussed in Section 4.3 - "Erosion and Sediment Control and Stormwater Management".