



PLANT SYSTEMS ENGINEERING

FIRE CODE REVIEW: COAL AND FUEL OIL AT CEMENT PLANT

Client: CTG (Italcementi Group), Bergamo, Italy
Project Location: Capital Cement (ESSROC), Martinsburg, WV

Project Requirements: Review process flows, general arrangements and hydrant loop drawings of \$500M cement plant upgrade pursuant to West Virginia Title 87 (NFPA 101 Life Safety Code).

Review insurance carrier requests of fire prevention

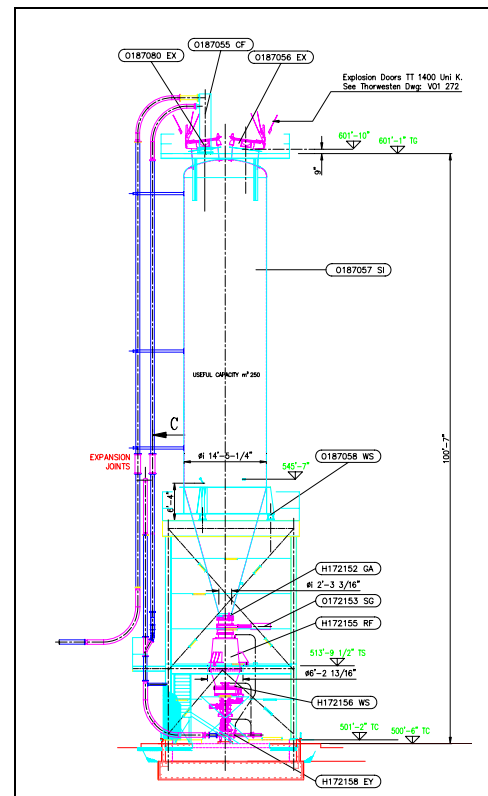
Prepare submittals for West Virginia State Fire Marshall

Processes Reviewed:

- Above ground storage tank for No. 2 Fuel Oil.
- Distribution of No. 2 Fuel Oil
- Pulverized Coal kiln firing system.
- Bulk storage and conveyance of coal.
- Pyro-processing (clinker formation)

Code Application (partial list):

- NFPA 101 Life Safety Code
- NFPA 30 Flam. And Comb. Liquids Code.
- NFPA 85 Combustion Systems Code
- NFPA 59 Utility LP-Gas Plant Code
- NFPA 69 Standard on Explosion Prevention
- NFPA 13 Sprinklers



Pulverized Coal Silo with explosion vents, CO₂ injection, CO detection, heat detection and passive mechanical isolation



Above ground storage tank for No. 2 Fuel Oil

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