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MEASUREMENT STATION INSPECTION PROGRAM AND GUIDE

Class #1210.1

Robert J. Rau, Consultant
10555 Shermoor Drive
Baton Rouge, LA 70815

Today, let's discuss an important phase of everyday planning for the Measurement personnel. A test and inspection guide is a corporation's plan to meet government regulations. DOT requires pipelines to have a written operating and maintenance plan. This plan must meet the minimum federal standards and cover various phases of operations. A company may include items above the minimum federal standards but they must operate according to the plan they prepare. In plain words, what you write you must be ready to live and operate by whether they just meet the DOT minimums or exceed the DOT requirements and this becomes the company bible. The last item to remember is that as field personnel you must perform the required inspections, complete properly the administrative records to document and prove that required tests were made. This is an important item as it involves personal honor and your signature is your statement the work was done. Government penalties applied to companies can be very high if the required work is not done, or has not been properly documented. If the work is not done, admit an error was made. It helps with DOT inspections if an explanation is in the file as to why the specific test was not performed, such as "weather prevented transportation offshore" or "station shut in because well is dead".

1. Where and What Decides Inspection Program

One major question to consider at this point is "where and what decides an inspection program". The most important of these "whats" are as follows:

A. Tariff.

B. DOT Regulations.

C. Mineral Management Service Regulations.

There are sections in each of the above items that will outline test schedules and certain parameters for testing.

A second possible source is either a Gas Purchase Contract or Gas Transportation Agreement. Companies generally have certain test schedules included in these agreements. These set the standards and responsibility for testing, calculations and allocation of a system of wells or offshore platforms. Also, gas specifications are sometimes outlined and may differ from tariff or regulations. These different specifications that are sometimes included in the agreements are negotiated by personnel who often are not aware of tariffs, MMS rules or DOT regulations.

Other factors that are used to determine the frequency of tests are volume of gas measured or type of meter installed. Some companies utilize volume to determine test schedules. Meter stations that handle large volumes may be tested by-monthly due to the monetary consideration involved. This would also keep corrections in the same month that an error occurred and eliminates arguments over interest on possible late payments or over payments for gas.

2. DOT Inspection

DOT Inspections are a very real, concise item all personnel will face sooner or later. The inspector will clearly base his inspection on the DOT Regulations and your operating and

maintenance plan. It is usually thorough and to the point. Accuracy is extremely important. The major concern they will consider is if you have a definite plan to follow the DOT rules and your specific Operating & Maintenance Plan, if your records are in order, if your records are neat and filed properly and if you have a means of reviewing work. If you have all of these, the inspection will go well.

One main item to develop is a simple timetable to assist field personnel on required tests in a form that can be maintained manually or by a personal computer. An example of this is shown in Figure 1. As you can see, the work is laid out not to occur all at once but be spread over a twelve-month period. The form also outlines each test and the reference for it in the Operating and Maintenance Plan, or the Field Facilities Miscellaneous Inspection Schedules Book. At my former employer, we refer to these books as the "Red Book" and the "Green Book", respectively.

Each column is used for a specific test. The heading above each column gives a reference to the appropriate book and its respective section. As an example in Figure 1, the first column has R-B-11 as a reference for inspecting M&R valves. The "R" indicates the "Red Book" and "B-11" indicates Section B-11 in this book. The second calendar is used to enter the date when all the work is completed on a specific job and the third calendar is to ensure the necessary reports are submitted. This form is a Kueffel & Esser Form 460020 and can be acquired at blue print shops, or make your own charts through Microsoft Excel program or Word Perfect Quattro Pro.

This same form can be used to outline all M&R stations assigned a person and marked with their specific test, such as M&R Valves, Relief Valves and others. When a test is made simply enter the date. A missing date stands out and thus becomes a mind jogger or work check sheet. (Figure 2)

To reduce hand written paperwork, this plan can easily be put on a personal computer using either the Excel or Quattro programs. Examples of Framework are shown in figures 3 and 4.

This form can be beneficial when involved in a Code Inspection. It can be used for the following:

1. As a reference

2. Assist in catching oversights

3. Assist in making sure items are completed by required date

3. Work Planning

Work planning is an important part of these inspections and reports. Using the code schedule and planning of work, a person can cut down on driving time, helicopter costs and man-hours. Schedules should include lab schedules, witnesses, possible travel schedules and weather.

Field test records that were previously discussed can assist in planning by furnishing data for physical inventories, equipment status and compiling data on problems like gas quality, as well as saving test data compiled on one form or record. (Figure 5)