## **Confined Space Personnel Monitoring Guide**

## LOUISIANA REFINING DIVISION

Personal 4 gas Monitors are required for 100 % of the authorized entrants when any of the following conditions / work within a Confined Space exist:

	Sludge Removal / Chemical Cleaning <sup>2</sup>	Arc Gouging <sup>2</sup>	Coating Applications	Confined Space within a Confined Space (ex. cyclones in the regen)	Representative Monitoring of the Space cannot be Achieved
Where:	Storage Tanks, Process Vessels, etc.	Storage Tanks, Process Vessels, etc.	Storage Tanks, Process Vessels, etc.	Storage Tanks, Regenerator	TBD
Respirator Required:	SAR	SAR or SAR w/Yokes	SAR	TBD <sup>1</sup>	TBD <sup>1</sup>
Personal 4 gas Monitor Alarm Set Points for Task	$O_2 = 19.5\% - 23.5\%$ LEL < 10% $H_2S < 75 \text{ PPM}$ CO < 500  PPM	$O2 = 19.5\% - 23.5\%$ $LEL < 10\%$ $H_2S < 75 PPM$ $CO < 500 PPM$	$O_2 = 19.5\% - 23.5\%$ LEL < 10% $H_2S < 10 \text{ PPM}$ CO < 25 PPM	$O_2 = 19.5\% - 23.5\%$ LEL < 10% $H_2S < 10 \text{ PPM}$ CO < 25  PPM	$O_2 = 19.5\% - 23.5\%$ LEL < 10% $H_2S < 10 \text{ PPM}$ CO < 25  PPM

## Notes:

- 1. Refer to RSW-A-002-GV and RSW-A-003-GV for additional information.
- 2. H2S sensor will be set to alarm at 75 PPM and CO sensor will be set to alarm at 500 PPM
- 3. Hot Work A in sour service equipment will require SO<sub>2</sub> continuous monitoring.
- 4. H<sub>2</sub>S Personnel Monitors are always required.
- Confined Spaces that are clean, gas free and provided with the required ventilation will not require Personnel 4 gas monitoring unless the job scope requires it. This will be determined during the planning phase prior to the initial entry.