EnerChem’s “ClearChem™ System” for Effective Emission Control

THE LOW COST EMISSION CONTROL OPTION
FOR COAL FIRED POWER PLANTS
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WHAT IS CLEARCHEM(TM)

- FURNACE SORBENT INJECTION PROCESS
- PATENTED, BASED ON MICRONIZED CaCO$_3$
- MINIMAL TUBE DEPOSITS & IMPACT ON ESP
- MARKETABLE ASH – NO POND LEACHING
COSTS & BENEFITS

• CAPITAL UNDER $500,000

• OPERATING $400 - 600/TON SO$_2$ MITIGATED

• SMALL FOOT PRINT

• EASY HANDLING

• WIDELY AVAILABLE

• SAFE REAGENT
RESULTS

• 84% SO$_2$ CAPTURE @ CA/S =1.9
  – Lower exit temp will boost capture

• HCl capture circa 75%

• SO$_3$ VIRTUALLY ALL CAPTURED
  – Allows lower exit gas temp, heat rate, CO$_2$ release
OTHER CLEARCHEM™ BENEFITS

• EXISTING FGD MORE EFFECTIVE
• MAKES OXIDIZED Hg CAPTURE EASY
• EXISTING CaCO$_3$ SUPPLY CAN BE USED
• IMPROVES ECONOMICS OF H$_2$O RECOVERY FROM FLUE GAS
CFD modeling indicates best injection sites (2 nozzles at each of the OFA and Side Door ports). Above shows the pump skids and day tank.