

ITS BPV Form 12 - Guarded Status Steam Plants Checklist

Date: _____

LOCATION INFORMATION – ENTER INFORMATION REGARDING THE PHYSICAL LOCATION OF THE REFRIGERATION PLANT			
Building Name			
Address		City	Postal Code
Contact Name	Phone Number	Ext.	E-Mail

PLANT LICENSE INFORMATION						
Chief Engineer / Class						
Select One: High Pressure Low Pressure Steam Water						
Safety relief valves set to 15 psig or lower, and greater than 50 bhp in capacity					Yes	No
Safety relief valves set to greater than 15 psig, and less than 150 psig, over 5 bhp in capacity, but not over 50 boiler horsepower in capacity					Yes	No
Plant Capacity (kW)						
Boiler 1 Information	CRN:	Serial Number:	MAWP:	SRV Set & Capacity:	Boiler Size:	
Boiler 2 Information	CRN:	Serial Number:	MAWP:	SRV Set & Capacity:	Boiler Size:	
Boiler 3 Information	CRN:	Serial Number:	MAWP:	SRV Set & Capacity:	Boiler Size:	
Plant Classification:						

Additional Information		
Declaration from owner with confirmation that the plant is subject to regular maintenance and regular testing of its safety limit controls by a power engineer of the required class	Yes	No
List of operator duties provided	Yes	No
Alarm response time provided	Yes	No

ADDITIONAL INFORMATION		
Owner requests an extension to the unattended period greater than 24 hours. If yes, how long? _____	Yes	No
Plant is an unoccupied building	Yes	No

Checklist Items for Guarded Status	Yes	No	Comments/ Remarks
TWO LOW WATER CUT-OFF CONTROLS: CSA B51-19 6.3.2			
Low water cut-off controls installed correctly			
Low water cut-off controls cause safety shut down and lockout			
Low water cut-off devices require manual reset			
Low water cut-off devices initiate audio-visual alarm			
FLAME SAFEGUARD CONTROL: ASME CSD-1: Table CF-1, CF-2			
Flame failure detection system provided with appropriate means of testing			
Flame failure detection system causes a safety shut down and lockout			
Flame failure detection system requires manual reset			
Flame failure detection system initiates audio-visual alarm			
HIGH STEAM PRESSURE CUT-OFF LIMIT CONTROL: ASME CSD-1: CW-300			
High pressure cut-off installed correctly			
High pressure cut-off limit control causes safety shut down and lockout			
High pressure cut-off limit control requires manual reset			
High pressure cut-off limit control devices initiates audio-visual alarm			
PRESSURE/TROL/HI-LIMIT OVER-RIDE SWITCHES: ASME CSD-1: CW-300			
Momentary contact switch installed to override the function of the operating pressure control			
Second momentary contact switch installed to override the function of the high pressure cut-off limit control			
Power engineer can cause boiler pressure to raise above the set point of the operating pressure control, to test the high pressure cut-off limit control			
Power engineer can cause boiler pressure to raise above the set point of the high pressure cut-off limit control, to enable the safety relief valve or valves to be tested			
HIGH-FIRE REQUIREMENT FOR OVER-RIDE SWITCHES: ASME CSD-1: CW-300			
Activation of either pressure-control over-ride switch places the firing rate control of the boiler in its "high fire" position (only while the momentary contact switch is activated).			
COMBUSTION AIR PROVING SWITCH (where applicable): CSA B149.1-15: Clauses 8.3.4			
Three-way valve installed in the airline feeding the air-proving switch			
Operation of three-way valve simulates a combustion air failure			
Three-way valve cause a safety shutdown and lockout, requiring manual reset.			
MAIN BURNER FUEL SAFETY SHUT-OFF VALVES: CSA B139-19, CSA B149.3-15, ASME CSD-1 CF-300			
Each fuel train equipped with redundant main fuel safety shut-off valves			
Locations of safety shut-off valves, gauges, hand-operated valves, control devices, and other fuel train fittings conform to the applicable sections of the CSA B149.3, CSA B139 and ASME CSD-1 code			

Checklist Items for Guarded Status	Yes	No	Comments/ Remarks
FUEL TRAIN GAUGES: CSA B149.3-15 Clause 6.22			
An additional hand-operated valve is located in the gas train upstream of the first main-fuel safety shut-off valve and downstream of the pilot gas take-off connection (standing-pilot applications)			
An additional pressure gauge is mounted between the two main safety shut-off valves (all fuel train configurations including "double-block and bleed" applications)			
Fuel pressure gauge is mounted downstream of the main fuel safety shut-off valves and upstream of the hand-firing valve (all fuel train configurations)			
Fuel pressure gauge is mounted upstream of the main fuel safety shut-off valves and downstream of the appliance fuel pressure regulator (all fuel train configurations)			
Any alterations to the fuel train proceeded after an application for a ITS "Special Acceptance" has been made			
All fuel train alterations are made by a certified, qualified, and licensed tradesperson			
LOW FUEL PRESSURE CUT-OFF SWITCH (where applicable): ASME CSD-1 CF-162			
Low fuel pressure switch causes a safety shut down and lockout			
Low fuel pressure switch requires manual reset			
Low fuel pressure switch initiates an audio-visual alarm			
HIGH FUEL PRESSURE CUT-OFF SWITCH (where applicable): ASME CSD-1 CF-162			
High fuel pressure switch causes a safety shut down and lockout			
High fuel pressure switch requires manual reset			
High fuel pressure switch initiates an audio-visual alarm			
LOW ATOMIZING AIR PRESSURE/LOW ATOMIZING STEAM PRESSURE CUT-OFF SWITCH (where applicable): ASME CSD-1 CF-450			
Low atomizing air/steam pressure switch causes a safety shut down and lockout			
Low atomizing air/steam pressure switch requires manual reset			
Low atomizing air/steam pressure switch initiates an audio-visual alarm			
PIPING OF SAFETY VALVES: CSA B51-19 Clause 12.2.2.3			
Safety valves are piped to discharge at a safe outdoor location, using approved drip-pan elbows.			
GUARDED STATUS CONTROL PANELS			
All audio-visual readouts and momentary contact switches as itemized above are combined at a single "Guarded Status Panel"			
"Guarded Status Panel" in sight of the controls being tested			
"Guarded Status Panel" certified by an approved testing lab			
TRAINING AND PROCEDURES			
Operators are trained on how to operate the guarded status panel and on how to conduct the Guarded Status tests.			
There is a documented training program for operators			
Refresher classes will be provided as necessary			

Checklist Items for Guarded Status	Yes	No	Comments/ Remarks
The plant engineers is capable of performing the guarded status checks, if the inspector desires to witness tests.			
TESTING AND MAINTENANCE REQUIREMENTS			
Inspection and testing plan in place for periodic testing of all controls and safety devices is necessary to determine that the controls are operating as designed in place			
Preventative Maintenance program developed			
Records of all maintenance work performed on the plant are maintained.			
All records are available to a provincial inspector on request.			

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INSPECTION ADMINISTRATION		
Name of Inspector		
Plant meets the minimum safety code standards and other stipulated regulatory requirements	YES	NO
Are there any documentation associated with acceptance?	YES	NO
Any additional remark/note or comment:		
Is any additional documentation or information required?	Yes	No
If yes, list documents:		
Date requested:	Date received:	
Are there any inspection deficiencies noted?	YES	NO
Are there any related variance files?	YES	NO
If yes, file number: _____		
Any related field approval file?	YES	NO
If yes, file number: _____		
Signature of Inspector	Date: _____	

FINAL ADMINISTRATION		
Accepted and letter of guarded status acceptance issued :	Yes	No
Signature of Engineer	Date: _____	
Additional note:		