
**EMISSION MEASUREMENT CENTER
GUIDELINE DOCUMENT**

F FACTORS FOR "ORIMULSION"

INTRODUCTION

Orimulsion is a trade name given to an emulsion in water of Orinoco bitumen, which is a hydrocarbon produced from the Orinoco oil belt in Venezuela. Chemically, Orimulsion is similar to fuel oil. The Florida Power and Light (FPL) Company requested that the Environmental Protection Agency evaluate fuel analysis data which showed the F_d factor for Orimulsion to be about the same as the F_d factor for oil as defined in Method 19. The purpose of this document is to provide a summary of the F_d factor data for Orimulsion.

SUMMARY

The FPL Company successfully combusted Orimulsion during a trial burn in an oil-fired steam generator unit. For the trial burn test, FPL received seven shipments of Orimulsion and analyzed duplicate samples from each shipment. The average F_d factors from duplicate samples ranged from 9075 to 9327 dscf/MM BTU with an overall average of 9228 dscf/MM BTU.

A power plant in Canada also test Orimulsion. Their data from seven shipments showed an average F_d factor of 9258 dscf/MM BTU.

CONCLUSION

The F_d factor for Orimulsion is statistically no different from that for oil. Therefore, the users of Orimulsion may use the F_d factor for oil listed in Method 19 as 2.47×10^{-7} dscm/j (9190 dscf/MM BTU).