[PROPOSED BY REP. McCORMACK AS EDITED BY VTRANS/LC]

* * * Use of Pozzolans as an Alternative to Portland Cement * * *

Sec. XX. USE OF POZZOLANS AS AN ALTERNATIVE TO PORTLAND CEMENT

(a) Findings. The General Assembly finds that:

(1) Pozzolans, such as pulverized fuel ash (commonly known as "fly ash"), ground granulated blast-furnace slag, and silica fume, can be used to partially replace a portion of the Portland Cement used in the production of concrete.

(2) Using pozzolans in the production of concrete for transportation infrastructure projects can typically reduce the use of Portland Cement by 40 to 50 percent.

(3) Using pozzolans in a concrete mix design can:

(A) reduce the carbon dioxide emissions associated with transportation infrastructure projects, such as bridges and sidewalks;

(B) increase the compressive strength and durability of concrete; and

(C) decrease construction costs.

(4) Pozzolans cannot be used as a complete substitute for Portland Cement in a concrete mix design because they enhance and do not replace the cementitious properties of Portland Cement as it hydrates as part of the overall chemical reaction that binds and strengthens the concrete.

(b) Use of Portland Cement. The Agency is encouraged to continue researching, testing, and wherever practicable, using pozzolans and alternatives to Portland Cement as part of the concrete mix designs for all transportation infrastructure projects.