

RULE NO.: R161-23.04

ADOPTION DATE: March 23, 2023

NOTICE OF RULE ADOPTION

By: Jorge L. Morales, P.E., CFM, Director
Watershed Protection Department

The Director of the Watershed Protection Department has adopted the following rule. Notice of the proposed rule was posted on January 12, 2023. Public comment on the proposed rule was solicited in the January 12, 2023 notice. This notice is issued under Chapter 1-2 of the City Code. The adoption of a rule may be appealed to the City Manager in accordance with Section 1-2-10 of the City Code as explained below.

A copy of the complete text of the adopted rule is attached to this notice.

EFFECTIVE DATE OF ADOPTED RULE

A rule adopted by this notice is effective on March 23, 2023.

TEXT OF ADOPTED RULE

R161-23.04: Modifies the Environmental Criteria Manual as follows:

Environmental Criteria Manual – 1.6.2 General Design Guidelines

- ECM 1.6.2.C.1.b.1 - Liner characteristics: Removes reference to standard detail 661-4 and replaces with reference to two new updated standard details 661-4A and 661-4B.

COMMENTS AND CHANGES FROM PROPOSED RULE

No comments were received, and no changes were made.

AUTHORITY FOR ADOPTION OF RULE

The authority and procedure for the adoption of a rule to assist in the implementation, administration, or enforcement of a provision of the City Code is established in Chapter 1-2 of the City Code. The authority to regulate water quality is established in Chapter 25-8 of the City Code.

APPEAL OF ADOPTED RULE TO CITY MANAGER

A person may appeal the adoption of a rule to the City Manager. **AN APPEAL MUST BE FILED WITH THE CITY CLERK NOT LATER THAN THE 30TH DAY AFTER THE DATE THIS NOTICE OF RULE ADOPTION IS POSTED. THE POSTING DATE IS NOTED ON**

THE FIRST PAGE OF THIS NOTICE. If the 30th day is a Saturday, Sunday, or official city holiday, an appeal may be filed on the next day which is not a Saturday, Sunday, or official city holiday.

An adopted rule may be appealed by filing a written statement with the City Clerk. A person who appeals a rule must (1) provide the person's name, mailing address, and telephone number; (2) identify the rule being appealed; and (3) include a statement of specific reasons why the rule should be modified or withdrawn.

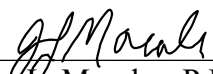
Notice that an appeal was filed and will be posted by the city clerk. A copy of the appeal will be provided to the City Council. An adopted rule will not be enforced pending the City Manager's decision. The City Manager may affirm, modify, or withdraw an adopted rule. If the City Manager does not act on an appeal on or before the 60th day after the date the notice of rule adoption is posted, the rule is withdrawn. Notice of the City Manager's decision on an appeal will be posted by the city clerk and provided to the City Council.

On or before the 16th day after the city clerk posts notice of the City Manager's decision, the City Manager may reconsider the decision on an appeal. Not later than the 31st day after giving written notice of an intent to reconsider, the City manager shall make a decision.

CERTIFICATION BY CITY ATTORNEY


By signing this Notice of Rule Adoption (R161-23.04), the City Attorney certifies that the City Attorney has reviewed the rule and finds that adoption of the rule is a valid exercise of the Director's administrative authority.

REVIEWED AND APPROVED



Jorge L. Morales, P.E., CFM, Director
Watershed Protection Department

Date: 03/02/2023



Anne L. Morgan
City Attorney

Date: 3/13/2023

This Notice of Rule Adoption was posted on the City website by the City Clerk. The date and time stamp are on the front of the notice.

ECM 1.6.2 – General Design Guidelines

- C. Basin Liners. All wet ponds require an impermeable liner. Impermeable liners are also required for water quality basins located over the Edwards Aquifer Recharge Zone. If a liner is required and there are multiple controls in series, liners are only required for the first control in series. Impermeable liners may be clay, concrete, geosynthetic clay liner (GCL), geomembrane, or other approved liner, depending on the application. For water quality SCMs in the Edwards Aquifer Recharge Zone, clay liners are not acceptable. The analysis and design should entail a comprehensive review of the site-specific conditions to determine the most appropriate type of liner for the site, and should include a stability assessment of the pond side slope. The criteria in item 1. is applicable to any size basin or pond, while the criteria in item 2. may be applied to sedimentation basins, filtration basins and retention ponds that are less than 1,000 square feet in area. When required for sedimentation/filtration basins, the liner must underlie both the sedimentation basin and filtration basin and any gabion wall areas.

1. The following criteria applies to all SCMs where a basin liner is required:

There are a number of important engineering design and construction considerations for wet pond liners and other basin liners. A geotechnical engineer must be involved in all aspects of the liner design. All liner studies, plans, details, specifications and other related documents must be sealed by a geotechnical engineer. Careful attention must be paid to each of the following areas:

- a. Liner subgrade - A stable subgrade is very important in the construction of the pond or basin. Careful evaluation must be conducted to ensure the liner will be placed on a suitable base. If any voids are encountered, proper geotechnical analysis must be performed to ensure that the integrity of the liner can be maintained. Proof rolling must be conducted as necessary to determine the suitability of the subgrade, and any suspect areas must be reworked and recompacted, or the weak soils removed and replaced with suitable fill material. The subgrade for geomembrane or GCL must be smooth and contain no particles greater than 0.375 inch diameter.
 - b. Liner characteristics - At least three types of liners can be considered, including a clay liner of appropriate thickness and permeability, a geomembrane liner, and GCL. Alternative liner designs may also be considered.
- (1) If *geomembrane* is used, it must have a minimum thickness of thirty (30) mils and be ultraviolet resistant. Use of a geomembrane also requires that a suitable geotextile fabric be placed on the top and bottom of the membrane for puncture protection if any particles greater than 0.375 inch are present in the cover soil or subgrade surface, respectively. The geotextile material must have a minimum unit weight of 8 oz./sq. yd., a minimum puncture strength of 125 lbs., a minimum Mullen Burst Strength of 400 psi, and a minimum tensile strength of 200 lbs. The designer must demonstrate the liner's impermeability, and the method of liner protection to be used during maintenance and sediment removal operations. Equivalent methods for protection of the geomembrane liner will be considered by the Watershed Protection Department on a case by case basis. Equivalency

will be judged on the basis of ability to protect the geomembrane from puncture, tearing and abrasion. Individuals installing geomembrane liners must be trained and/or certified by the liner manufacturer. Standard Details ~~661-4~~661-4A, 661-4B, and 661-5 illustrate acceptable geomembrane liner end details for use on concrete walls, stacked stone walls, and earthen embankments.