



John Elias Baldacci
Governor

Maine Department of Health and Human Services

Maine Center for Disease Control and Prevention
286 Water Street, 3rd Floor
11 State House Station
Augusta, ME 04333-0011

Brenda M. Harvey,
Commissioner

Dora Anne Mills, MD, MPH
Public Health Director
Maine CDC Director

October 1, 2007

Desoto Concrete Products, Inc.
Attn.: Chip Dayton, Sales Director
P. O. Box 336
Olive Branch, MS 38654

Subject: Product Registration, H-TWO-O Series 35T Wastewater Treatment System

Dear Mr. Dayton:

The Division of Environmental Health has completed a review of a registration application for your company's product. This information was submitted pursuant to Section 1802 of the Maine State Plumbing Code, Subsurface Wastewater Disposal Rules (Rules), for code registration, for use in Maine.

Product Description

The H-TWO-O Series 35T Wastewater Treatment System consists of a pre-cast concrete tank with a pre-treatment chamber, an aeration chamber, and a clarification chamber. The system is available in capacities of 500 gallons per day (gpd), 750 gpd, and 1,000 gpd. Average BOD₅ and TSS levels in the treated effluent are 13 mg/L and 19 mg/L, respectively.

Claim

According to the information you provided, the H-TWO-O Series 35T Wastewater Treatment System has been certified by the National Sanitation Foundation (NSF) pursuant to ANSI/NSF Standard 40 for residential wastewater treatment systems.

Determination

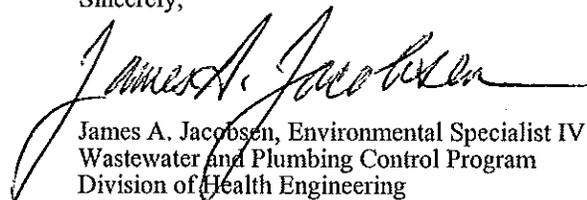
On the basis of the information, the Division has determined that the H-TWO-O Series 35T Wastewater Treatment System is acceptable for use in the State of Maine, provided that it is installed, operated, and maintained in conformance with the manufacturer's directions.

In the event that the product fails to perform as claimed by the applicant, use of the product in Maine, including all installations approved pursuant to Chapter 18 of the Rules, shall cease. Use of the product shall not resume until the applicant and the Division have reached a mutually acceptable agreement for resolving the failure to perform as claimed.

Because installation and owner maintenance has a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation of H-TWO-O Series 35T Wastewater Treatment System. Further, registration of this product for use in the State of Maine does not represent Division preference or recommendation for this product over similar or competing products.

If you have any questions please feel free to contact me at (207) 287-5695.

Sincerely,


James A. Jacobsen, Environmental Specialist IV
Wastewater and Plumbing Control Program
Division of Health Engineering
e-mail: james.jacobsen@state.me.us

/jaj

xc: Product File

Our vision is Maine people enjoying safe, healthy and productive lives.

Phone: (207) 287-5695

Fax: (207) 287-3165

NexTalk (former TTY/TDD Line)
1-800-606-0215

Rec'd 09/27/07

DESOTO CONCRETE PRODUCTS, INC.
P. O. BOX 336
OLIVE BRANCH, MS 38654
(662) 890-1688

September 25, 2007

State of Maine
Division of Environmental Health
286 Water Street, 3rd Floor
Augusta, MA 04333
Attn: Mr. Jim Jacobson

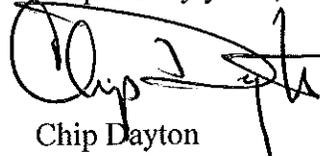
Dear Mr. Jacobson:

With regard to our phone conversations, I submit for your approval, information you requested about our H-TWO-O aerobic treatment unit.

Upon state approval, we intend to bring the product to market via distributors, (precasters), and licensed installers that have been thoroughly trained in proper construction, installation and maintenance of our product.

If you see any omission or further information you require, please let me know. Thank you for your advice and cooperation.

Respectfully yours,



Chip Dayton
Sales Director

WASTEWATER TECHNOLOGY

ANSI/NSF Standard 40 - *Residential Wastewater Treatment Systems*

Final Report:

**Desoto Concrete Products, Inc.
H-TWO-O Series 35T Wastewater Treatment System
02/01/2015/060**



NSF International
789 Dixboro Road
PO Box 130140
Ann Arbor, Michigan 48113-0140 USA

**Evaluation Report:
Desoto Concrete Products, Inc. H-TWO-O Series 35T
Wastewater Treatment System**

**Under the provisions of ANSI/NSF Standard 40
Residential Wastewater Treatment Systems**

August 2003

EXECUTIVE SUMMARY

Testing of the Desoto Concrete Products Inc. H-TWO-O Series 35T was conducted under the provisions of ANSI/NSF Standard 40 for Residential Wastewater Treatment Systems (June 2000 revision). ANSI/NSF Standard 40 was developed by the NSF Joint Committee on Wastewater Technology.

The performance evaluation was conducted at the C-K Associates Wastewater Technology Test Facility located in Baton Rouge, Louisiana, using wastewater diverted from a lift station supplied by a residential neighborhood in Ascension Parish, Louisiana. The C-K Associates Wastewater Technology Test Facility is a Standard 40 subcontractor for NSF. The evaluation consisted of 2 weeks of dosing without sampling to allow for plant start-up, sixteen weeks of dosing at design flow, seven weeks of stress test and two weeks of dosing at design flow. Sampling started in the winter and continued into the fall, covering a wide range of operating temperatures.

Over the course of the evaluation, the average effluent CBOD₅ was 13 mg/L, ranging between 2 and 40 mg/L, and the average effluent suspended solids was 19 mg/L, ranging between 3 mg/L and 65 mg/L.

The H-TWO-O Series 35T produced an effluent that successfully met the performance requirements established by ANSI/NSF Standard 40 for Class I effluent:

During the first month of the evaluation, the maximum 7-day arithmetic mean was 28 mg/L for CBOD₅ and 29 mg/L for suspended solids, both below the allowed maximums of 56 and 63 mg/L respectively. The 30-day arithmetic mean during the first month of testing was 21 mg/L for CBOD₅ and 24 mg/L for suspended solids, both below the allowed maximums of 35 and 42 mg/L respectively.

For the final five months of the evaluation, the maximum 7-day arithmetic mean was 23 mg/L for CBOD₅ and 39 mg/L for suspended solids, both below the allowed maximums of 40 and 45 mg/L respectively. The maximum 30-day arithmetic mean was 17 mg/L for CBOD₅ below the allowed maximum of 25 mg/L. The maximum 30-day arithmetic mean was 22 mg/L for suspended solids, below the allowed maximum of 30 mg/L.

The effluent pH during the entire evaluation ranged between, 6.8 and 7.7, within the required range of 6.0 to 9.0. The plant also met the requirements for noise levels (less than 60 dbA at a distance of 20 feet) and color, threshold odor, oily film and foam.

PREFACE

Performance evaluation of residential wastewater treatment systems is achieved within the provisions of ANSI/NSF Standard 40: Residential Wastewater Treatment Systems (revised June 2000), prepared by the NSF Joint Committee on Wastewater Technology and adopted by the NSF Board of Trustees.

Conformance with the Standard is recognized by issuance of the NSF Mark. This is not to be construed as an approval of the equipment, but a certification of the data provided by the test and an indication of compliance with the requirements expressed in the Standard.

Plants conforming to Standard 40 are classified as Class I or Class II plants according to the quality of effluent produced by the plant during the performance evaluation. Class I plants must also demonstrate performance consistent with the effluent color, odor, oily film and foam requirements of the Standard. Class I plants must meet the requirements of EPA Secondary Treatment Guidelines¹ for five day carbonaceous biochemical oxygen demand, suspended solids and pH.

Permission to use the NSF Mark is granted only after the equipment has been tested and found to perform satisfactorily, and all other requirements of the Standard have been satisfied. Continued use of the Mark is dependent upon evidence of compliance with the Standard and NSF General and Program Specific Policies, as determined by periodic reinspection of the equipment at the factory, distributors and reports from the field.

NSF Standard 40 requires the testing laboratory to provide the manufacturer of a residential wastewater treatment system a report including significant data and appropriate commentary relative to the performance evaluation of the plant. NSF policy specifies provision of performance evaluation reports to appropriate state regulatory agencies at publication. Subsequent direct distribution of the report by NSF is made only at the specific request of or by permission of the manufacturer.

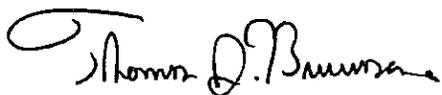
The following report contains results of the entire testing program, a description of the plant, its operation and key process control equipment, and a narrative summary of the test program, including test location, procedures and significant occurrences. The plant represented herein reflects the equipment authorized to bear the NSF Mark.

CERTIFICATION

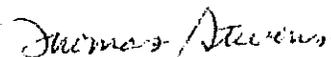
NSF International has determined by performance evaluation under the provisions of ANSI/NSF Standard 40 (revised June 2000) that the H-TWO-O Series 35T manufactured by Desoto Concrete Products Inc., has fulfilled the requirements of ANSI/NSF Standard 40. The Desoto Concrete Products Inc. H-TWO-O Series 35T has therefore been authorized to bear the NSF Mark so long as Desoto Concrete Products Inc. continues to meet the requirements of Standard 40 and NSF General and Program Specific Policies.

General performance evaluation and stress tests were performed at the C-K Associates Wastewater Technology Test Facility, located in Ascension Parish, Louisiana. The raw wastewater used in the test was residential wastewater. The characteristics of the wastewater during the test are included in the tabulated data of this report.

The observations and analyses included in this report are certified to be correct and true copies of the data secured during the performance tests conducted by NSF on the wastewater treatment systems described herein. The manufacturer has agreed to present the data in this certification in its entirety whenever it is used in advertising, prospectuses, bids or similar uses.



Thomas J. Bruursema
General Manager
Wastewater Treatment Unit Certification



Thomas Stevens
Manager
Federal Programs

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