



Department of Environmental Conservation



APPLICATION FOR PERMIT
FOR THE CONSTRUCTION, RECONSTRUCTION OR REPAIR OF A DAM OR OTHER IMPOUNDMENT STRUCTURE
 Supplement D-1

Please read all instructions on the following page. Please TYPE or PRINT clearly in ink. Attach additional information as needed.

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| FOR DEPARTMENT USE ONLY | |
| APPLICATION NO. | |
| WATERSHED | |

PROJECT DESCRIPTION

| | | | | | | | | | | | | | |
|---|----------------------|--|---|--|--|---|----------------------|--|----------------------|--|---------------------|--|--|
| 1. LOCATION ON U.S. GEOLOGICAL SURVEY MAP COUNTY _____ Latitude _____ Longitude _____ | | 2. PROPOSED USE FOR IMPOUNDED WATER Storm Water Management | | 3. STATE THE HEIGHT ABOVE SPILLCREST OF THE LOWEST PART OF THE IMMEDIATE UPSTREAM ADJOINING PROPERTY OR PROPERTIES _____ Feet | | | | | | | | | |
| 4. IS THIS PROPOSED POND OR LAKE PART OF A PUBLIC WATER SUPPLY If not, where is nearest downstream public water supply intake? Yes No | | | 5. STATE DAM ID# _____ | 6. DRAINAGE AREA (ac or sq-mi) _____ | 7. HEIGHT OF DAM ABOVE STREAM BED? _____ Feet | | | | | | | | |
| 8. THE DRAINAGE AREA IS COMPOSED OF: (Total = 100%) <table border="0" style="width:100%"> <tr> <td align="center">_____ % Forest</td> <td align="center">_____ % Cropland</td> <td align="center">_____ % Pasture</td> <td align="center">_____ % Swamp</td> <td align="center">_____ % Suburban Lands</td> <td align="center">_____ % Urban Lands</td> <td align="center">_____ % Other</td> </tr> </table> | | | | | | _____ % Forest | _____ % Cropland | _____ % Pasture | _____ % Swamp | _____ % Suburban Lands | _____ % Urban Lands | _____ % Other | |
| _____ % Forest | _____ % Cropland | _____ % Pasture | _____ % Swamp | _____ % Suburban Lands | _____ % Urban Lands | _____ % Other | | | | | | | |
| 9. TYPE OF SPILLWAY Service Spillway - Auxiliary Spillway Combination Drop Inlet/Riser ONLY Single Spillway Other | | | 10. DESIGNER'S ESTIMATE OF CLASS OF HAZARD (As described in 6NYCRR Part 673.5) Class A - Low Class B - Intermediate Class C - High | | | | | | | | | | |
| 11a. SPILLWAY DESIGN FLOOD (Refer to Guidelines 5.3) Frequency _____ Flood Peak _____ cfs Runoff Volume _____ in. | | | 11b. SERVICE SPILLWAY DESIGN FLOOD (Refer to Guidelines 5.3) Frequency _____ Flood Peak _____ cfs Runoff Volume _____ in. | | | | | | | | | | |
| 12. THE SINGLE SPILLWAY OR AUXILIARY SPILLWAY IS COMPOSED OF: Vegetated Earth Concrete Timber Rock-filled Crib Masonry Other Hydroturf lined auxiliary spillway | | | | | | | | | | | | | |
| 13. MAXIMUM VELOCITY WITHIN THE SINGLE OR AUXILIARY SPILLWAY _____ fps | | 14. SINGLE OR AUXILIARY SPILLWAY DISCHARGE AT DESIGN HIGH WATER Not activated during SDF _____ cfs | 15. TYPE OF ENERGY DISSIPATER PROVIDED ON SINGLE SPILLWAY Hydraulic Jump Basin Drop Structure Other | | | | | | | | | | |
| 16a. POND OR LAKE WILL BE DRAINED BY MEANS OF The lowest orifice on the service spillway | | | 15b. WATER WILL BE SUPPLIED TO RIPARIAN OWNERS DOWNSTREAM BY MEANS OF | | | | | | | | | | |
| 17. AREA CAPACITY DATA Answer 1, 2 and 3, OR 1, 2, 4, 5 | | ELEVATION, Referred to Assumed Benchmark | SURFACE AREA | VOLUME STORED | 18a. TYPE OF ENERGY DISSIPATER AT OUTLET OF CONDUIT: Impact Basin Hydraulic Jump Basin Plunge Pool Other | | | | | | | | |
| 1. Top of Dam | | Feet | Acres | Acre-Feet | 18b. IS RISER PROVIDED WITH AN ANTI-VORTEX DEVICE? Yes No | | | | | | | | |
| 2. Design High Water | | Feet | Acres | Acre-Feet | | | | | | | | | |
| 3. Single Spillway Crest | | Feet | Acres | Acre-Feet | | | | | | | | | |
| 4. Auxiliary Spillway Crest | | Feet | Acres | Acre-Feet | | | | | | | | | |
| 5. Service Spillway Crest | | Feet | Acres | Acre-Feet | | | | | | | | | |
| 19. DRAWDOWN TIMES: Answer 1 and 2, OR 1, 3, and 4 <table border="0" style="width:100%"> <tr> <td style="width:50%">1. Has provision been made to evacuate 90% of the storage below the lowest spillway crest within fourteen days?</td> <td style="width:10%; text-align:center"><u>Yes</u> <u>No</u></td> <td style="width:50%">3. Can the Service Spillway evacuate 75% of the storage between the Auxiliary Spillway and the Service Spillway crest within seven days?</td> <td style="width:10%; text-align:center"><u>Yes</u> <u>No</u></td> </tr> <tr> <td>2. Can the single spillway evacuate 75% of the storage between the maximum design high water and the spillway crest within 48 hours?</td> <td></td> <td>4. Can the Service Spillway and the Auxiliary Spillway in combination evacuate the storage between the design high water and the Auxiliary Spillway crest within 12 hours?</td> <td></td> </tr> </table> | | | | | | 1. Has provision been made to evacuate 90% of the storage below the lowest spillway crest within fourteen days? | <u>Yes</u> <u>No</u> | 3. Can the Service Spillway evacuate 75% of the storage between the Auxiliary Spillway and the Service Spillway crest within seven days? | <u>Yes</u> <u>No</u> | 2. Can the single spillway evacuate 75% of the storage between the maximum design high water and the spillway crest within 48 hours? | | 4. Can the Service Spillway and the Auxiliary Spillway in combination evacuate the storage between the design high water and the Auxiliary Spillway crest within 12 hours? | |
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| 20a. STABILITY FOR EARTHEN DAMS (Refer to SECTION 9.0) 1. Geometry Upstream Slope Downstream Slope Crest Width | | | 2. Slope stability assessed? Yes No | 20b. GRAVITY DAMS (Refer to Section 10.0) Were all loading cases assessed? Yes No | | | | | | | | | |
| | | | 21. SPECIFICATIONS Have specifications for materials and placement been provided? Yes No | | | | | | | | | | |
| 22a. SOIL DATA - State the character of the bed and banks in respect to natural types of soil materials, hardness, perviousness, water bearing, effect of exposure to air and water, uniformity, etc. If an earth dam, describe the material to be used in the embankment. What is the source of embankment fill material? | | | | | | | | | | | | | |
| 22b. Are there porous seams or fissures beneath the foundation of the proposed dam? Yes No | | | 22c. Method used to obtain the above soil data Soil Borings Test Pits | | | | | | | | | | |
| 23. DESIGN ENGINEER Name of agency or individual | | P.E. License No. of Individual | Date | Title Dams Engineering Program Manager | Telephone No. | | | | | | | | |
| Address | | | Email Address | | | | | | | | | | |

**INSTRUCTIONS FOR INFORMATION TO ACCOMPANY SUPPLEMENT D-1
(DAM/IMPOUNDMENT APPLICATION)**

1. Five (5) copies of all documents must be filed, including detailed construction plans and specifications.
2. The plans and specifications submitted with the application must include the following information:
NOTE: The following is required to satisfy the requirement in 6NYCRR Part 608, section 608.6(a)(3)(iii) for construction plans and project specifications that are sufficiently detailed for department evaluation of the safety aspects of the dam.
 - a. A plan showing the proposed dam and dam appurtenances, horizontal and vertical controls, the normal water level in the lake or pond, the limits of the owner's property, the location of drill holes, test pits or other foundation exploration, the location of borrow areas, and topographic contours at the dam and around the anticipated reservoir area, including 2-foot contours to 6 feet above high water level.
 - b. A profile along the dam axis from abutment to abutment and a cross section diagram of the dam at its maximum height, showing original, existing, and proposed conditions.
 - c. A profile along the center line and a cross section diagram, or diagrams, of the spillways, including stilling basins, outlet work, and other details of the design of the structures.
 - d. Specifications for the materials and for the methods of construction.
 - e. A description of construction inspection activities, to be performed by the applicant's engineer, to ensure that work is performed in conformance with the approved design.
 - f. A record of subsurface investigation and soils information used by the design engineer or conservationist for foundation and borrow assessment.
 - g. Any additional drawings needed to clearly show all details of the proposed project.
 - h. Samples of foundation, embankment and construction materials need not be furnished unless specifically requested by the Department.
3. The design, preparation of plans, estimates and specifications, and the supervision of the erection, reconstruction and repair of all the structures, herein applied for, shall be done by a licensed professional engineer, or, in the case of farm ponds, by an engineer or conservationist employed by a governmental agency cooperating with a soil conservation district.
4. A technical guidance document "Guidelines for Design of Dams" is available upon request from the DEC Regional Permit Administrator or through the DEC Dam Safety website at <https://www.dec.ny.gov/lands/4991.html>. This document outlines hazard classification, hydrologic criteria, structural stability, and other criteria which should be utilized by the design engineer.
5. **NO WORK** (including site preparation) for construction of new structures or reconstruction or repairs of existing structures **SHALL BE STARTED UNTIL A PERMIT** has been issued by the New York State Department of Environmental Conservation.