

# MATS PROGRAM STATUS

- Regulates Mercury, Metals HAPS, Acid Gases and Dioxin/Furans
- Mercury
  - <1.2 lbs Hg/Tbtu (except Pirkey 4.0# Hg/TBbtu)
  - Monitored for reporting with Sorbent Traps on Fleet
  - Most plants will use mercury CEMS of operational indication
- Acid Gases
  - <0.002 lbs HCl/Mbtu
  - Reporting across fleet:
    - SO<sub>2</sub> as a surrogate (<0.2#SO<sub>2</sub>/MBtu)
    - or-
    - **Quarterly** stack testing for HCl
- Non-Mercury Metal HAPS
  - **Quarterly** stack particulate monitoring (<0.03 lbs particulate/Mbtu)
- Dioxin/Furans
  - Boiler inspections, repairs and tuning (CO, NO<sub>x</sub> , O<sub>2</sub>)
  - Annual reporting required.

# Mercury Compliance Measures

<b>MERCURY</b>	<b>ACID GASES</b>	<b>Non-Hg Metals</b>
SCR & WFGD	WFGD	ESP – WFGD
ACI* & Fabric Filter	SBC** & Fabric Filter DFGS & FF	Fabric Filter
ACI & NID	NID	NID
ACI & ESP	SBC & ESP	ESP
ACI & CaBr <sub>2</sub> & ESP	WFGD	ESP - WFGD
WFGD & GMCS	WFGD	ESP - WFGD

\* ACI – activated carbons are typically a halogenated variety.

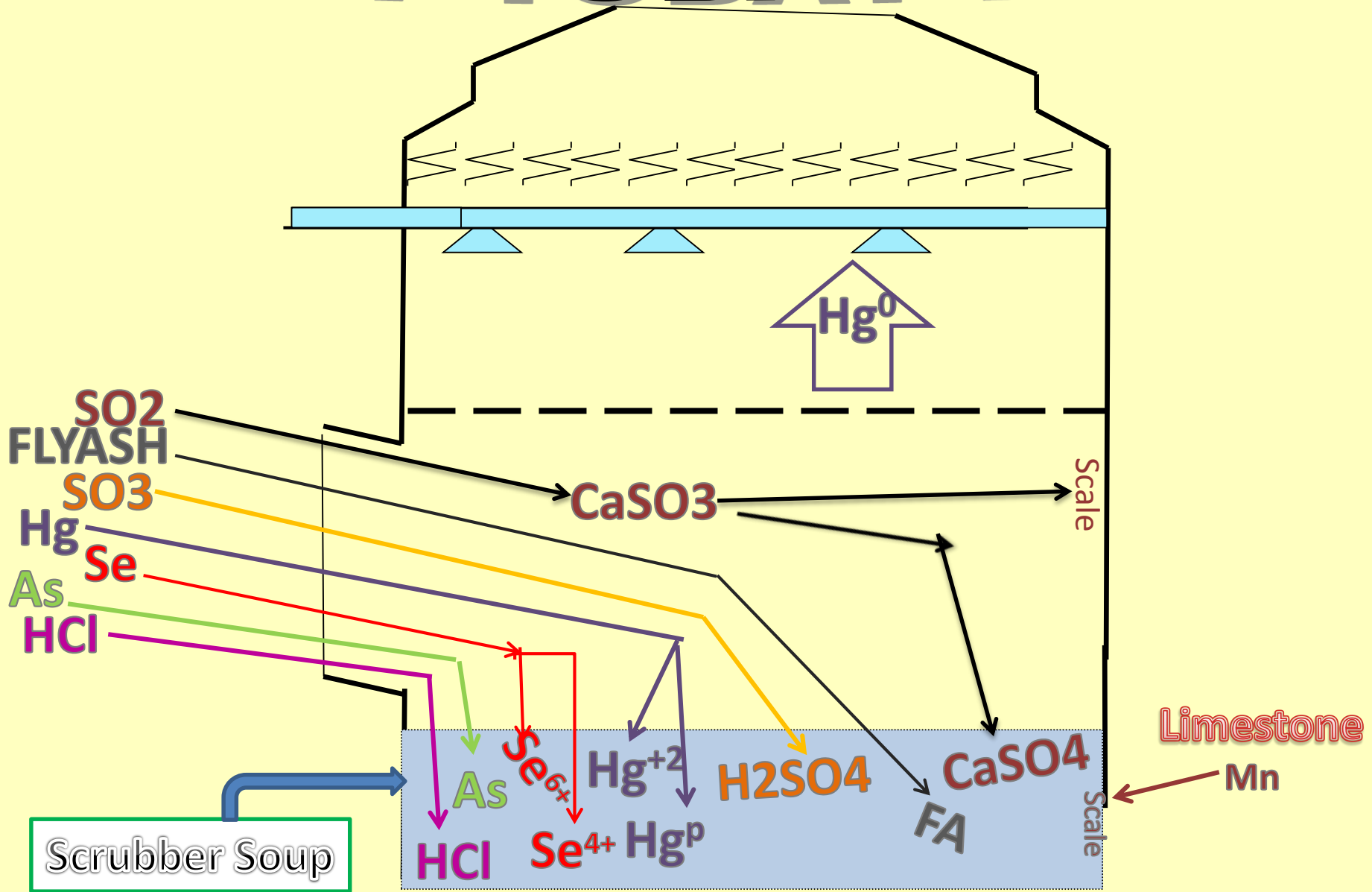
\*\* SBC – Sodium bicarbonate – dry injected into fluework.



# Mercury Compliance Variables

- Numerous options to comply – very specific based upon plant.
  - **Utilization of existing equipment.**
  - Combustion process and acceptable fuel options.
    - Unit designed are specific to a specific type/range of coal.
    - Halogens in fuel --- Hg oxidation, corrosion, competing FGD reactions.
  - **Economic Drivers**
    - Cost benefit - - capital to costly = retire units
    - Cost avoidance – maintain ESP for ash sales/avoid landfill expansion.
  - **Holistic Process View (Total Evaluated Cost)**
    - Sodium salts get to landfill and into landfill leachate.
    - Flyash collection in WFGD, contributes to increase arsenic in absorbers.
    - SCR ammonia slip affect on WFGD's Hg removal.
    - ESP performance with additional particulate (AC, trona, SBC).
  - **Equipment arrangement and space.**
    - Utilize as much of existing equipment (ductwork, stack) in retrofits.
    - More remote areas increase capital and operating costs.
  - **Schedule**
    - Compliance date.
    - May limit options.

# BUT TODAY .....



# Nothing Disappears

