February 16, 1999

Refer to: HMHS

Mr. Bob Williams
Recycled Plastic Products
2331 W. Hampden Ave
Apartment No. 148
Englewood, Colorado 80110

Dear Mr. Williams:

This is in reply to your letter of May 14 regarding your company’s hollow core recycled plastic barricades. These barricades were tested by the Texas Transportation Institute, under contract to the Texas Department of Transportation, and are included in our Acceptance Letter “WZ-3,” copy enclosed, dated August 28, 1998 and titled “Information: Crash Tested Work Zone Traffic Control Devices.”

Your company’s Type II barricades are shown in that memorandum’s Attachment A. Table II.1 “ACCEPTABLE CRASHWORTHY CATEGORY 2 HARDWARE,” as item number 8 under “TTI Report Note 1” and as item number 1 under “TTI Report Note 2.” Illustrations of the tested barricades are also included in Attachment A. A brief description of each of the tested Type III barricades is presented below.

<table>
<thead>
<tr>
<th>Test #</th>
<th>Height</th>
<th>Uprights</th>
<th>Rails</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>453790-4</td>
<td>1524 mm</td>
<td>86 x 86 mm</td>
<td>25 x 203 x 1219 mm</td>
<td>51 x 152 mm*</td>
</tr>
<tr>
<td>439107-1</td>
<td>1524 mm</td>
<td>102 x 102 mm**</td>
<td>25 x 103 x 1219 mm</td>
<td>51 x 152 mm*</td>
</tr>
</tbody>
</table>

*Base is wood or recycled plastic lumber (solid)

**In test 439107-1, for ease of fabrication the rails were affixed to 51 x 102 x 1168 mm wood braces before being placed on the hollow core uprights. A warning light attached to this barricade caused significant windshield damage.

These barricades met the crashworthiness requirements of NCHRP Report 350 (as modified by the Federal Highway Administration (FHWA)). Therefore, they are acceptable for use on the National Highway System (NHS) within the range of conditions tested, when requested by a State. Because of the extensive windshield damage caused by the warning light during test 439107-1, lights atop these barricades will not be acceptable without further testing.
Our acceptance is limited to the breakaway characteristics of the devices and does not cover the structural features nor the devices' conformity with the Manual on Uniform Traffic Control Devices. Presumably, you will provide users with sufficient information on structural design and installation requirements to ensure proper performance of your hardware and provide certification to transportation agencies that the hardware furnished will have essentially the same chemistry, mechanical properties, and geometry as those used in the tests and that it will meet FHWA change in velocity requirements. This acceptance letter, Number WZ-11, shall not be reproduced except in its entirety.

Your company’s work zone traffic control devices are proprietary products, but their use in Federal-aid projects is generally of a temporary nature. They are selected by the contractor for use as needed and removed upon completion of the project. Under such conditions they can be presumed to meet requirement “a” given below for the use of proprietary products on Federal-aid projects. On the other hand, if proprietary devices are specified for use on Federal-aid projects, except exempt, non-NHS projects, they: (a) must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with existing highway facilities or that no equally suitable alternative exists or; (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411, a copy of which is enclosed.

Sincerely yours,

Dwight A. Horne
Director, Office of Highway Safety Infrastructure

2 Enclosures

Federal Highway Administration
HNG-14: NArtimovich: 366-1331: na: 2-12-99
copies to:
HMHS HMHS Reader HMHS File
HRC HFL-1 HSR-20 HMHS-Taylor HIBT Reader DIVISIONS

Office of Highway Safety Infrastructure Acceptance Letter WZ-11
Figure 1. Type III Hollow core plastic barricade as used in test 439107-1.