



United States Department of the Interior



NATIONAL PARK SERVICE
Kaloko-Honokōhau National Historical Park
73-4786 Kanalani Street, # 14
Kailua-Kona, Hawai'i 96740

IN REPLY REFER TO:

L.A. 1(2018-4)

May 18, 2018

Ms. Elizabeth Char
Development Officer
The Michaels Organization
737 Bishop Street Suite 1520
Honolulu, Hawai'i 96813

Subject: National Park Service Comments Regarding the Proposal to Install Flexstorm Filters in the Existing Drain Inlets to Meet Condition 13 of the LUC 2010 Decision and Order (Docket A10-788)

Dear Ms. Char,

This letter is in response to your April 10, 2018, email seeking the National Park Service's (NPS) input on your proposal to install Flexstorm filters in the existing drain inlets in the paved parking lots at Kamakana Affordable Rental Housing (Kamakana) in order to satisfy Condition 13 of the State Land Use Commission's 2010 Decision and Order (Docket A10-788).

The NPS is unable to approve or disapprove the proposed inlet filter installations at Kamakana. Such authority lies with the Land Use Commission (LUC) as they are the only state agency with jurisdiction over the applicable Finding of Fact Conclusion of Law and Decision and Order (FFCLDO). Therefore, only the LUC can determine whether or not Kamakana is in compliance with the FFCLDO.

In comparison with the Best Management Practices (BMPs), our NPS technical experts have concluded that these filters would not be as effective at removing stormwater pollutants as the BMPs described in Condition 13 of the Decision and Order. Our experts had the following concerns and questions:

1. What size are these inlets?
2. How are these filters secured within the drains?
3. What kinds of flows are expected to move through them?

4. What amount of bypass could be expected to occur?
5. Because the water will be moving directly into these inlets from the parking lots, the filters would be the first and last line of defense to keep pollutants from moving into these inlets.
6. Even with grates covering the drain inlets (we are assuming there will be grates, please confirm), there would likely be enough plant/organic matter that would block at least part of the drain filter greatly reducing the efficacy of the filters.
7. Because the run-off will be primarily from the parking lots, and potentially from the streets, the stormwater is expected to contain volatile compounds. During intense rain events, our concern is that part of the flow would bypass the Flexstorm filters altogether.
8. Vegetated swales are known and documented to remove heavy metals from stormwater. The State DOT is installing Bio Clean Grate Inlet Filters, which are known and documented to remove heavy metals, (see the attached pamphlet) along Queen Ka'ahumanu Highway in the area bordering the Park. We encourage you and your consultants to show the LUC that what you have proposed is as effective at removing heavy metals as the BMPs stated in the Decision and Order or as effective as other commercially available products at removing stormwater pollutants from paved areas.
9. We are aware that Flexstorm filters and similar devices are intended to be used as "temporary" stormwater protection during road construction. As a proposed long-term installation, what will be the Standard Operating Procedure (SOP) to determine when the filters have become saturated with pollutants and need to be changed out or replaced?
10. If the LUC authorizes the use of the Flexstorm filters, we would encourage you and your company to determine how often the filters need to be changed and then establish a regular maintenance schedule. We request that a written commitment be made to the NPS and the LUC to (1) change the Flexstorm filters on the maintenance schedule established and (2) to document and report to the NPS and LUC when they are changed.

From both an ecological and practical perspective, vegetated swales are a better choice than storm drain filters. These swales require less maintenance to maintain efficacy, and if they are designed as part of the landscape from project inception, they are cheaper over the long-term than stormwater filters that need to be replaced on a continuing basis.

Since this is the first phase of the project, we hope that additional phases will integrate vegetated swales instead of the storm drain filters to manage stormwater pollutants.

If you have any questions regarding this letter, please contact Dr. Jeff Zimpfer of my staff (808-329-6881 x1500 or jeff_zimpfer@nps.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'W. Thompson', with a long horizontal flourish extending to the right.

William Thompson
Superintendent

cc: Arnold Wong, Chair, State of Hawai'i Land Use Commission
Craig K. Hirai, Executive Director, HHFDC

