

March 12, 1980

Mr. Raymond Michael Ripple
Attorney
E.I. Du Pont De Nemours & Company
Wilmington, Delaware 19898

Dear Mr. Ripple:

Your letter dated February 15, 1980, requested a review of your method to calculate stress level and an interpretation of §195.1(b)(3).

The enclosed pipeline safety regulatory interpretation gives the information you requested.

Sincerely,

Cesar DeLeon
Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau

Enclosure

No. 80-7
Date: March 12, 1980

DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
MATERIALS TRANSPORTATION BUREAU

PIPELINE SAFETY REGULATORY INTERPRETATION

Note: A pipeline safety regulatory interpretation applies a particular rule to a particular set of facts and circumstances, and, as such, may be relied upon only by those persons to whom the interpretation is specifically addressed.

SECTION: Section 195.1(b)(3)

SUBJECT: (1) Proper method to calculate stress level.

(2) Applicability of Part 195 to pipelines which operate at a stress level less than 20 percent of the specified minimum yield strength of the pipe.

FACTS: As given in letter dated February 15, 1980, from Mr. Raymond Michael Ripple, E.I. Du Pont De Nemours and Company (Du Pont).

"E.I. du Pont de Nemours and Company (Du Pont) is proposing to construct three pipelines between its Spruance and James River plants, a distance of about four miles, wholly within the Commonwealth of Virginia. One line, stainless steel, will carry 100% sulfuric acid. The other two lines are of fiberglass reinforced plastic construction and will carry dilute (7-10%) sulfuric acid and waste water. These two plastic lines will be interchangeable for either the dilute sulfuric or waste water service.

"In the past, of course, this construction project, being totally intrastate, would not entail any approvals from the Department of Transportation. However, the recent passage of Public Law 96-129 has apparently placed certain intrastate liquid pipelines under DOT jurisdiction. Nevertheless, assuming that Du Pont's pipelines would fall within this general jurisdiction, we believe that they would be exempt from current regulations under provision of 49 CFR 195.1(b)(3) in that the pipelines concerned will operate at stress levels of less than twenty (20) percent of the specified minimum yield strength.

"I am attaching as Appendix A the calculations of J.H. Hill, a Du Pont Senior Research Engineer at the Spruance plant. These calculations show the stainless line has a seven (7) percent stress level while the plastic lines have an eighteen point seven (18.7) percent level. It is my understanding that these figures were developed after Mr. Hill discussed the methodology with Mr. Paul Cory of your office."

Question 1. Is the method used to calculate the stress level in the stainless steel pipeline and the fiberglass reinforced pipelines the correct method for these uses?

Question 2. Is Part 195 applicable to the stainless steel pipeline or the fiberglass reinforced pipelines?

Interpretation 1. The method used to calculate the stress level in the stainless steel pipeline and the fiberglass reinforced pipeline is the correct method.

Interpretation 2. Section 195.1, Scope, states:

"(b) This part does not apply to-

* * * *

"(3) Transportation through pipelines that operate at a stress level of 20 percent or less of the specified minimum yield strength of the line pipe in the system;"

Because the stainless steel pipeline and the fiberglass reinforced pipelines operate at less than 20 percent of the specified minimum yield strength of the pipe, Part 195 does not apply to these pipelines.

Cesar DeLeon
Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau