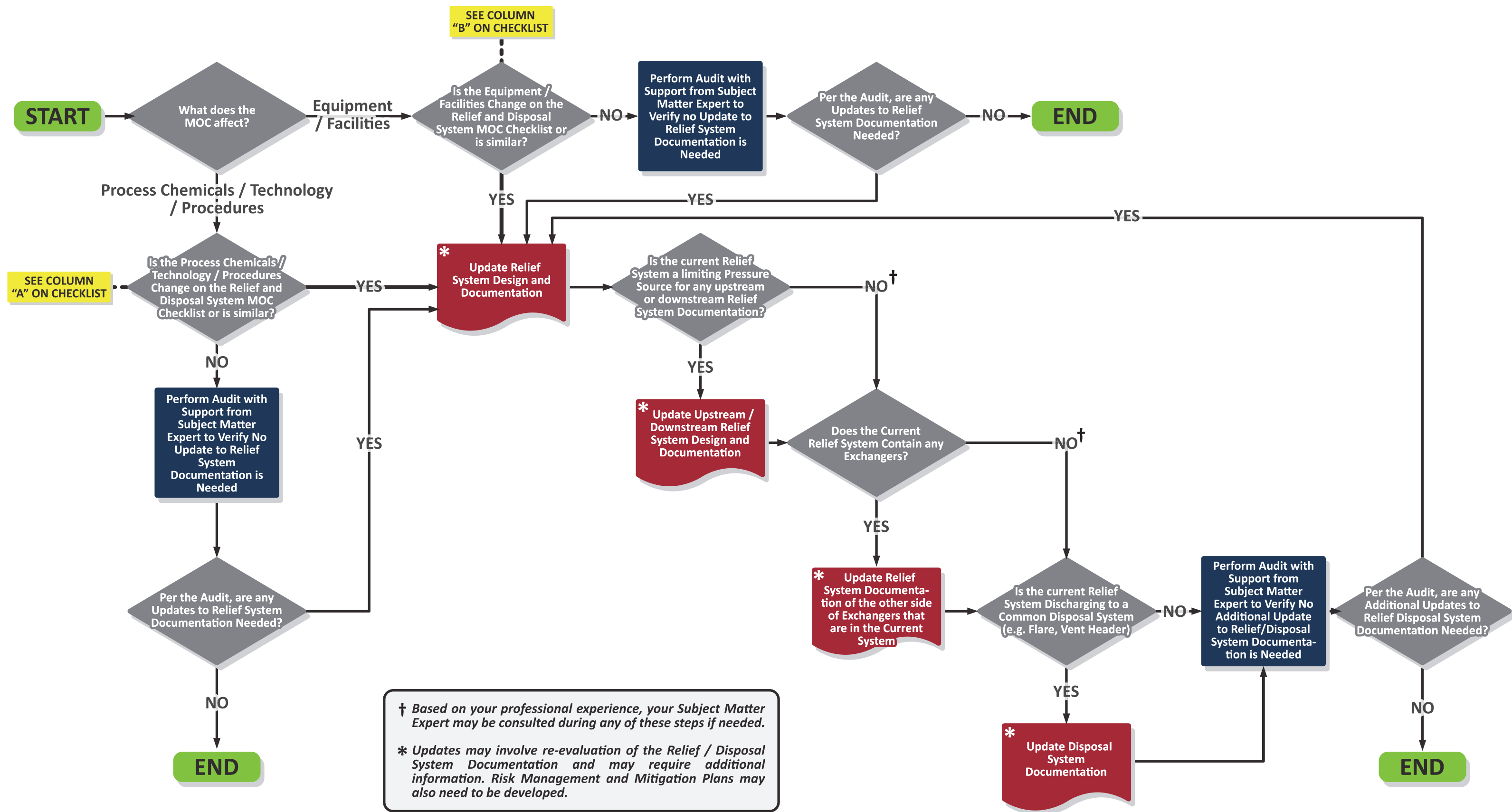




Column “A”: Process Chemicals / Technology / Procedures

PROCESS:

- ☐ Change in the unit charge rate
- ☐ Change in the feed stock composition
- ☐ New chemistry, or changes to chemistry of existing process
- ☐ Introduce new feedstocks, catalysts, chemicals, product streams, or new process sequence
- ☐ Changes to the process that could affect flows, pressures, compositions or changes involving the erosive, corrosive or toxic nature of the stream
- ☐ Set point change (level, pressure, temperature, flow)
- ☐ Change material in tank or increase tank throughput
- ☐ Change in flare system seal gas pressure

OPERATION:

- ☐ Change to the basic mode of unit operation (including new or modified feed to the unit)
- ☐ Changes to equipment operating or maintenance procedure
- ☐ Change to safe operating limits or require operating outside of the approved operating envelope
- ☐ Change in inventory of any vessel or exchanger
- ☐ Changes to car-seal/lock valves
- ☐ Change in electric or steam driver for a pump, compressor, etc.
- ☐ Change in minimum turndown for the unit
- ☐ Change in sparing of equipment (i.e. pumps/compressors)
- ☐ Change in operation of control valve bypass valves
- ☐ Change in flare line-ups or staging

INSTRUMENTATION:

- ☐ Addition, modification, or demolition of control valves, alarms, interlocks and other instrumentation
- ☐ Changes to instrumentation operating or maintenance procedure
- ☐ Change in actuator mechanism/motive fluid (i.e. instrument air to nitrogen)

UTILITIES:

- ☐ Utility operating condition changes
- ☐ Change in utility line-up (i.e. switching a LP steam user to a HP steam user or CW user to BFW user)
- ☐ Addition/upgrading of firefighting equipment and/or drainage
- ☐ Electrical changes (one-line information)

Column “B”: Equipment / Facilities

RELIEF SYSTEM EQUIPMENT:

- ☐ Addition, modification, or demolition of relief device (not including replacement in-kind)
- ☐ Change in relief device capacity (orifice size, etc.)
- ☐ Change in relief device discharge location
- ☐ Change in relief device manufacturer or model
- ☐ Change in relief device sub-type (i.e. conventional to bellows)
- ☐ Change in relief device set pressure or blowdown setting
- ☐ Change to relief device piping
- ☐ Change in sparing of relief devices
- ☐ Addition, modification, or demolition of flares, knockout drums, seal drums, and other disposal system equipment

PROCESS EQUIPMENT:

- ☐ Addition, modification, repurpose, relocation, or demolition of process equipment (not including replacement in-kind)
- ☐ Rerate of vessel design code
- ☐ Rerate of hydrotest pressure / MAWP or change in design pressure / temperature
- ☐ Change in piping connections to machinery that could affect alignment or pressure profile
- ☐ Increased/Decreased heat transfer surface area of heat exchanger
- ☐ Reduction/addition of fixed trays in tower
- ☐ Change in tube metallurgy, tube size, or tube length
- ☐ Movement of internal weir in a vessel
- ☐ Removal/installation of fireproof insulation
- ☐ Change of restriction orifice plate size
- ☐ Change floating roof on a tank
- ☐ Changes to location of equipment

ROTATING EQUIPMENT:

- ☐ Addition, modification, or demolition of rotating equipment (not including replacement in-kind)
- ☐ Changes to machinery component design, materials or manufacturer (pumps, compressors, etc.)
- ☐ Changes of performance capability of equipment
- ☐ Changes of driver size (motor, turbine, engine)
- ☐ Change to the pump impeller size
- ☐ Change in electric or steam driver for a pump, compressor, etc.

INSTRUMENTATION:

- ☐ Addition, modification, or demolition of control valves, alarms, interlocks and other instrumentation
- ☐ Change of control valves or bypass valves (including valve size, trim, or failure position)
- ☐ Change in actuator mechanism/motive fluid (i.e. instrument air to nitrogen)
- ☐ Change to safety-critical instrumentation

UTILITIES:

- ☐ Addition, modification, or demolition of electrical equipment
- ☐ Changes to electrical line-ups
- ☐ Change in utility line-up (i.e. switching a LP steam user to a HP steam user)
- ☐ Changes to utility equipment (cooling water systems, steam systems, etc.)