

Work Classification Table Revision Date: 11/17/16

TASK	TASK RISK	OTHER Applicable Standards	Minimum Approvers/Notifications
Abrasive blasting: not on live equipment	Low	SR-40 PPE	Unit Operator, Authorized Person
Abrasive Blasting: on live equipment	Med	SR-40 PPE	Unit Operator, Competent Person, Craft APIC, Notification / Approval: Inspections
Acid: Any work requiring Acid or Caustic Gear	Med	SR-40 PPE	Unit Operator, Competent Person, Craft APIC
Analyzer rounds (not including energy or process exposure activities)	NPA - (Non Permitted Activity)		Check in/out with Unit Operators
Analyzer work requiring energy isolation, or exposure to hazardous processes	Low		Unit Operator, Authorized Person
Animal control	Low		Unit Operator, Authorized Person
Automotive Permitting: Adjacent to or inside a process unit.	Low	SR-5 Permitting; SR-19 Automotive and Traffic Regulations.	Unit Operator, Authorized Person
Automotive: Inside an "Active" Tank Yard	Med		Unit Operator, Competent Person, Authorized Person
Automotive: Mobile equipment operation in restricted roadway, process unit or tank basin (i.e., anywhere a vehicle entry permit is required) Includes portable air compressor, light plant, generator, portable pump or other gas, diesel or electric powered motor (source of ignition).	Low Risk - Low Energy Hot	SR-19 Automotive and Traffic Regulations.	Unit Operator, Authorized Person
Automotive: Passenger Vehicle entry, Any other combustion powered equipment	Low	SR-19 Automotive and Traffic Regulations.	Unit Operator, Authorized Person
Automotive: Vacuum Truck Operations requires a Vac Truck Permit	Med	SR-05	Unit Operator, Vac Truck Operator, Competent Person
Bolting: <b>Four Bolting</b> . 4-Gas Required - Must be "0" pressure	Low	MOP-14 Flange Bolting, MOP-28 Blinding and Isolation.	Unit Operator, Authorized Person
Bolting: <b>Hot Bolting</b> (taking out one stud at a time and replacing it) - Equipment Hot Bolting on should be reduced in pressure - continuous 4 gas monitoring required	Med	MOP-14 Flange Bolting, MOP-28 Blinding and Isolation, MOP-14, TRS-510G	Unit Operator, Competent Person, Craft APIC, Notification / Approval: <b>Reliability Engineer or Pressure Equipment Engineer</b>

Work Classification Table Revision Date: 11/17/16

TASK	TASK RISK	OTHER Applicable Standards	Minimum Approvers/Notifications
Bolting: <b>Skip Bolting</b> (Half Bolting) - Equipment Skip Bolting on should be close to atmospheric pressure - continuous 4 gas monitoring required	Med	MOP-14 Flange Bolting, MOP-28 Blinding and Isolation, MOP-14, TRS-510G	Unit Operator, Competent Person Craft APIC, Notification / Approval: <b>Reliability Engineer or Pressure Equipment Engineer</b>
Caustic: Work on any equipment that is in caustic or acid service	Med	SR-40	Unit Operator, Competent Person, Craft APIC
Chemical: Any work requiring additional PPE (Chemical Suit) from the SDS	Med	SR-40	Unit Operator, Competent Person, Craft APIC
Chemical: Chemical deliveries inside of classified areas	Low	Hazard Evaluation Form can be used in place of Part B	Unit Operator, Authorized Person
Chemical: Chemical deliveries outside of classified areas	NPA	Hazard Evaluation Form can be used in place of Part B	Check in/out with Unit Operators
Cold Cutting: <b>Hydrocarbon, and /or Nitrogen lines:</b> Line must be isolated, blinded, depressured, drained, purged, verified hydrocarbon free at the cut point, cutting tool to be kept cool with oil or water. When cutting any lines, the line must be marked on the pipe with a Paint Pen and initialed by the Operator and the Authorized Craft employee during thr JJSV.	Med	SR-60 Control of Hazardous Energy (LO/TO); MOP 28 Blinding	Unit Operator, Competent Person, Craft APIC
Cold cutting: <b>Non-hydrocarbon lines:</b> (steam up to 50 psi, air, water) Line must be isolated, depressured, verified hydrocarbon free, cutting tool to be kept cool with oil or water. Steam lines above 50 psi blinding is required (blinds or double block and bleed). When cutting any lines, the line must be marked on the pipe with a Paint Pen and initialed by the Operator and the Authorized Craft employee during thr JJSV.	Med	SR-60 Control of Hazardous Energy (LO/TO); MOP 28 Blinding	Unit Operator, Authorized Person
Cold Work: Drain Cleaning and Inspection (including use of remote camera)	Low		Unit Operator, Authorized Person
Cold Work: Industrial Hygiene (Health) exposure monitoring	NPA	SR-21 Industrial Hygiene	Check in/out with Unit Operators
Cold Work: Information or Reading Gathering without any tools or performing any maintenance.	NPA		Check in/out with Unit Operators
Cold Work: Inspection - penetrant testing on piping, vessels and fixed equipment	Low		Unit Operator, Authorized Person
Cold Work: Intrinsically safe portable equipment/devices where there is no negative impact with process equipment (e.g., temperature gun, sonic detector)	NPA		Check in/out with Unit Operators
Cold Work: Lubricate rotating equipment and valves using oil can and grease gun at fixed lubrication points - NOT Lubricating the actual rotating parts while in motion.	Low		Unit Operator, Authorized Person

Work Classification Table Revision Date: 11/17/16

TASK	TASK RISK	OTHER Applicable Standards	Minimum Approvers/Notifications
Cold Work: Setting up or removing temporary power, lighting and utilities in a classified area	Low		Unit Operator, Authorized Person
Confined Space Entry: Equipment (Vessels, Tanks, Exchangers, etc.)	Med	SR-29 Confined Space, SR-21 Industrial Hygiene, MOP-28 Blinding, SR-60 LOTO, SR-05 Work Permitting	Unit Operator, Competent Person, Craft APIC, Notification / Approval: Safety (on all Initial Entries)
Confined Space Entry: Excavation greater than 4 ft	Med	SR-17 Excavation Attachment E & D) SR-29 Confined Space Entry	Unit Operator, Competent Person, Craft APIC, Notification / Approval: Safety
Confined Space Entry: Inert Atmosphere	High	SR-29 Confined Space. TSHS-007 ( <u>must retain the TSHS-007 Documentation</u> )	Unit Operator, Competent Person, Craft APIC on Permit. <b>TSHS-007 Approval:</b> TSO Entry Coordinator, Safety / OPS & Maint Superintendent
Confined Space Entry: Not initial or inert	Med	SR-29 Confined Space	Unit Operator, Competent Person, Craft APIC
Crane Work: Critical Lift: A lift meeting any of the following criteria: 1. Any lift made within a distance less than the minimum required clearance per the Electrical Safety Orders. 2. Any lift in which the combination of weight and lift radius will load the crane in use above 80% of its rated capacity. 3. Any lift requiring the use of more than one crane in any configuration, except in a laydown area (one designated person shall be responsible for the operation, that person shall analyze the operation and instruct all personnel involved in the proper positioning, rigging of the load, and the movements to be made). 4. A lift requiring transferring the load from hook to rigging. 5. Any lift over 25 tons except in a laydown area. 6. Manbasket lifts involving hoisting of personnel (	High	SR-10 CRITICAL LIFTS / LIFTS OVER PROCESS EQUIPMENT OR PIPING / MANBASKET USAGE	Unit Operator, Competent Person, Craft APIC; <b>SR 10 (Attachment A) Approvals:</b> Lift Company Representative, Maintenance/Project Supervisor, Maintenance/Project Superintendent, Safety, Unit Operator, Operations Supervisor, Crane Operator, Signal Person(s), Rigger(s), Lift Coordinator
Crane Work: Normal (non-critical lifts)	Low	SR-10 CRITICAL LIFTS / LIFTS OVER PROCESS EQUIPMENT OR PIPING / MANBASKET USAGE	Unit Operator, Authorized Person

Work Classification Table Revision Date: 11/17/16

TASK	TASK RISK	OTHER Applicable Standards	Minimum Approvers/Notifications
Diving	Med	Procedure Validation Retrieval Plan Competency Verification	Unit Operator, Competent Person, Craft APIC
Electrical - Working on or exposed to energized electrical equipment equal to or less than 240VAC or 1.2 cal/cm2	Low	MOP-11 A&B	Unit Operator, Authorized Person
Electrical / Instrumentation: Opening a non purged, 24VDC termination junction box	NPA		Check in/out with Unit Operators
Electrical / Instrumentation: Opening a purged analyzer enclosure in a classified area.	<u>Low</u>		Unit Operator, Authorized Person
Electrical: Area lighting repairs, including light bulbs, inside classified areas.	Low		Unit Operator, Authorized Person
Electrical: Opening or Working in a purged AC/DC electrical junction box	Low	Working in a live junction box procedure	Unit Operator, Authorized Person
Electrical: Tasks in office premises where no energy sources are involved or where they are fully isolated by a competent person, including: phone system installation and repair, lighting repair and painting.	NPA	MOP-11 A&B	Check in/out with Unit Operators
Electrical: Working in a non purged 24VDC termination junction box	Low	Working in a live junction box procedure	Unit Operator, Authorized Person
Electrical: Working on or exposed to energized electrical equipment greater than 240VAC or 1.2 cal/cm2	Med	Energized Electrical Work Permit	Refer to TES-606
Engineered: clamp, plug or wire wrap from specialty contractor	Med		Unit Operator, Competent Person, Craft APIC; Notification / Approval: Safety
Engineered: Drill, tap and seal flanges with specialty contractor	Med		Unit Operator, Competent Person, Craft APIC, Notification / Approval: Reliability Engineer or Inspection, Safety
Engineered: Stock clamp installation or fiberglass wrap on all process piping (excluding air & water)	Med		Unit Operator, Permit Competent, Maintenance Coordinator, Craft APIC,
Engineered: Stopple and or Hot Tap - welding and tapping on live process lines.	Med	SR-45 Hot Taps - Welding on In-Service Equipment	Unit Operator, Competent Person, Craft APIC, <b>SR 45 Approvals required:</b> Operations Superintendent, Safety, Reliability Engineer, Inspection

Work Classification Table Revision Date: 11/17/16

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Excavation: < 4ft deep	Med	SR-17 Excavation, Trenching & Shoring (Attachment E & D).	Unit Operator, Competent Person, Craft Excavation Competent Person
Excavation: > 4'	Med	SR-17 Excavation, Trenching & Shoring (Attachment E & D). SR-29 Confined Space	Unit Operator, Competent Person, Craft Excavation Competent Person on permit, Safety (notification on all initial excavations / Trenches greater than 4 feet deep)
Excavation: requiring shoring / cribbing or over 10'	High	SR-17 Excavation, Trenching & Shoring (Attachment E & D). SR-29 Confined Space.	Unit Operator, Competent Person, Craft Excavation Competent Person, Safety (notification)
Fall Protection: Heights using rope access methods (IRATA-certified only)	Med	SR-62 Fall Protection	Unit Operator, Competent Person, Craft APIC; Notification / Approval: Safety
Fire and Safety: PM inspections and minor repairs of fire and safety equipment, with hand tools. Not to include any energy isolation.	NPA		Check in/out with Unit Operators
Fire Water: Perform PM and regulatory flow tests of deluge systems	NPA		Check in/out with Unit Operators
<u>Flare Work</u> : Live Live Flare work to remove or install PSV's and HIC valves for preventative maintenance.	High	SR-14 FLARE, HOT DROP OUT, AND SYSTEMS CONTAINING H2S	Unit Operator, Competent Person, Craft APIC; Notification / Approval: Notify Safety Specialist and Maintenance Superintendent and get approval from Operations Superintendent or designee
<u>Flare Work</u> : All Live Flare work of any kind other than to remove or install PSV's and HIC's for preventative maintenance. This includes installing slip blinds and piping work of any kind on any size line.	High	SR-14 FLARE, HOT DROP OUT, AND SYSTEMS CONTAINING H2S	Unit Operator, Competent Person, Craft APIC, Notification / Approval: Notify Safety Specialist and get approval from either Operations, Maintenance, or HS&E Manager or designee
Fresh Air: Any work requiring Fresh Air (Bottle Cart or SCBA) not in a confined or inert space - Including Blinding activities.	Med	SR-40 PPE	Unit Operator, Competent Person, Craft APIC

Work Classification Table Revision Date: 11/17/16

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Heat Stress: Ambient Temperature over 95 degrees	Med	SR-22 Heat Related Illness Prevention Plan	Unit Operator, Competent Person, Craft APIC, <b>Safety must conduct an analysis</b>

Work Classification Table Revision Date: 11/17/16

TASK	TASK RISK	OTHER Applicable Standards	Minimum Approvers/Notifications
HILTE Gun (Powder Acutated Tool)	Med		Unit Operator, Competent Person, Craft APIC; Notification / Approval: Safety
Hot Drop Out: Live Hot Drop Out work in Vaults, and or above ground.	High	SR-14 FLARE, HOT DROP OUT, AND SYSTEMS CONTAINING H2S	Unit Operator, Competent Person, Craft APIC, Notification / Approval: Notify Safety Specialist and get approval from either Operations, Maintenance, or HS&E Manager or designee
Hot Work: Burn, weld and grind on doublar plates, cladding, internal liners and repads in process units - (including Wire Wheel, Flapper Wheel).	Med (High Energy)	SR-57 Hot Work	Unit Operator, Competent Person, Craft APIC, Notification / Approval: Safety
Hot Work: Burn, Weld and Grind on piping, and or piping components in process units - (including Wire Wheel, Flapper Wheel). When cutting any lines, the line must be marked on the pipe with a Paint Pen and initialed by the Operator and the Authorized Craft employee durring thr JJSV.	Med (High Energy)	SR-57 Hot Work	Unit Operator, Competent Person, Craft APIC
Hot Work: Burn, Weld, Grind on any structural steel in process units - (including Wire Wheel, Flapper Wheel).	Med (High Energy)	SR-57 Hot Work; SR 21 Industrial Hygiene & Air Monitoring Equipment	Unit Operator, Competent Person, Craft APIC
Hot Work: Curing refractory or liners with an open flame of any kind within a process unit	High	SR-57 Hot Work	Unit Operator, Competent Person, Craft APIC; Notification / Approval: Safety
Hot Work: or Hot Work Spark Potential NOT in a classified hazardous area (Zone E). This does not apply to Hot Work or Hot Work Spark Potential in the Maintenance Shops; and does NOT apply to Hot Taps or Welding on In-Service equipment.	Med	SR-57 Hot Work.	Multiple Tesoro individuals (minimum of 2) with Competent Person, and or APIC Qualifications.
Hot Work: Stress relieving of equipment (coils) within a process unit	Med	SR-57 Hot work	Unit Operator, Competent Person, Craft APIC
Hot Work: Use of of heat gun in any application.	Med	SR-57 Hot work	Unit Operator, Competent Person, Craft APIC
Housekeeping	NPA		Check in/out with Unit Operators
HP hydro blasting: (>2000 psi)	Med		Unit Operator, Competent Person, Craft APIC
HP hydro blasting: in confined space	Med		Unit Operator, Competent Person, Craft APIC; Notification / Approval: Safety OPS & Maint Superintendent

Work Classification Table Revision Date: 11/17/16

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HP hydro blasting: in confined space with Short Barrel Lance	High	Qualified Short Barrel Operator Required.	Unit Operator, Competent Person, Craft APIC, / Safety & OPS & Maint Superintendent (Verbal Approval)
HVAC: Work in process units	Low		Unit Operator, Authorized Person
HVAC: Work requiring energy isolation	Low		Unit Operator, Authorized Person
Hydro Cutting: (water) cutting process lines/equipment.	Med		Unit Operator, Competent Person, Craft APIC; Notification / Approval: Safety
Hydrotesting	Med		Unit Operator, Competent Person, Craft APIC
Inspection: of roof on fixed or cone roof tanks.	Low	SR-30 Tank Roof Access	Unit Operator, Authorized Person
Inspection: Radiography (X-Ray)	Low		Unit Operator, Authorized Person
Inspection: Ultrasonic, magnetic particle testing on, NDE & NDT piping, vessels and fixed equipment	Low		Unit Operator, Authorized Person
Inspections: UT Inspections with Intrinsically Safe Equipment	Cold Work		Unit Operator, Authorized Person
Inspections: AUT Automatic UT Inspection Tools ie; Crawlers, Spiders, etc.	Low Energy Hot		Unit Operator, Authorized Person
Instrumentation: Blowing down a transmitters not requiring fresh air	Low		Unit Operator, Authorized Person
Instrumentation: Blowing down a transmitters requiring fresh air (can be done in an SCBA work pack).	Med		Unit Operator, Competent Person, Craft APIC
Instrumentation: Field instrument work, including PIS tests, where connecting/disconnecting from a process or working on the electrical components or wiring (excluding thermocouple wiring)	Low		Unit Operator, Authorized Person
Insulation: Asbestos disturbance or removal of asbestos containing material (ACM)	Med	SR-37 Asbestos	Unit Operator, Competent Person, Craft APIC
Insulation: Installation or removal (no asbestos)	Low		Unit Operator, Authorized Person
Insulation: Removal of insulation on a known hydrocarbon/chemical leak	Med		Unit Operator, Competent Person, Craft APIC, Notification / Approval: Safety



Work Classification Table Revision Date: 11/17/16

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LDAR: (VOC monitoring)	NPA		Check in/out with Unit Operators
LDAR: (VOC monitoring) when fall protection is required	Low		Unit Operator, Authorized Person
Lead, removal of suspected lead containing material	Med	SR-16 Lead Management Program	Unit Operator, Competent Person, Craft APIC
Line Break: Known Breaking of Containment with any toxic or flammable chemical.	Med		Unit Operator, Competent Person, Craft APIC
Line Breaks: Opening Flanges - Breaking Containment against an Alternate Isolation Device (Stopple, Line Freeze, etc.)	Med	MOP-28 Blinding and Isolation.	Unit Operator, Competent Person, Craft APIC,
Line Breaks: Opening Flanges - Breaking Containment on system when valve is not holding or has unverified valve isolation.	Med		Unit Operator, Competent Person, Craft APIC
Line Breaks: Opening Flanges - Breaking Containment with active purge of nitrogen (must have Fresh Air).	Med	MOP-33 Refinery Nitrogen System. SR-31 Respiratory Protection Program	Unit Operator, Competent Person, Craft APIC,
Low Energy Hot Work: Non-intrinsically safe portable equipment or devices in classified hazardous area (measuring, diagnostic, drills, etc)	Low Risk - Low Energy Hot	SR-5 Permitting	Unit Operator, Authorized Person
Mercury: Cleaning Mercury in Process equipment	<u>Med</u>	SR-40	Unit Operator, Competent Person, Craft APIC, Safety to evaluate Mercury Vapors in Confined Space and large amounts of Mercury
Mercury: Cleaning up Mercury spills.	<u>Low</u>	SR-40 PPE	Authorized Person, Safety required to evaluate Mercury Vapors for any amount more than a thermometer
Nitrogen: Opening equipment with a known N2 purge	Med	MOP-33 Refinery Nitrogen System. SR-31 Respiratory Protection Program	Unit Operator, Competent Person, Craft APIC

Work Classification Table Revision Date: 11/17/16

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Painting: Removal of Lead Material	Med	SR-16 Lead Management Program, SR-31 Respiratory Protection	Unit Operator, Competent Person, Craft APIC
Painting; Non lead material	Low		Unit Operator, Authorized Person
Pressure Washing: Low Pressure Water washing (up to 2000 psi) - Power Washers	Low		Unit Operator, Authorized Person
Scaffolding: Erecting, dismantling or modifying any of the following types <ul style="list-style-type: none"> <li>• Scaffolds that are greater than 60 feet tall (measured from base plate)</li> <li>• Engineered scaffold</li> <li>• Scaffolds that may exceed 80% of the design load rating while in use</li> <li>• Scaffold or platforms supported by non-rigid supports (ropes, cables, etc)</li> </ul>	Med	SR-51 Construction, Inspection and Use of Supported and Suspended Scaffolding	Unit Operator, Competent Person, Craft APIC, Scaffold Engineer
Scaffolding: Erecting, dismantling or modifying installations that are built from grade or a dedicated, fixed platform and are less than or equal to 60 feet tall.	Low	SR-51 Construction, Inspection and Use of Supported and Suspended Scaffolding	Unit Operator, Authorized Person
Temporary Piping: Connecting a Utility line/hose to a Process Line (only applies to Craft or Non Tesoro Operators)	Low	SR-12 Utility Connections, MOP-24 Temporary Piping,	Unit Operator, Authorized Person
Temporary Piping: Connecting any temp pipe to the Flare and or the Hot Drop Out.	Med	MOP-24 Temporary Piping, SR-14 Flare and Hot Drop Out	Unit Operator, Competent Person, Craft APIC
Temporary Piping: Connecting temp pipe to process equipment with a double block and bleed or Blind	Low	MOP-24 Temporary Piping, MOP-28 Blinding	Unit Operator, Authorized Person
Temporary Piping: Connecting: Connecting temp pipe to process equipment not blinded or double block & bleeder	Med	MOP-24 Temporary Piping, MOP-28 Blinding	Unit Operator, Competent Person, Craft APIC

Work Classification Table Revision Date: 11/17/16

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Utilities: Steam trap surveys - use of intrinsically safe temperature guns - no breaking containment	NPA		Check in/out with Unit Operators
Utility Connections: Connecting a Utility line/hose to a Process Line (only applies to Craft or Non Tesoro Operators)	Low	SR-12 Utility Connections,	Unit Operator, Authorized Person
Vibration testing: on rotating equipment (intrinsically safe equipment)	NPA		Check in/out with Unit Operators
Vibration testing: on rotating equipment (non-intrinsically safe meter)	Low - Low Energy Hot		Unit Operator, Authorized Person
Visual inspections and walkthroughs requiring no tools or equipment (e.g., audits, safety walks, administrative tasks and job site visits)	NPA		Check in/out with Unit Operators
Zone E: Remodeling or other major work such as drywall, removal and/or installation of flooring, de-energized electrical work (installing conduit, wiring, etc), moving into/out of, etc. for buildings inside refinery fence line	Low	SR-5 Permitting	Unit Operator, Authorized Person