

SMU EHS Standard Operating Procedure for use of

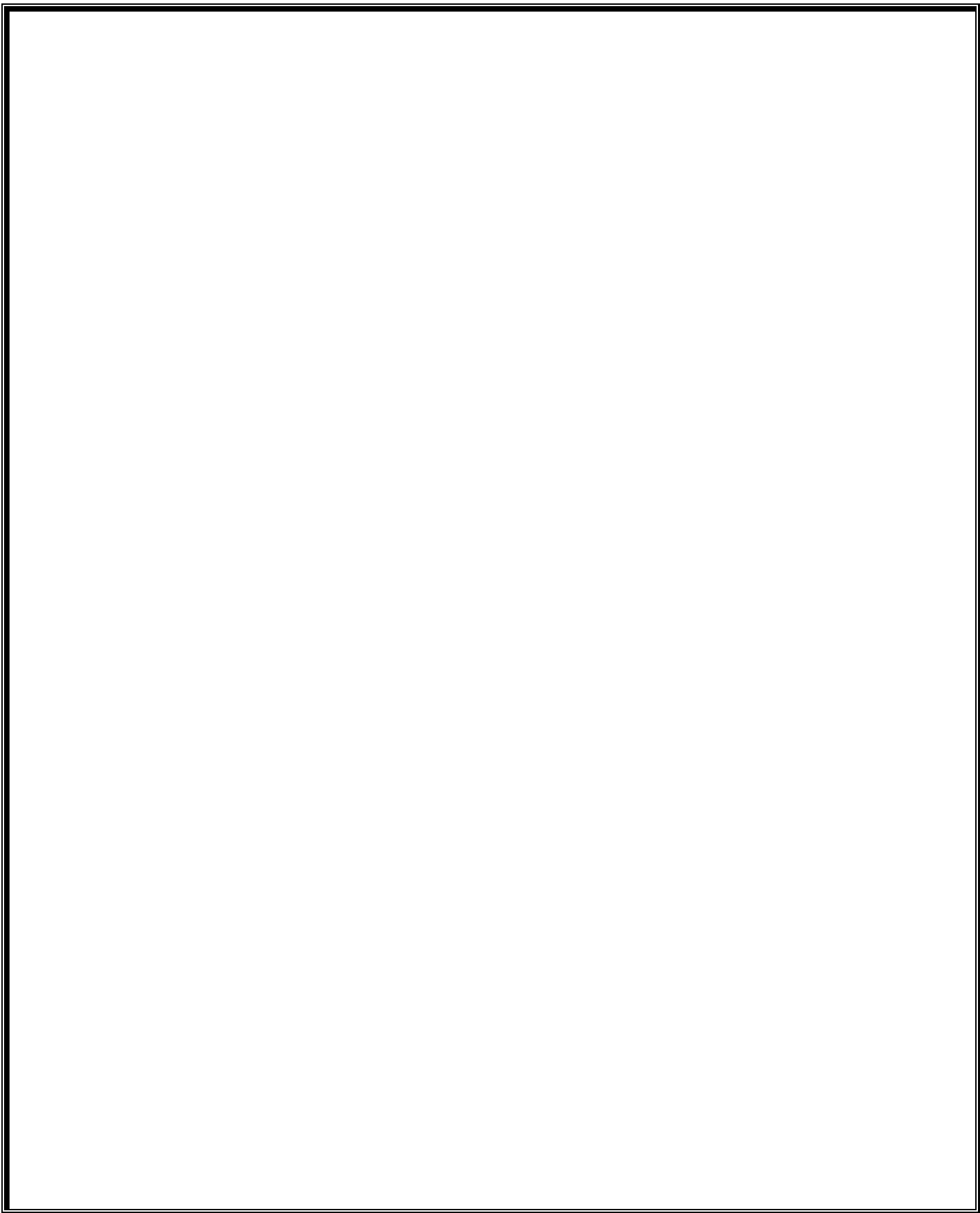
COMPRESSED GASES

Examples: nitrogen, argon, oxygen, hydrogen,
compressed air, acetylene, carbon dioxide



HAZARDS	Potential Hazards	<ul style="list-style-type: none"> The large amount of pressure contained makes gas cylinders a potential rocket or bomb if the cylinder or valve fails. Gases may be flammable, corrosive, oxidizing, toxic, and/or irritating. They may also cause asphyxiation. See Safety Data Sheet (SDS) for specific hazard information.
	HAZARD CONTROLS	Selection and Purchase
Storage and Transportation		<ul style="list-style-type: none"> Store upright and secure with sturdy chains or straps (between midpoint and shoulder) to a wall, or use a cylinder rack, bench mount, or stand. Keep valves closed (with valve covers on) when not in use. Store separately: <ul style="list-style-type: none"> Full away from empty cylinders. (Label as full or empty.) Oxidizing gases (such as oxygen) away from flammable gases. Post storage area for flammable gases or oxygen with “No Open Flames” sign. Do not store near flammable materials. Do not store above 125° F or in direct sunlight, or outside of the temperature range specified by the manufacturer. Do not store in cold rooms or other unventilated areas. Transport with valve cover on using a cylinder dolly. Secure cylinder during transport. Use a helper if possible.
Engineering Controls		<ul style="list-style-type: none"> For flammable gases, use a flashback arrestor between regulator and hose. Consider a ventilated gas cabinet or chemical fume hood for flammable or irritating gases, depending on quantities used.
Work Practice Controls		<ul style="list-style-type: none"> Properly rated and compatible regulators should be used to regulate flow. Cylinder valves should not be used to regulate flow. Properly rated and compatible tubing and piping must be used at all times
Personal Protective Equipment (PPE)		<p>Minimum PPE:</p> <ul style="list-style-type: none"> Safety glasses Closed-toe shoes when moving cylinders
OTHER		Waste
	Training	Sign Laboratory Specific Training document to indicate understanding of this SOP.
	Questions	Contact Environmental Health and Safety at 214-768-2430.
	Additional Guidelines	Please complete page 2 for additional laboratory-specific guidelines

Laboratory-specific gases and procedures:

A large, empty rectangular box with a black border, occupying most of the page below the text. It is intended for the user to list laboratory-specific gases and procedures.