

Application NAB-2007-08123-M05
Response to U.S. Army Corps of Engineers Information Request Dated 01/16/09
Calvert Cliffs 3 Project, LLC and UniStar Nuclear Operating Services, LLC
February 12, 2009

Question 12

In the area by the tennis courts, provide explanation on the elevations at the outlet and how storm water management will be addressed to prevent erosion and destabilization of the cliffs.

RESPONSE

According to the Calvert Cliffs Unit 3 Storm Water Management Plan (Bechtel, October 2008), Maryland stormwater management ordinances were followed to satisfy water quality requirements, recharge volumes, channel protection storage volume, overbank flood protection volume, and spillway design. Runoff from the developed areas will be collected via ditches, swales and culverts and routed to detention basins. Discharge from the detention basins will be controlled through the outlets so that it is at or below inflow discharge. In the area by the tennis courts, a series of wetland cells are being created, which will also serve to detain stormwater (SWB1) before it is discharged into the channels draining to the Chesapeake Bay.

Based on the current design of the forested wetlands, flow will be diverted from the upper wetland cell to the middle wetland cell and from the middle wetland cell to the lowest wetland cell through orifices and connecting pipes. One foot of water will be stored in each wetland cell before the discharge pipe becomes activated. This volume of water is designed to draw down over the course of 24 hours. The outlet pipe from the lowest wetland cell is 8-inches. Storm runoff above the volume that fills the three wetland cells will be diverted through a principal spillway in the uppermost cell to the south where it will flow into the channel draining Camp Conoy. Therefore discharge from the lowest wetland cell will be very small and is not anticipated to increase from pre-development conditions.

Further attention will be given in the final design to stormwater management systems feeding the channel to the south of the forested wetlands in order to maintain the existing hydrology in that system.