

July 16, 1993 (?)

Mr. Dave Mitchel
Director
Airborne Environmental Surveys
Suite 108
3130 Skyway Drive
Santa Maria, CA 93455

Dear Mr. Mitchel:

This responds to your letter of April 12, 1993, to George W. Tenley, Jr. regarding the use of airborne cathodic monitoring equipment to detect and measure the impressed cathodic currents in pipelines. Your letter states that your technology involves the determination of current and current density at any point on an impressed-current pipeline by direct measurement of electromagnetics, specifically the magnetic field associated with the impressed current. Your letter further states that these measurements may be made from ground surface, or from airborne platforms.

Properly applied, electromagnetic can yield continuous measurements and plots of current along a pipeline, including interference from foreign pipelines, bonds, taps, casing shorts, coupling separations, coating conductivity changes and holidays. It is very important that an existing baseline pipe-to-soil potential be established by conventional methods. The electromagnetic techniques can be employed to establish baseline data that can be overlaid on the original baseline pipe-to-soil to accurately portray the performance of the cathodic protection system. This technique would provide an approach to assess the performance of the cathodic protection system to determine compliance with the requirements of 49 CFR 192.463(a) and §192.465(b) and (c).

As set forth in my letter of November 7, 1991, an operator has the freedom to conduct its inspections utilizing whatever appropriate technology or means it chooses, including your airborne cathodic monitoring equipment, to comply with the inspections under 49 CFR 192.463(a) and §192.465(b) and (c) of rectifiers or other impressed current power source.

If the airborne cathodic monitoring equipment provides reliable data, your airborne remote sensing technique is an acceptable means of inspection under the above rules.

Sincerely,

Cesar De Leon
Director, Regulatory Programs
Office of Pipeline Safety