

DOCUMENT RESUME

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Forest Service Policies regarding the Use of Cattleguards Constructed from Used Oil Well Drill Pipe. CED-78-72; B-125053. February 27, 1978. 4 pp.

Report to Sen. John Melcher; by Henry Eschwege, Director, Community and Economic Development Div.

Contact: Community and Economic Development Div.

Budget Function: General Government: General Property and Records Management (302); Natural Resources, Environment, and Energy: Conservation and Land Management (804).

Organization Concerned: Department of Agriculture; Forest Service.

Congressional Relevance: House Committee on Agriculture; Senate Committee on Agriculture, Nutrition, and Forestry. Sen. John Melcher.

Forest Service policies prohibit the use of cattleguards constructed from used oil-well drill pipe. In fact, Department of Agriculture regulations prohibit the purchase or use of used material except when new material is not available at a reasonable cost. In addition, Forest Service instructions state that structures erected on forest system roads should conform to specifications set by the American Association of State Highway and Transportation Officials, the American Society for Testing and Materials, and the General Services Administration. Representatives of the two associations knew of no specifications for used materials, and Forest Service officials knew of no way to assess the overall strength of used materials. It would be difficult to competitively purchase equipment constructed from used material because of the difficulty of comparing and assessing pertinent properties of used materials. The Forest Service did, however, purchase used materials for an emergency situation in Montana and, because of the special circumstances, waived the policy of not purchasing equipment constructed of used materials. (RBS)

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UNITED STATES GENERAL ACCOUNTING OFFICE
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COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION

FEB 27 1978

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The Honorable John Melcher
United States Senate

Dear Senator Melcher:

In response to your letter of November 28, 1977, we inquired into Forest Service policies prohibiting the use of cattleguards constructed from used oil-well drill pipe. As you know, a cattleguard is a structure of parallel rails or pipes, constructed across a roadway in an opening through a fence line, which permits the passage of vehicles while discouraging the passage of cattle and other large animals.

We reviewed applicable Federal regulations and instructions and held discussions with officials of the Department of Agriculture's Forest Service and the Department of Transportation's Federal Highway Administration. We also discussed Forest Service policies regarding the testing and approval of equipment constructed of used material with representatives of the American Association of State Highway and Transportation Officials and the American Society for Testing and Materials. These two groups issue guidelines covering the quality of materials used in building miscellaneous transportation structures, including such structures as cattleguards. The following is a summary of the information provided your office in an oral briefing last month.

Forest Service officials indicated that Department regulations prohibit the purchase or use of used material except when new material is not available at a reasonable cost. Agriculture procurement regulations for used equipment state in part that:

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"It is the policy of this [Agriculture] Department that used or reconditioned equipment * * * is not to be purchased when new equipment is available at a reasonable cost. * * *"

Likewise, General Services Administration general provisions for construction contracts state that:

"Unless otherwise specifically provided in this contract, all equipment, material, and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended * * *" (emphasis added).

In addition, Forest Service instructions state that structures erected on forest system roads should conform to material and construction specifications of the American Association of State Highway and Transportation Officials, the American Society for Testing and Materials, and the General Services Administration.

Representatives of both the American Association of State Highway and Transportation Officials and the American Society for Testing and Materials told us that they knew of no specifications for used materials. They said that new material, such as a pipe, is manufactured to meet certain specifications and to be consistent in its strength. When new steel is purchased, the supplier is required to furnish a certificate stating the physical properties or strength of the material purchased. A batch of new steel can be statistically sampled with reasonable assurance that the rest of the batch will be of the same strength as the sample.

Forest Service engineers told us that they knew of no way of assessing the overall strength of used material and that, for example, any one section of a used oil-well drill pipe would probably be of a different strength than the next section because of the stresses and strains that had been exerted on the pipe during drilling operations. To be certain that cattleguards constructed from used oil-well drill pipe have the strength properties needed, each section of each cattleguard would have to be tested.

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In this connection, a Forest Service contract official said it would be extremely difficult to competitively purchase equipment constructed from used material because of the difficulty of comparing and assessing pertinent properties of used material.

Forest Service instructions provide that, in planning and designing structures relating to its forest development roads system, certain time elements be considered, including:

- Material life: the period that the structural material can withstand abrasion, corrosion, fatigue, chemical change, or decay and still serve its intended purpose.
- Service life: the period for which a certain volume or stage of use has been predicted. Structures on the system should be designed for a period of 20 years or more.

Federal engineers and engineers from the testing groups told us that they knew of no practical way to gauge how long used material will last and withstand the above conditions.

Regarding the situation mentioned in your letter where the Forest Service purchased used material, Forest Service officials explained that they had an emergency situation on Federal land in Montana. Horses were stepping through existing cattleguards, breaking legs, and having to be destroyed. Because of the emergency, the Forest Service purchased several "horseguards" from Mr. Al Wolfe of Roundup, Montana, which were constructed from used oil-well drill pipe. Forest Service officials told us that, after learning that the local county government was using similar guards made by Mr. Wolfe, and because of the special circumstances involved, the Forest Service policy of not purchasing equipment constructed of used material was waived. They said that the decision to waive the policy was in error and that future purchases would be made in accordance with existing policy.

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As arranged with your office, we plan to distribute the report to the Forest Service and other parties who request it 10 days from the date of the report.

We trust that the information furnished in this report will serve your needs.

Sincerely yours,

A handwritten signature in cursive script that reads "Henry Eschwege".

Henry Eschwege
Director