

July 10, 2001

Refer to: HSA-B85A

Mr. Rodney A. Boyd
President, Highway Safety Products Group
Trinity Industries, Inc.
Post Office Box 568887
Dallas, TX 75356-8887

Dear Mr. Boyd:

In his June 30 letter to Mr. Richard Powers of my staff, Mr. Don Johnson requested the Federal Highway Administration's (FHWA) acceptance of two modifications to the King Recycled Composite guardrail offset block (King Block) that was originally accepted for use on the National Highway System (NHS) with strong post, metal beam guardrail installations in my June 1 letter to you.

Whereas the original King Block consisted of approximately 67 percent high density polyethylene (HDPE), 30 percent ground rubber, 2 percent Black concentrate, and 1/2 percent blowing agent, the modified block contains 52 percent HDPE and 45 percent ground rubber. The percentages of Black concentrate and blowing agent remained the same. The external shape and dimensions of the modified King Block remained unchanged. The only other difference from the original design was the elimination of the vertical web from the top and bottom of the honeycombed interior of the block. This modification was made to enhance the manufacturing process. A pendulum test was conducted at the Southwest Research Institute on the modified design and the results described in the June 2001 report, "Impact Evaluation of a King Block Recycled Plastic/Rubber Composite Blockout." A copy of the videotape of this test was mailed directly to Mr. Powers and was received on July 5.

Based on staff review of the information you provided, I consider the King Block, modified as described above, to be acceptable for use on the NHS with a strong steel post guardrail when molded to the same dimensions and composed of the same materials as the tested blocks. As with all other recycled blocks we have reviewed, this FHWA acceptance is based solely on the reported impact behavior of your product and does not address the long-term performance or durability of this product. Since the modified King Block remains proprietary, its use on Federal-aid projects, except exempt, non-NHS projects, is subject to the conditions listed in Title 23, Code of Federal Regulations, Section 635.411, a copy of which has been provided previously.

Sincerely yours,

(original signed by Harry W. Taylor) *for*

Frederick G. Wright, Jr.
Program Manager, Safety

