

PI-80-0106

December 19, 1980

Mr. D. W. Solanas
Deputy Conservation manager
Offshore Operations Support
Gulf of Mexico OCS Region
U.S. Department of the Interior
Geological survey
P.O. Box 7944
Metairie, Louisiana 70010

Dear Mr. Solanas:

This replies to your letter (OS-5) concerning application of the MOU and part 195 to three offshore pipeline segments in three different case examples.

As we interpret the MOU, segments I and II are subject to DOI responsibility, since segments I and II lie upstream from the farthest downstream facility where hydrocarbons are first processed and under §195.1(b)(5) would be excepted from the requirements of part 195.

Segment III would be subject to part 195 unless, as you point out, the §195.1(b)(3) exception for pipelines operating at 20 percent, or less, of SMYS applies. Under the interpretation you mentioned which we gave Alyeska, and "entire pipelines system" must operate at those stress levels for §195.1(b)(3) to apply.

Whether segment III is an entire system excepted from part 195 under §195.1(b)(3) depends on its relation to connecting pipelines. If a carrier's only facilities consist of segments I, II and III or segments II and III, then segment III would be an entire pipelines system, since under the terms of §195.1(b)(5) segments I and II are not subject to part 195. However, with an operating pressure of less than 20 percent of SMYS in each of the three cases, segment III would be excepted from meeting the requirements of part 195 under §195.1(b)(3).

In any of the three cases, if segment III is part of a carrier's facilities which include the shoreward bound pipeline and facilities other than segment III operate above 20 percent of SMYS, the segment III would not be an entire pipeline system by itself and would not be excepted under 195.1(b)(3).

Where segment III is not subject to part 195, because it still is subject to DOT pipelines safety jurisdiction under the terms of the MOU, it would not be within the spirit of the MOU for you to apply DOI's safety regulations to segment III. Rather, to resolve any immediate safety problems, we suggest that you advise DOT enforcement personnel in Houston of the problems so they can take action as necessary. Looking farther ahead, we do not want any unwarranted gaps in the safety regulations over offshore pipelines for which we are responsible under the MOU. If you will send us a more detailed explanation of the safety problems presented by the low stress level offshore pipelines not currently subject to part 195, we will proceed to issue a Federal Register notice requesting public comment on the need for and appropriate ways to amend part 195 to close the gap.

Sincerely,

SIGNED

Melvin A. Judah

Pipeline Safety Regulation

Materials Transportation Bureau

United States Department of the Interior
Geological survey
Imperial Office BLDG.,3301 N. Causeway BLVD.
P.O. Box 7944
Metairie, Louisiana 70010

In Reply Refer To ; OS-5

Materials Transportation Bureau
Research and Special Programs Administration
Attention: Mr. Melvin Judah
400 7th Street, SW, Room 8101
Washington, D.C. 20590

Gentlemen:

Recent situations have arisen necessitating action by the Department of the Interior (U. S. Geological Survey) to employ the Section, "Joint Responsibilities", of the May 6, 1976, Department of Transportation/Department of the Interior Memorandum of Understanding. Although your Houston office was notified in each case of these incidents and each was discussed at length, we find it necessary to attempt to better understand your interpretations regarding the following cases:

In each of the following cases, Segment I is the wellhead assembly, Segment II is the process equipment through which all fluids flow, and Segment III is the liquid pipeline located downstream of facilities where produced hydrocarbons are first separated, dehydrated, or otherwise processed traversing (1) any two platforms, or (2) a platform to a subsea tie-in which interconnects a shoreward- bound pipeline.

Also, SITP is the highest well shut-in tubing pressure, and SMYS is the specified minimum yield strength of the Segment III pipeline.

<u>Case</u>	<u>Segment I</u>	<u>Segment II</u>	<u>Segment III</u>
1	SITP > 20% Of SMYS	Operating at <20% SMYS	Operating at < 20% SMYS
2	SITP < 20% Of SMYS	Operating at < 20% SMYS	Operating at < 20% SMYS
3	SITP.> 20% Of SMYS	Operating at > 20% SMYS	Operating at < 20% SMYS

Section 195.1(b)(3) of Title 49 appears to exclude Segment III from the scope of Part 195. However, your interpretation letter dated May 26, 1977, to Mr. E. L. Patton of the Alyeska Pipeline Service Company in Anchorage, Alaska, [File 5930-1(h)] regarding the Alyeska Pipeline Service Company facilities indicates that an entire system must operate below 20 percent SMYS to qualify for exception under 195.1(b)(3).

In each of the cases described above, please indicate the applicability of Part 195 to each segment. If Part 195 is not applicable in all cases, it is imperative that this office be cognizant of such. If DOT Regulations do not apply, and the current DOT/DOI MOU does not provide for enforcement of DOI Regulations on these segments, then can no enforcement action be legally taken? By enforcement action, we mean steps taken by this office to assure employment of safe and environmentally protective procedures, during pipeline installations and repairs.

It is recognized that liquid pipelines which operate at 20% SMYS normally operate at very low pressures and do not present serious safety problems if found leaking; however, on offshore platforms, it is not uncommon for heavy wall liquid pipeline risers to operate below the 20% SMYS level but yet in fact be operating at 1,000 psi or higher pressures. This office believes that because these pipelines are subject to severe corrosion problems as well as numerous outside forces, if this jurisdictional gap does exist, in the interest of both safety and environmental protection, immediate consideration should be given to this matter.

If additional discussion is needed, please contact our Pipeline Approval Section at FTS 680-9257.

Sincerely yours,
D. W. Solanas
Deputy Conservation Manager
Offshore Operations Support
Gulf of Mexico OCS Region

May 26, 1977

Mr. E. L. Patton
Chairman of the Board
Alyeska Pipeline Service Company
1835 S. Bragaw Street
Anchorage, Alaska 99504

Dear Mr. Patton:

This is in furtherance to my letter of March 4, to Mr. Darch, and our meeting in Dallas, Texas, on March 15, 1977, regarding Mr. O'Connell's letters to Mr. Knodell of September 16, 1976, and January 25, 1977, concerning the extent of Department of Transportation (DOT) jurisdiction over (1) pipelines operated at a stress level of 20 percent or less of specified minimum yield strength (SUYS) and (2) gravity flow pipes at the Valdez terminal.

In our meeting in Dallas, Texas, attended by members of Alyeska and Materials Transportation Bureau (MTB) staff, we reviewed piping drawings of the pipelines that are of concern to Alyeska.

With regard to the pipelines which operate at less than 20 percent SMYS, the Alyeska drawing, "Inventory Line Diagram, Pump Station No. 8," dated October 26, 1976, which was provided us in Dallas, depicts these pipelines in yellow. The Alyeska personnel explained that these lines are 12-inch circulating lines within a pump station.

The question of DOT jurisdiction over these circulating lines is not dependent on the relationship between the stress level of those lines and the SMYS of the line pipe in the system. Rather, it depends on whether the circulating lines are transporting crude oil in interstate or foreign commerce.

MTB staff was informed that these lines are used during startup of a pump and during low flow conditions to keep the pump case temperature from becoming too high and serve only to draw off crude oil from the discharge side of the pumps and deliver the oil to a tank. MTB was further informed that this oil is later reintroduced into the upstream side of the pump station through a 36-inch relief line.

Based on this information, it appears that the circulating lines, when used, are taking crude oil out of the transportation stream for purposes of aiding in the proper operation of the pump station. It also appears that the circulating lines are not necessary for that part of the operation of the pump station affecting the safe transportation of crude oil in interstate or foreign commerce.

This information leads me to conclude that the circulating lines within a pump station are not transporting crude oil in interstate or foreign commerce and, therefore, are not subject to the requirements of 49 CFR Part 195.

With regard to the gravity flow lines at the Valdez terminal, the Fluor Ocean Services, Inc., drawing "D-50-M1558," dated August 9, 1976, Valdez Terminal Crude System - B31.4 49 CFR 195 and drawing "D-50-M1559," dated August 9, 1976, Valdez Terminal, Crude, Crude Transfer and Relief ANSI-B31.4, which were provided us in Dallas, depict these pipelines.

Alyeska personnel advised us in Dallas that the lines which were described in the letters of September 16, 1976, and January 25, 1977, were not limited to being used as gravity lines at all times since the tanks could be bypassed and the crude oil could be pumped directly to the ship through these lines from the 48-inch main line. Consequently, these lines are not a unique gravity pipeline system and are in fact a continuation of the pipeline system all the way to the ship docking berths and as such are subject to the requirements of 49 CFR Part 195.

Drawing D-50-M1559 also indicates in heavy dark lines crude transfer lines, relief lines, and lines from the common manifold or "feed-in" line to each tank, MTB was informed that the heavy dark lines indicated pipeline that Alyeska considered subject to ANSI-B31.4 but not 49 CFR Part 195. However, during the Dallas meeting, Alyeska personnel indicated that the drawing, in relation to the relief lines, was in error because Alyeska correctly considers such relief lines to be subject to 49 CFR Part 195. In addition, Alyeska personnel sought MTB concurrence on the non-applicability of 49 CFR Part 195 to the crude transfer lines and the lines from the manifold or "feed-in" line to each tank on the basis that these

lines operate at stress levels of 20 percent or less of the SMYS of the line pipe in the system.

The MTB cannot concur that the requirements of 49 CFR Part 195 are not applicable to the lines from the manifold or "feed-in" line to each tank. Because crude oil is delivered directly from the 48-inch main line to tanks through these lines they are an integral part of the regulated main line system and, therefore, cannot be considered a unique system in order to qualify for the exception provided under 49 CFR 195.1(b)(3). As stated in my March 4 letter, The applicability of Part 195 is determined not in relation to portions or segments of a pipeline system, but rather in relation to a pipeline system in its entirety." Under 195.1(b)(3) only a "pipeline system," as that term is defined in §195.2, that operates at a stress level of 20 percent or less of SMYS of the line pipe in the system is excepted. This exception is not applicable to segments of a system that meet these criteria unless the entire system also meets these criteria.

As to the crude transfer lines that Alyeska considers subject to ANSI-B31.4 but not 49 CFR Part 195, I have concluded that the regulations do not apply. These lines are used exclusively to transfer crude oil from one tank to another. Like our discussion regarding the 12-inch circulating lines, MTB believes that DOT jurisdiction over the crude transfer lines is not dependent on whether they qualify for the exception under §195.1(b)(3). Rather, MTB believes that during the transfer of crude oil from one tank to another the oil is not in interstate or foreign commerce and, therefore, the pipelines used to accomplish that transfer are not subject to the requirements of 49 CFR Part 195.

I trust that these findings will prove helpful to Alyeska in assuring continued compliance with DOT's liquid pipeline safety regulations.

In anticipation of my conclusion that the regulations are applicable to the "gravity flow* lines at the Valdez terminal and having been advised by the Department of the Interior's Alaska Pipeline office that it had issued nonconformance reports on 13 girth welds at the terminal, Mr. Cesar DeLeon, Acting Director of the Office of Pipeline Safety Operations, met with management and senior staff personnel of Alyeska, the Alaska Pipeline Office, and Mechanics Research Incorporated, in Valdez, Alaska, on May 12, 1977, to discuss the Valdez terminal lines and conduct an onsite inspection of these girth welds. Mr. DeLeon will communicate directly with Mr. M. J. Robinson of Alyeska Quality Assurance regarding his evaluation of the circumstances with respect to each of the repaired welds.

Sincerely,
James T. Curtis, Jr.