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Ontario

**Building Materials Evaluation
Commission**

**Commission d'évaluation des
matériaux de construction**

BMEC AUTHORIZATION: 17-01-380

Clearpod™ Enhanced Septic System Treatment

Date of Authorization: February 23, 2017

Date of Expiry¹: February 23, 2022

1. Applicant

Island Water Technologies
23 Brook Street
Montague, Prince Edward Island
Canada C0A 1R0

Tel: 902 361-2085
Web: www.islandwatertech.com

2. Manufacturing Facility

23 Brook Street
Montague, Prince Edward Island
Canada C0A 1R0

3. Authorization

The Clearpod™ Enhanced Septic System Treatment (the “Clearpod™”) is a fixed film micro aeration device equipped with a 24 W air-pump that may be used in Class 4 sewage systems, as they are described in Part 8 “Sewage Systems” of the Ontario 2012 Building Code.

The Clearpod™ is a drop-in product that can be incorporated into the first chamber of a septic tank of a new or existing on-site sewage system.

¹ This Authorization expires on the date shown. It is the responsibility of Authorization holders to make a complete application considering the time for review and complexity of the new application.

Additional descriptive information is provided in documents supplied by the Applicant listed in Appendix A.

Reports and assessment provided by the Applicant demonstrate that if the Clearpod™ is manufactured, designed, constructed, installed and maintained in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this authorization the use of the Clearpod™ is approved as an optional additional component to Section 8.6. "Class 4 Sewage Systems" of Division B of the Building Code.

All other requirements pertaining to the manufacturing, design, construction, installation and maintenance are subject to the requirements of the Building Code, and subject to the following terms and conditions contained in 4 and 5 below:

4. Specific Terms and Conditions

1. This authorization is valid only for the Clearpod™ model number 00105-NA as designed and manufactured by Island Water Technologies;
2. The Clearpod™ is not authorized as a treatment unit, where a treatment unit is permitted or required for use in conjunction with a Class 4 Sewage System;
3. The Clearpod™ shall only be used in conjunction with a:
 - a. Class 4 Sewage System, as it is defined by the Building Code, or
 - b. legally conforming system installed under the predecessor legislation;
4. The installation of the Clearpod™ shall not be used to authorize the reduction of any regulatory requirement set out in Section 8.7. "Leaching Beds" of Division B, of the Building Code;
5. The Clearpod™ shall be installed in the first compartment of a septic tank having a minimum working capacity of 5700 L, or in the first tank of a multiple tank system where the total minimum working capacity of the tanks is not less than 5700 L;
6. The Clearpod™ shall be installed in a septic tank equipped with an effluent filter conforming to Article 8.6.2.1. of Division B of the Building Code;
7. The Clearpod™ shall be installed by a person who is:
 - a. authorized by Island Water Technologies, or
 - b. authorized by an agent of Island Water Technologies, and
 - c. an on-site sewage system installer registered with Ministry of Municipal Affairs;
8. The Clearpod™ shall be installed in accordance with the requirements of the "Installation Manual: Clearpod™ Enhanced Septic System Treatment", version V16-3.0; and

9. The following documents shall be submitted to the property owner and the Principal Authority at the time of permit application
 - a. "Operation Maintenance Manual: Clearpod™ Enhanced Septic System Treatment", version V16-3.0, and
 - b. "Installation Manual: Clearpod™ Enhanced Septic System Treatment", version V16-3.0.

5. General Conditions

1. The use of the Clearpod™ as described in Section 3. and the Specific Terms and Conditions set out in Section 4 must comply with:
 - (a) the *Building Code Act, 1992*, (the "Act") as amended or re-enacted,
 - (b) except as specifically authorized herein, the Building Code as amended or remade, and
 - (c) all other applicable legislation.
2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.
3. The Applicant specified in Section 1. shall promptly notify the BMEC of:
 - (a) the failure of the Applicant to comply with any of the Specific Terms and Conditions set out in Section 4,
 - (b) the failure of the material, system or building design that is the subject matter of this Authorization to
 - (i) comply with any of the Specific Terms and Conditions set out in Section 4, or
 - (ii) provide a satisfactory level of performance in situ, or
 - (c) the occurrence of any of the events described in General Conditions 5.4.(a), (b), (e) or (f).
4. The BMEC may amend or revoke this Authorization at any time on its own initiative, or at the request of the Applicant specified in Section 1. Without restricting the foregoing, the BMEC may amend or revoke this Authorization where it determines that:
 - (a) any change has been made to:
 - (i) the name of the Applicant specified in Section 1,
 - (ii) the address or other contact name information of the Applicant specified in Section 1,
 - (iii) the ownership of the Applicant specified in Section 2,
 - (iv) the manufacturing facilities specified in Section 2,
 - (v) the material, system, or building design that is the subject matter of this Authorization, or
 - (vi) a test method relevant to this Authorization,
 - (b) the Applicant has failed to comply with any of the terms and conditions set out in this Authorization,
 - (c) in the opinion of the BMEC, the use of the material, system or building design authorized herein provides an unsatisfactory level of performance in situ,

- (d) in the opinion of the BMEC, amendment or revocation of the Authorization is appropriate on the basis of potential danger to public health and safety,
- (e) the *Act* or Building Code has been amended, re-enacted or remade in a manner relevant to this Authorization,
- (f) this Authorization was issued on mistaken, false or incorrect information, or
- (g) a revision of an editorial nature is appropriate.

Dated at Toronto this 23rd day of February 2017

BUILDING MATERIALS EVALUATION COMMISSION

Leo Grellette
Chair, Building Materials Evaluation Commission

ENCLOSURES: APPENDIX A - SUPPORTING INFORMATION

Appendix A – Supporting Information

The following is a list of the documents that were submitted and reviewed, but were not limited to:

1. Letter Report, R.J. Burnside & Associates Limited, “Application for Clearpod™ Enhanced Septic System Treatment – project No.: 900039102.0000”, dated August 25, 2016;
2. Manufacturer’s Documentation, Island Water Technologies, “ClearPod™ Enhanced Septic System Treatment – Product Description”, dated July 27, 2016;
3. Manufacturer’s Literature, ClearPod™ “The clear choice for your septic system?”, undated, 1 page;
4. Manufacturer’s Literature, ClearPod™ “How does the ClearPod™ work?”, 1 page, undated;
5. Drawing, ClearPod™ “Overall Unit Dimensions Document-R01”, 1 page, dated December 2015;
6. Drawing, ClearPod™ “Bio-Column-R01”, 1 page, dated December 2015;
7. Drawing, ClearPod™ “Pump Housing Assembly-R01”, 1 page, dated December 2015;
8. Test Results, MASSTC, “ClearPod™ Enhanced Septic System Treatment”, dated May 2015;
9. Test Results, MASSTC, “ClearPod™ Enhanced Septic System Treatment – Increased Flow Testing 1700 L/d”, undated;
10. Manual, ClearPod™ “Installation Manual”, version V16-3.0;
11. Sample contract, ESSE, “Maintenance Contract – Terms and Conditions”, 3 pages, undated;
12. Manual, ClearPod™, “Operation and Maintenance”. version V16-3.0;
13. Approval Letter, Georgia Department of Public Health, dated April 26, 2016;
14. Approval Letter, Nova Scotia Ministry of the Environment, “ClearPod™ Product Approval for Nova Scotia”, July 17, 2015;
15. Approval Letter, South Carolina, “South Carolina Approval Letter”, 1 page, undated;
16. Approval Letter, Prince Edward Island – Communities, Land and Environment, “ClearPod™ Waterwater technology”, dated June 29, 2016;
17. Approval Letter, Florida Health, 2 pages, dated August 9, 2016;
18. Approval Letter, Alabama, “Alabama Approval Letter”, 1 page, undated;
19. Test Results, Ontario Rural Wastewater Centre, “Final Report: Evaluation of the Clearpod™ Technology”, dated August 12, 2014;
20. Manufacturer’s Literature, “ClearPod™ Case Study: Single Chamber Septic Upgrade”, one page, undated;
21. Manufacturer’s Literature, “ClearPod™ Case Study: Advanced Pump Chamber”, one page, undated;
22. Manufacturer’s Literature, “ClearPod™ Case Study: Yacht club and marina restaurant water system upgrade”, two pages, undated;
23. Manufacturer’s Literature, IslandWater Technologies “Sentry-AD™”, one page, undated;

24. Letter Report, R.J. Burnside & Associates Limited, "ClearPod™ Enhanced Septic System Treatment – 2nd Submission for Sub Committee Consideration, Project No.: 300039102.0000", dated October 12, 2016;
25. Presentation, IslandWater Technologies
26. Presentation, R.J. Burnside & Associates Limited,
27. Manufacturer's Documentation, Island Water Technologies, "Building Materials Evaluation Committee Response to Reviewers - Clearpod", dated October 11, 2016;
28. Letter Report, R.J. Burnside & Associates Limited, "Application for ClearPod™ Enhanced Septic System Treatment – project No.: 300039102.0000, with Appendix A", dated January 5, 2017;
29. Videos, R.J. Burnside & Associates Limited, "Clearpod™ Enhanced Septic System Treatment - 300039102.0000,1.5.2017", one DVD; and
30. Manufacturer's Literature, IslandWater Technologies "The REGEN™", one page, undated.