



Interoffice Communication

To J. P. Warner
From J. D. Olson
Date January 10, 1983
Subject OPACITY METER DRYER EXHAUST MONITORING

The following is the final report summarizing test work conducted in 1982 using Lear Siegler and Data Test opacity meters for monitoring particulate emissions from dryer line exhaust ducts. Neither of the meters was found to perform satisfactorily for this service. The meters were not sensitive enough to detect particulate emissions at even reasonably high levels. At best, the Lear Siegler unit only showed a 2-5% meter deflection at unacceptably high dust loadings of 30-50 pounds per hour. The Data Test unit was found to be even less sensitive. Numerous attempts at increasing the meters' sensitivity electrically and mechanically did not result in substantial improvements.

Charlie McDonald of R & D provided assistance with the testing through much of 1982. Additional assistance was given by Andy Wiles of PED during tests conducted in October and November of 1982. Attached is their report that provides a summary of data collected during many of the tests. Their recommendation is consistent with the plant's finding that the opacity meters are not suitable for dryer particulate emissions monitoring.

Also attached is a chronological listing of events and findings that occurred throughout the 1982 test program. Included are brief explanations of test results intended to supplement the PED/R & D report.

As a result of the opacity meter test findings, the plant has elected not to pursue this project any further. An AFE request was not submitted for the 1982 Capital Budget project (OKC-5) that would have provided opacity monitoring meters for all dryer lines had the opacity meters been found to work adequately. The plant is now in the process of testing a trial system that will permit easier visual inspection of dryer exhaust by ducting a slip stream of exhaust into the dryer building.

A handwritten signature in cursive script that reads "John D. Olson".

JOHN D. OLSON
Process Engineer

JDO-dh
Attachment

cc: (RAC-File: 1982 Capital Budget), AWS, CWT, RDF, RJK, MGJ, RVG
RAF, CJMc, AJW