

Larry Hogan Governor

Boyd Rutherford Lieutenant Governor

Ben Grumbles Secretary

JAN 2 4 2017

Eva Kerchner, Assistant Director Inspections and Permits Anne Arundel County Heritage Office Complex 2664 Riva Road, MS6201 Annapolis MD 21401

Dear Ms. Kerchner:

The Maryland Department of the Environment, Water Management Administration (MDE/WMA) has completed a review of Anne Arundel County's application for continued delegation of erosion and sediment control enforcement authority. As part of this evaluation, MDE conducted field inspections, and a review of erosion and sediment control enforcement procedures in accordance with the County's approved ordinance. I would like to thank you and your staff for their assistance during the review process.

On November 1 and 3, 2016, MDE along with County personnel and the Anne Arundel Soil Conservation District (SCD), inspected 19 active construction sites totaling 357 acres of earth disturbance. Results of this field audit, which is attached for your use, found that while most of the program elements were being implemented effectively, three important issues need to be addressed:

- A number of the sites visited by MDE required stabilization. The main issues identified
 were seeding or reseeding and the maintenance, or installation, of stabilized construction
 entrances.
- MDE found inconsistent completion of routine inspections and report documentation. This
 issue was pointed out in the 2012 Delegation Review of the County's program. MDE
 encourages the County to take the necessary steps to consistently document inspections.

One additional issue that was brought to MDE's attention by County inspectors was that recent rain events have resulted in significant off-site impacts near several larger construction sites. In each case, the County is commended for taking the necessary actions to address these instances of downstream flooding, excessive erosion in receiving waters, and other off-site impacts as they have occurred. However, problems like these could be prevented if potential issues (e.g., increased imperviousness during construction, extensive removal of forest cover) that result in increased volumes of runoff exiting the site are addressed during the review process.

The County should be aware that proactive steps for addressing potential offsite problems are supported by the State regulations. COMAR 26.17.01.07.B.(6) requires that erosion and sediment control plans include "[s]torm drainage provisions, including: (i) [v]elocities and quantities of

Eva Kerchner, Assistant Director Page 2

flows at outfalls; and (ii) [s]ite conditions around points of all surface water discharge from the site". Likewise, COMAR 26.17.01.08.B. allows "[t]he approval authority...to deny approval or impose conditions necessary to prevent: (1) a nuisance or dangerous condition [or] (2) sediment pollution". Lastly, if problems arise after construction begins, Section 4-105.(a)(4), Environment Article of the Annotated Code of Maryland states that the "jurisdictions delegated enforcement authority...or the appropriate approval agency may require modifications to an approved sediment control plan if the approved plan is not adequate to control sediment or erosion."

Anne Arundel County's municipal separate storm sewer system (MS4) permit (11-DP-3316 MD0068306) requires the County to submit quarterly grading permit information to MDE. For State fiscal year 2015, the County submitted quarterly grading permit reports documenting that 41 grading permits were issued for 360 acres of disturbance. While MDE has updated an online erosion and sediment control course that may be used to fulfill MS4 permit training requirements, the County should continue to ensure that onsite operators have received training.

Based on the findings of this evaluation, MDE is granting Anne Arundel County's request for continued delegation of erosion and sediment control enforcement authority with the understanding that the issues raised will be given the necessary attention and should be addressed by the next review. This delegation of authority is effective through June 30, 2019. Because effective erosion and sediment control is fundamental in our effort to protect local streams and restore Chesapeake Bay, I would like to thank you and your staff for your continued efforts.

If you have any questions or comments regarding this evaluation, please contact me at 410-537-3567, or have a member of your staff contact Mr. Raymond Bahr, Sediment and Stormwater Program Review Division at 410-537-3545, or raymond.bahr@maryland.gov.

Sincerely,

D. Lee Currey Acting Director

Water Management Administration

Enclosure

cc: Dan Kane, Director, Inspections & Permits

Erik Michaelson, Anne Arundel County MS4 Permit Administrator John Czajkowski, District Manager, Anne Arundel Soil Conservation District

MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION EROSION AND SEDIMENT CONTROL PROGRAM EVALUATION

Jurisdiction: Anne Arundel County Review Dates: 11/1/16 and 11/3/16 **Ordinance** Reference Citation: Anne Arundel County Code, Article 16, Floodplain Management, Erosion and Sediment Control, and Stormwater Management 1985 First Adopted by Jurisdiction: State Approval Issued: March 11, 1985 Most Recent Modification: September 29, 2015 - Article 16 amended to reflect changes in State Code. Current Status: Acceptable **Procedures** Description: Currently, Anne Arundel County's inspection and enforcement procedures are consistent with the Code of Maryland Regulations (COMAR) 26.17.01. Total Inspections Performed: 10,667 (annual average based on FY15 and FY16 data) Violation Notices Issued: 1,090 Stop Work Orders Issued: 151 Amount of Fines or Bonds Collected: \$25,651 Court Cases: 11 Procedurally, Anne Arundel County should be able to administer Comments: an effective erosion and sediment control program. (annual average based on FY15 and FY16 data) Workload Permits Issued: Major: 401 (513 acres) Minor: 286 (34 acres) Major: 1,349 (1,754 acres) Minor: 140 (16 acres) Permits Active: Staff Size: Supervisory Staff: Inspection Staff: 10 Administrative Support: 1 (2 part time staff) **Current Status:** The County's Department of Inspections and Permits staff conduct erosion and sediment control inspections and enforcement.

Adequate

Field Enforcement

Comments:

Total Number of Sites Visited: 19

| E&SC Delegation | Plan Data | | | | | Adequate Implementation/Maintenance | | | | | | | | | | | Enforcement | | | | | | | | |
|--|-----------------|-----------------|----|------------------------------|----|-------------------------------------|----|---------------|-----|------------------|-----|-----------------|-----|-----------|-----|------------|-------------|-------------------|----|-------------------------------------|-----|-------------------------------|-----|-------------------------|----|
| Anne Arundel County Inspection Dates November 1 and 3, 2016 | Disturbed Acres | 2-Year Approval | | Provides Adequate Control | | Grading | | Stabilization | | Water Conveyance | | Erosion Control | | Filtering | | Dewatering | | Sediment Trapping | | Off-Site/Potential Water Impacts | | Two Week Inspection Frequency | | Adequate Enforcement | |
| Site Name | | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N |
| 1. Zemans Choice | 44.2 | X | | X | | | | X | | X | | X | | X | | | | X | | | X | | X | X | |
| 2. Brumwell-Miller Property | 7.6 | X | | X | | | | X | | X | | X | | X | | | | X | | | X | | X | X | |
| 3. Shipley Homestead | 37.4 | X | | X | | | | X | | X | | X | | X | | | | X | | | X | | | | |
| 4. Gable Drive & Shipley Meadow | 19.5 | X | | X | | | | X | | X | | X | | X | | X | | X | | | X | X | | X | |
| 5. Creekstone Village Section 2B | 7.1 | X | | X | | | | | X | X | | X | | X | | | | X | | | X | | X | X | |
| 6. Solomons Choice | 23.4 | X | | X | | | | | X | X | | X | | X | | | | X | | | X | | X | X | |
| 7. Admiral Sqaure 16380 (Phase II) | 5.1 | X | | X | | | | X | | | | X | | X | | | | Х | | | X | X | | Х | |
| 8. Bay Ridge Christian Church | | X | | X | | | | | X | X | | X | | X | | X | | X | | | X | X | | X | |
| 9. Brightview Assisted Living Facility | 4.8 | X | | X | | | | X | | X | | X | | X | | | | | | | X | | | | |
| 10. Holladay Park Estates Phase 2 & 3 | 18.4 | X | | X | | | | | X | | | X | | X | | | | X | | | X | | | | |
| 11. Asher's Farms | 15.5 | X | | X | | | | | X | | | | X | | X | | | X | | X | | | | | |
| 12. Severna Park High School | 21.6 | | X | X | | | | X | | X | | X | | X | | X | | X | | | X | X | | X | |
| 13. Stone Mill | 14.5 | X | | X | | | | | X | | X | | X | | X | | | X | | X | | X | | | X |
| Stone Mill* | | | | | | | | X | | | | X | | X | | | | | | | X | | | | |
| 14. Creekside Village Tanyard Cove | 21.8 | X | | X | | | | | X | X | | X | | | X | X | | X | | | X | X | | X | |
| Creekside Village Tanyard Cove* | | | | | | | | X | | | | | | X | | | | | | | | | | | |
| 15. Tanyard Cove North Section 2 | 21.7 | X | | X | | | | X | | | X | X | | X | | | | X | | | X | X | | X | |
| Tanyard Cove North Section 2* | | | | | | | | | | X | | | | | | | | | | | | | | | |
| 16. AAA Car Care Center | 1.2 | X | | X | | | | X | | | | X | | | X | | | | | | X | | | | |
| 17. Chesaco RV | 0.5 | | | X | | | | X | | | | | | X | | | | | | | X | | | | |
| 18. Cascades at Two Rivers Parcel C-1 | 49.0 | X | | X | | | | X | | | | X | | X | | X | | | X | X | | | | | |
| 19. The Highlands | 43.3 | X | | X | | | | X | | X | | X | | X | | X | | X | | | X | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| *County Reinspection Totals | 356.5 | 18 | 1 | 19 | 0 | 0 | 0 | 14 | 7 | 12 | 2 | 17 | 2 | 17 | 4 | 6 | 0 | 15 | 1 | 3 | 17 | 7 | 4 | 10 | 1 |
| Percent | | 95% | 5% | 100% | 0% | 0% | 0% | 67% | 33% | 86% | 14% | 89% | 11% | 81% | 19% | 100% | 0% | 94% | 6% | 15% | 85% | 64% | 36% | 91% | 9% |

| E&SC Delegation | P | lan Da | ta | | A | Adequate | Enforcement | | | | | | | |
|--|--|--|---|---|---|--|--|--|---|--|--|---|--|---|
| Anne Arundel County Inspection Dates November 1 and 3, 2016 | Disturbed Acres | 2-Year Approval | Adequate Control | $\mathbf{Provides}$ | Grading | Stabilization | Water Conveyance | Erosion Control | Filtering | Dewatering | Sediment Trapping | Off-Site/Potential Water Impacts | Two Week Inspection Frequency | Adequate Enforcement |
| Site Name | | YN | I Y | N | YN | Y N | Y N | Y N | Y N | Y N | YN | Y N | Y N | Y N |
| MDE Site Inspection Comments | Sites 5., construct Stockpile maintena protectio practices not insta protectio water water water water water water water water sediment 12, 13, 14 | tion enter requirements. Repaired to the control of | trancered red red red red red red red red red | e (SO) e sta ot in ired ive f nsta harg re th that enat and red red ired d 18 | cE) requibilization stalled postable state are water at the 3-stabilized ediment at the site nee require roadward modifications scharging | ired main. Site 8. er specif. Plan wat needed was be specificate from a 7 day state from a 8. Site 14 buildup had been ay was mation not ance. Site soff-site. | ntenance SCE re ication a as not u d mainte ing disci ition. Fa an outlet abilizati f. Stocky and add and re-stal ddress S ot insta approve e 18. Th See add | e. Site 6 quired. Sand sedi p-to-dat enance. Sand sedi charged of bric requi on requi on requi orders RS o | S. Outlet Site 11. ment wa e. Some Site 13. onsite in uired ur c inspect rement uired re- F receiv nd RSF was bei equired e SCD. Se ent basi photo do | Reinfor Reinfor as exiting stormwas me stabilizating conduction reports the property of the pr | cion need ceed silt ag the silvater may water did foff-site elet protection. Recentrate er received circuit plan. Did SWM protection for the silvation for t | ded for offence (Rence | eulvert. Sept need pinflowent (SWI) a pipe (Country rection for minor country rentrated inspectors in not well arol structure. | ded w M) WDP) t laden sive ound or d flow. ors cture; , 10, 11, |
| *County Reinspection | MDE Re | | | | Cooper, S | Stewart (| Comstoo | k, Pat I | Depkin, | Mary D | ewa, Ke | elly Flin | t, Melis | sa Hew, |

Anne Arundel County Delegation Review

November 1 and 3, 2016

Site Visit Notes

MDE Reviewers: Brian Cooper, Stewart Comstock, Pat Depkin, Mary Dewa, Kelly Flint, Melissa Hew, and

Christina Lyerly

General Notes

- A number of the sites visited by MDE required stabilization. The main issues identified were seeding or reseeding and the maintenance, or installation, of stabilized construction entrances.
- Modification to practices and erosion and sediment control plans were sometimes being made without documentation on the procedures taken to make the changes and in one case without SCD approval.

VISITED SITES

November 1, 2016 - Brian Cooper, Mary Dewa, and Melissa Hew

5. Creekstone Village Section 2B

County Staff: David Ridolfi and Arthur Clanton

Plan Approval Date: June 3, 2015

Disturbed Area: 7.1 ac Type of project: Residential

Stage: Utility installation, building construction, finished grading, final stabilization

Pictures of Creekstone Village Section 2B:



Stabilization required



Re-stabilization required

6. Solomons Choice

County Staff: Roseanne Zimmerman and Arthur Clanton

Plan Approval Date: March 23, 2015

Disturbed Area: 23.4 ac Type of project: Residential

Stage: Clearing and grubbing, building construction

Notes:

• Improved stabilization was needed. The County has made efforts to enforce stabilization and stop work orders have been issued.

Pictures of Solomons Choice:



Stabilized construction entrance (SCE) required maintenance



Re-stabilization required



Install outlet protection for culvert

November 1, 2016 – Pat Depkin and Christina Lyerly

7. Admiral Square 16380 (Phase II)

County Staff: Geoff Bobersky

Plan Approval Date: December 7, 2015

Disturbed Area: 5.1 ac Type of project: Residential Stage: Building construction

Pictures of Admiral Square 16830 (Phase II):



Stockpile required re-stabilization

8. Bay Ridge Christian Church

County Staff: Geoff Bobersky Plan Approval Date: June 16, 2016

Disturbed Area: 4.8 ac Type of project: Commercial

Stage: Rough grading, finished grading

Pictures of Bay Ridge Christian Church:



An SCE was required; the inspection report requested that one be installed

10. Holladay Park Estates Phase 2 and 3

County Staff: Geoff Bobersky

Plan Approval Date: August 18, 2016

Disturbed Area: 18.4 ac Type of project: Residential Stage: Clearing and grubbing

Pictures of Holladay Park Estates Phase 2 and 3:



SCE required maintenance; tracking on roadway



Re-stabilization required

11. Asher's Farms

County Staff: Geoff Bobersky Plan Approval Date: June 9, 2015

Disturbed Area: 15.5 ac Type of project: Residential Stage: Building construction

Pictures of Asher's Farms:



Re-stabilization required



RSF not installed per specifications; sediment was exiting site



RSF with hole



Riprap inflow protection (RIP) required

November 3, 2016 – Brian Cooper, Christina Lyerly, and Stewart Comstock

12. Severna Park High School

County Staff: Roseanne Zimmerman and Arthur Clanton

Plan Approval Date: June 9, 2014

Disturbed Area: 21.6 ac Type of project: Capital Stage: Building construction

Pictures of Severna Park High School:



Area reserved for future stormwater management (SWM) not adequately protected



Protective fabric for SWM practice

13. Stone Mill

County Staff: David Ridolfi and Arthur Clanton Plan Approval Date: February 10, 2016

Disturbed Area: 14.5 ac Type of project: Residential

Stage: Installation of E&S controls, rough grading, utility installation

Notes:

- The previous inspection report noted a need for stabilization. During MDE's review, the inspector indicated that the unstabilized SWM area was reaching the 3-7 day limit. The resulting inspection report restated the need for stabilization but did not use progressive enforcement.
- The County reinspection found that the stabilization needs were addressed.

Pictures of Stone Mill:



A clear water diversion pipe (CWDP) was not installed correctly; clear water was being discharged onsite instead of off-site.





Stabilization required



Sediment laden water was being discharged offsite from an outlet. Fabric needed under outlet protection.

14. Creekside

County Staff: Mark Wells and Arthur Clanton

Plan Approval Date: October 4, 2016

Disturbed Area: 21.8 ac Type of project: Residential

Stage: Clearing and grubbing, rough grading, and building construction

Notes:

- Maintenance items included removing the RSF in the area of concentrated flow and removing sediment that accumulated along RSF.
- The County reinspection showed that maintenance was performed to address stabilization needs and correct the RSF that was receiving concentrated flow.

Pictures of Creekside:



Stockpile required re-stabilization



Stabilization required



RSF receiving concentrated flow

15. Tanyard Cove

County Staff: Mark Wells and Arthur Clanton

Plan Approval Date: October 25, 2016

Disturbed Area: 21.7 ac Type of project: Residential

Stage: Clearing and grubbing, rough grading

Pictures of Tanyard Cove:



SCE was being short-circuited; maintenance required



Dike to basin not constructed per plan and modification not approved by the SCD



Per inspector's instruction, RSF along the roadway was not installed as required by the plan



Modified dike discharges to concrete structure

November 1, 2016 – Pat Depkin and Kelly Flint

16. AAA Car Care Center

County Staff: Geoff Bobersky

Plan Approval Date: October 28, 2016

Disturbed Area: 1.2 ac Type of project: Commercial

Stage: Building construction and finished grading

Pictures of AAA Car Care Center:



Future SWM practices not well protected



RSF required maintenance

18. Cascades at Two Rivers Parcel C-1

County Staff: Geoff Bobersky

Plan Approval Date: January 12, 2016

Disturbed Area: 49.0 ac Type of project: Residential Stage: Utility installation

Pictures of Cascades at Two Rivers Parcel C-1:



Sediment observed leaving site from sediment basin