Camp Minden
M6 Disposal

CO2AL, LLC

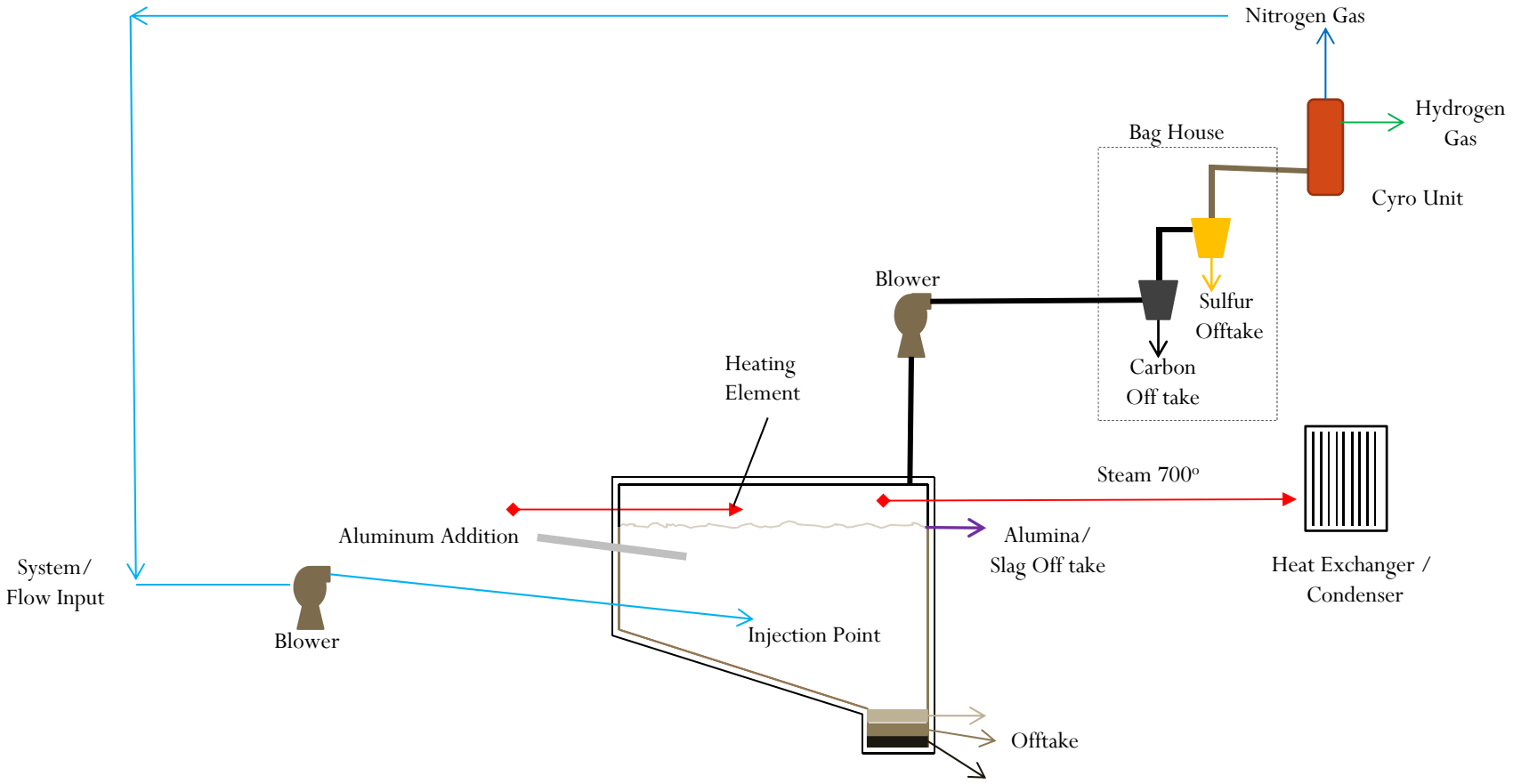
CO2AL Solution

- Eliminate and recycle M6 using molten alloy bath.
- Similar testing performed with powered Lignite coal with auto-ignition temperature of 400˚ F (M6 383 ˚ F).
- Results from coal testing proved efficacy of the system. Results showed the carbon / oxygen and sulfur bonds were broken.
- Process is expected to reduce the CBI to elemental material, alumina and aluminum salts. Additional information on actual chemistry would need to be provided.

Chemical Composition

- Dibutyl Phthalate
  - $3C_{16}H_{22}O_4 + 8Al = 48C + 33H_2 + 4Al_2O_3$
- Diphenylamine
  - $2C_{12}H_{11}N + 0Al = 24C + 22H_2 + N_2$
- Nitrocellulose
  - $6C_6H_9(NO_2)O_5 + 12Al = 36C + 27H_2 + 3N_2 + 6Al_2O_3$
  - $2C_6H_9(NO_2)_2O_5 + 12Al = 12C + 9H_2 + N_2 + 6Al_2O_3$
  - $6C_6H_9(NO_2)_3O_5 + 44Al = 36C + 27H_2 + 9N_2 + 22Al_2O_3$
- Dinitrotoluene
  - $3C_7H_6N_2O_4 + 8Al = 21C + 9H_2 + 3N_2 + 4Al_2O_3$

Process Design



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