



**Carroll County Soil Conservation District
Carroll County Bureau of Resource Management
(MD-378 Ponds)**

To be completed, signed, and certified by a responsible professional engineer (design engineer- engineer in charge)
To be dated and signed by the owner

SMALL POND APPROVAL

SMALL POND APPROVAL NUMBER: _____

CARROLL COUNTY FILE NUMBER: _____ **Date:** _____

In accordance with §§5-501 through 5-514, et seq. of the Environment Article, Annotated Code of Maryland (2013 Replacement Volume, as amended), permission is hereby granted to _____, hereinafter referred to collectively as “the Owner”, by the **Carroll County Soil Conservation District (C.C. SCD)** to _____ as shown on sheets through on plans prepared by _____ and approved by the **Carroll County Soil Conservation District (C.C. SCD)** on _____.

The site is located near _____ on _____ stream in Carroll County, at latitude degrees north, longitude - _____ degrees west.

Sincerely,

**Matthew McMahon
Carroll County Soil Conservation District Manager**

This **SMALL POND APPROVAL** is granted subject to the following:

GENERAL CONDITIONS

1. This Approval is valid only for use by the Owner. Permission to transfer the Approval must be obtained from the Department in writing.
2. This Approval is issued based on this structure being classified as a low hazard dam that meets the permit exemption requirements of §§5-503(b) of the Environment Article. Downstream development within the dam break flood zone may cause a change in the hazard classification and may require safety modifications to the structure and submittal of an Emergency Action Plan.

3. This Approval shall become null and void if the construction authorized herein has not begun within two (2) years from the date of this Approval. If the construction authorized herein has not been completed within five (5) years from the date of this Approval. After construction has been completed, the Operation and Maintenance Conditions shall remain in effect.
4. This Approval is subject to all laws and regulations now in effect and may be revoked if it becomes at variance with the laws of the State, or if the Owner fails to comply with the conditions of this Approval.
5. If future repairs, additions, or modifications other than routine maintenance must be made to the structure following completion of construction, a separate Approval must be obtained.
6. The Owner shall notify the Carroll County Bureau of Resource Management at least five (5) days prior to commencement of construction and no later than five (5) days following completion of construction at 410-386-2210.
7. This Approval does not preclude the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.

CONSTRUCTION CONDITIONS

8. The Owner is responsible for implementing all required erosion and sediment controls as approved by the Carroll County Soil Conservation District. The approved erosion and sediment control plan shall be maintained at the construction site for reference during the construction period. The Owner is responsible for implementing the erosion and sediment control plan.
9. The bed and banks of the waterway shall be disturbed as little as possible. Following initial soil disturbance or redisturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading. Should construction be interrupted or delayed for more than seven (7) days, the Owner, as directed by the Department, shall implement temporary measures to prevent soil erosion during that period. All erosion and sediment control practices during construction shall be in accordance with the 2011 Maryland Standards and Specifications for Erosion and Sediment Control or an approved equivalent. The discharge of untreated sediment laden waters is strictly prohibited.

Note: Conditions 10-13 only apply to the Use Class of Watersheds affected by the project. The non-applicable conditions can be removed from the document.

10. Instream construction in Use I waters is prohibited between the dates of March 1st and June 15th, inclusive, of each calendar year.
11. Instream construction in Use II waters is prohibited between the following dates of each calendar year:
 - SAV Closure: 4/15 to 9/15 or 4/15 to 10/15
 - Ruppia Closure: 4/15 to 10/14
 - Fish Closure: 2/15 to 6/15 or 3/1 to 6/15
 - Oysters Closure: 12/15 to 3/31 or 6/1 to 9/30 for spat

Turtles Closure: 2/16 to 9/30

Historic Waterfowl Closure: 11/15 to 3/1

12. Instream construction in Use III waters is prohibited between the dates of October 1st and April 30th, inclusive, of each calendar year.
13. Instream construction in Use IV waters is prohibited between the dates of March 1st and May 31st, inclusive, of each calendar year.
14. Motor driven construction equipment is allowed to be used within the stream channel only for that work that is authorized by this Approval and located within the project right-of-way. Spoil material/debris shall be disposed of outside the floodplain. Any temporary excavation or filling within the stream channel or floodplain shall be restored to the elevation existing prior to construction unless the Carroll County Bureau of Resource Management requires otherwise.
15. Construction activities, operation, and maintenance shall be carried out in strict accordance with Code of Maryland Regulations (COMAR) 26.17.04.05 and this Approval. The location, dimensions and type of all structures, excavation, or filling is to be in strict accordance with the Approved Plans and specifications unless written approval for any changes is granted by the Carroll County Bureau of Resource Management. If any changes to the Approved Plans are found to be necessary, they shall be submitted to the Carroll County Bureau of Resource Management for approval prior to ordering the execution of such change.
16. A person (including Owner, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Approval, Approved Plans or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Environment Article, Annotated Code of Maryland (2013 Replacement Volume, as amended).
17. A copy of the Approved Plans and this Approval shall be kept at all times at the construction site for reference during the construction period.
18. If the Owner, its employees, agents or contractors fail to comply with this Approval or Approved Plans, the Carroll County Bureau of Resource Management may, in its discretion refer the case to the Maryland Department of the Environment (The Department) Dam Safety program to issue an administrative order requiring Owner, its employees, agents and contractors to cease and desist any activities that violate this Approval, or the Department may take any other enforcement action available to it by law, including filing civil or criminal charges.
19. This Approval may be suspended or revoked by the Department for cause, including violation of Approval conditions, obtaining an Approval by misrepresentation, failing to disclose a relevant or material fact, or change in conditions. The Department shall notify the violator in writing and provide an opportunity for a hearing, if the Owner: (a) submits false or inaccurate information in the Approval application or subsequently required submittals; (b) deviates from the Approved Plans, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Approval; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Department to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Department; or (g) does not have vested rights under this Approval and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or

suspension.

20. Overall design of the project has been under the supervision of _____ Maryland PE Registration No. _____, _____, hereinafter referred to as Engineer-In-Charge (EIC). The EIC may not be changed without written approval from the Carroll County Bureau of Resource Management. Construction shall be under the supervision of the EIC, who shall notify the Carroll County Bureau of Resource Management upon the commencement of construction activities and thereafter maintain a record of the results of all field and laboratory material testing, delivery tickets for materials, shop drawings, and several representative digital photographs of the work.

21. The EIC or their representative shall be present and document their findings during all phases of construction including, but not limited to: a) site preparation, b) cutoff trench installation, c) spillway construction, d) embankment construction, and e) upon completion of construction.

22. Within sixty (60) days following substantial completion of construction, the EIC shall submit the documentation described in the above conditions, "As-Built" drawings, and a completed "Project Completion Report" (Form 1) to the Carroll County Bureau of Resource Management. The "As-Built" drawings shall include the contract drawings annotated with all changes in elevation, location, quantity, material specification, and any supplemental drawings issued during the construction period. All submittals shall be electronic. Special attention shall be directed toward documenting the foundation conditions encountered during construction. Where "... or equal" substitutions are made, the As-Built plans shall reflect these installed items.

OPERATION AND MAINTENANCE CONDITIONS

23. The Owner and any heirs, successors, or assigns are responsible for the safety of the dam and the continued operation, surveillance, inspections, and maintenance in accordance with the conditions described herein. The Owner shall promptly notify the Carroll County Bureau of Resource Management and the Department of significant changes in conditions.

24. In accepting the Approval, permission is hereby granted to representatives of the Carroll County Bureau of Resource Management and the Department to enter in or upon the subject premises at any reasonable time for the purpose of conducting inspections pursuant to the provisions of Title 5 of the Environment Article, Annotated Code of Maryland, as amended.

25. The dam shall be operated in accordance with the approved Operation and Maintenance Guidelines appended to this Small Pond Approval.

26. If the dam is not operated or maintained in full compliance with this Approval, the Owner shall repair all or any part of the structure at his sole cost and expense, as directed by the Carroll County Bureau of Resource Management or the Department.

27. Inspections of the facility shall be made by the Owner and/or qualified engineer on a triennial basis. Records of each inspection shall be maintained by the Owner. Triennial inspection reports shall be submitted to the Department within sixty (60) days of each inspection. Extensions may be granted under extenuating circumstances. At a minimum, annual inspection reports shall include a dam inspection checklist (Form 2), photographs of the dam, overall assessment of the condition of the dam and appurtenant works, a review of the downstream danger reach to determine if any new structures exist, etc.

28. Inspections of the facility will also be made during and after storms with significant runoff, by the Owner, to uncover any structural or operational problems. These inspections will include checking of the reservoir pool, spillway and conduit, to assure that they are free of any restricting debris. Records of these inspections shall be maintained by the Owner and submitted to the Department with the triennial inspection report.

29. Maintenance work such as the removal of all new tree growth and mowing of the dam will be scheduled as determined necessary during the Owner's inspections. Mowing of the dam shall be accomplished at least twice each year by the Owner. Any emergency maintenance will also be accomplished by the Owner.

30. The Owner agrees not to plant or allow the growth of any trees or woody vegetation on or around the dam. The growth of this vegetation shall be removed by the Owner.

31. The costs of the inspection, regular maintenance and emergency repairs will be accomplished by the Owner as warranted or at the direction of the Carroll County Bureau of Resource Management or the Department.

SMALL POND APPROVAL ACCEPTANCE

This Approval and its conditions including the Operation and Maintenance Guidelines are accepted.

Owner Signature: _____

Print Name and Title: _____

Date: _____

Form 1: Project Completion Report

PROJECT COMPLETION REPORT
Small Pond Approval No. _____
Date _____

I (We) hereby certify that _____ of _____ in
Carroll County was completed on _____, 20____, in accordance with the plans
and specifications approved by the Carroll County Bureau of Resource Management. Any minor
differences between the As-Built plans and the approved construction plans will not affect the safety of
the dam including hydraulic performance or the minimum freeboard criteria.

Very truly yours,

Engineer-In-Charge

Professional Certification. I hereby certify that these documents were
prepared or approved by me, and that I am a duly licensed professional
engineer under the laws of the State of Maryland, License No. _____,
Expiration Date: _____.

Signature of Owner

Title

Enclosed: As-Built plans, project history

Form 2: Triennial Dam Inspection Checklist

Dam: _____ Weather: _____ Date: _____

Inspectors: _____ Pool Level: _____

MARYLAND DAM INSPECTION CHECKLIST		Y	N	Monitor Repair
1. CREST				
Ground cover in good condition				
Settlements Depressions Cracks				
2. UPSTREAM SLOPE				
Ground cover in good condition				
Riprap in good condition				
Erosion Animal Burrows Trees Shrubs				
Settlements Depressions Bulges Cracks				
3. DOWNSTREAM SLOPE				
Ground cover in good condition				
Erosion Animal Burrows Trees Shrubs				
Settlements Depressions Bulges Cracks				
Seepage _____ gpm				
4. INTERNAL DRAINAGE SYSTEM				
Seepage/drain flow: Left _____ gpm Right _____ gpm Other _____ gpm				
Does seepage contain fines?				
5. ABUTMENT CONTACTS				
Trees Shrubs Erosion				
Seepage _____ gpm				
6. SPILLWAY/RISER STRUCTURE Concrete Metal Pipe				
Spalling Cracking Corrosion Erosion Scaling Exposed Reinforcement				
Joints: Displacement Leakage Loss of joint material				
Trash racks: Operational Broken Bent Rusted Debris Obstructed				
Sluice/Drain gates: Operational Broken Bent Corroded Leaking				
7. SPILLWAY CONDUIT Concrete Metal Pipe				
Debris Cracking Leakage Spalling Exposed reinforcement				
Joints: Displacement Leakage Loss of joint material				
8. STILLING BASIN/PLUNGE POOL Riprap Concrete				
Spalling Cracking Erosion Scaling Exposed Reinforcement Joint Deterioration				
Undercutting Eroding				
Outlet channel condition:				
Tailwater elevation and flow condition:				
9. EMERGENCY SPILLWAY				
Ground cover in good condition				
Erosion Trees Shrubs Obstructions				
OVERALL CONDITION: Excellent Good Fair Poor Unsafe				

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OPERATION AND MAINTENANCE PLAN GUIDELINES

Project Name: _____

Pond Address: _____

Carroll County File No. _____

Accepted by Owner: _____ **Date:** _____

The following are to be considered in the preparation of an Operations and Maintenance plan (O&M). By checking applicable items, these guidelines may be used as a standard O&M plan if deemed appropriate by the design engineer, or may be used in the preparation of a custom O&M plan (complete signature section required). O&M is to be designed to ensure that the facility continues to operate in a safe and effective manner and that problems are prevented or quickly identified and corrected. The O&M is to be in conformance with this document, NRCS MD 378, and COMAR 26.17.04.

In general, operation items are required for the following major areas: Embankment, Reservoir, Spillway, and Outlet Works.

The term “owner” used in these operation and maintenance plan guidelines refers to the property owner(s) where the pond embankment, spillway and appurtenant works are located.

OPERATIONS

I. Support Data

A.) Background Information – The owner shall maintain a complete up to date as-built plan and design specifications for the dam. A copy of the completed Small Pond Sheet (MD-14) should be available.

B.) Record Keeping – Written records of maintenance and observations should be kept. Photographs are valuable for recording observations and changes.

II. Inspections

A.) Inspection Guidelines – Owners are to make a visual inspection at least once a year. Inspections are to be made after extreme rainfall events. Owners are encouraged to have an inspection by a registered professional engineer at least once every three (3) years.

B.) Dam Inspection Checklist – Shall be included as part of the operation and maintenance plan and completed at least triennially. A visual inspection shall be conducted on an annual basis to detect blockages of the principal spillways that would cause the facility to not function as designed. In addition, if there are any visible trees, shrubs, or other woody growth on the embankment at time of annual inspection, it shall be removed prior to the next inspection.

III. Emergency Procedures

A.) Surveillance – Inspect daily or more often under adverse conditions of heavy or extended rainfall, flash flood warnings or snow melt. Inspect for overtopping failures, piping or seepage failures, and structural failures. If any of the following conditions are noted, emergency procedures are warranted; muddy water is flowing from the downstream slope or toe; cracks or depressions are forming on the embankment; or flood flow over the top of the embankment is imminent.

B.) Mitigation – Provide for lowering the reservoir or sandbagging before overtopping. Action to be taken for piping includes lowering the pool and attempting to plug the upstream end with suitable material.

- C.) Notification – Time permitting, consult a professional engineer experienced in dam design and operation to determine the extent of the damage and necessary repairs. Before major repairs, contact the Maryland Dam Safety Permits Division for approval. In the case of anticipated dam failure, the local fire and rescue or police department should be notified regarding the potential emergency. The ultimate responsibility for implementation of a warning plan, that includes the danger reach, rests with dam owner.

MAINTENANCE (Replace sections IV, V, and VI with the approved specific maintenance schedule on the plan sheets)

IV. Embankment

- A.) Vegetation – Proper vegetation is required on earth dams. The proper selection of grasses, seeding rates, planting dates, and vegetation maintenance is available in the current MD Standards and Specifications for Soil Erosion and Sediment Control.
- B.) Tree and Brush – Trees and shrubs will not be allowed on the embankment. Trees that have been allowed to grow on the dam shall be removed completely, including all roots in accordance with Dam Safety Policy Memorandum No. 1.
- C.) Mowing and Brush Removal – Mowing is necessary to control the establishment of woody growth and to maintain the vegetative cover. The embankment, a fifteen (15) foot wide buffer strip adjacent to the toe, upstream and downstream of the embankment, and the area within 25 feet of the control structures need to be mowed.
- D.) Erosion and Slope Protection – The rate of erosion is directly related to the lack of vegetation. Prompt repair of eroding areas is required. Vegetation should be inspected in the early spring and late summer, and any bare or eroded areas repaired and reseeded. Problem erosion areas of pedestrian traffic or abundant contacts should be controlled with filter cloth and rock rip rap. The upstream face of a dam can be protected from wave erosion by the same method.
- E.) Seepage – Must be controlled in quantity and velocity to minimize damage to the dam. Regular monitoring to detect wet areas, “spring” flow, “piping”, and “boils” on the downstream embankment should be done. Excessive seepage pressure can threaten the downstream slope stability. Seepage flow which is muddied by soil is evidence of “piping” and “boils”. When this occurs, complete failure may happen within hours and professional advice must be obtained immediately. Typical methods used to control the quantity of seepage are installation of an upstream blanket, or the installation of drainage trenches or drains. Non-emergency repairs must be approved by the Dam Safety Permits Division before installation.
- F.) Stability – Large cracks, slides, sloughing, and excessive settlement are signs of embankment distress and indicated that remedial work is required. Soil added to restore an embankment must be properly “keyed” into the base material. Repair of these conditions is not considered routine maintenance and must be approved by the Dam Safety Permits Division.
- G.) Rodent Guard – Control of rodents such as beavers, groundhogs, and muskrats is required as they can damage structural integrity and performance of the embankment and spillway. Groundhog and muskrat burrows serve as pathways for seepage. Beavers may plug the spillway and raise the pool level. Rodent removal and elimination of burrows is required when encountered.

- H.) Crest of Dam – Should be graded to direct all surface drainage into the impoundment. When access roads cross the dam any ruts that develop should be repaired as soon as possible.

V. Spillway and Outlet Works

- A.) Conduits – All conduits should be inspected thoroughly once a year. Inspect for improper alignment (sagging), elongation, and displacement at joint, cracks, leaks, surface wear, loss of protective coatings, corrosion and blockage.
- B.) Trash Racks – The trash rack unit should be checked periodically and especially after storm events. Accumulated debris should be removed, and maintenance performed if necessary. Under no circumstances should the trash rack be removed for an extended period. Annual maintenance for corrosion protection should be provided.
- C.) Concrete – Surfaces should be inspected for cracking, spalling, displacement or movement, and deterioration by weathering, chemical reactions or leaching. Extensive cracking, slab or wall movement, large areas of exposed reinforced steel and severe undermining require professional advice and Dam Safety Permits Division approval before repairs can be made. Minor repairs of patching, grouting, and coatings can be performed during routine maintenance.
- D.) Vegetated Earth Spillways – An emergency spillway is designed to pass infrequent large flood flows around the dam to prevent overtopping. The vegetative cover should be maintained the same as the embankment to provide a vigorous grass cover. Prompt repair of erosion damage and removal of flow obstructions are required.
- E.) Outlet – Erosion at the spillway outlet is common maintenance problem. Severe undermining, displacement of pipes, and dam failure can occur. Often the outlet is adequate for normal flow, but not for extreme storm flows. Periodically, and especially after storm events, the stilling basin, plunge pool, or rip rap energy dissipator should be inspected. Provide prompt repair of damages.
- F.) Drains/Mechanical Equipment – Drains should always be operable to provide draw down in the case of an emergency for necessary repairs. The gate or valve controlling the drain should be operated fully at least once a year or as recommended by the manufacturer. It should be inspected, and all appropriate parts lubricated and repaired before operations. Annual maintenance of metal operating mechanisms should be performed by keeping parts greased or painted to prevent corrosion. All equipment controls should be checked for proper security to prevent vandalism.

VI. Reservoir

- A.) Pool Level – When it is necessary to draw down the pool level it should be done gradually over a period of time to prevent slope failures. An annual inspection of the pond/lake perimeter should be done. Potentially damaging fallen trees, debris, and sediments should be removed. Periodic removal of floating debris to prevent clogging of the spillways should be done. During extended periods of severe freezing weather inspection for ice damage or ice formation at the spillways and outlets should be performed.

VII. Additional Requirements

Modified from MDE Small Pond Approval
Martin B. Covington III P.E.
Carroll County SWM Program Engineer
April 2023

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