

**ITS BPV Form 11 - Guarded Status Refrigeration 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 LICENCE INFORMATION		
Chief Engineer / Class / Licence Number		
Plant has field-erected refrigerant piping	Yes	No
If yes, is the high-side pressures in excess of 15 psig and rated capacity in excess of 50 tons?	Yes	No
Plant is factory built, pressure/leak tested, and having no field-erected refrigerant piping connections	Yes	No
If yes, is the high-side pressures in excess of 15 psig and rated capacity in excess of 100 tons?	Yes	No
Plant tonnage (ton)		
Plant tonnage determined by:		
Manufacturer's nameplate rating		
Compressor driver horsepower rating (one driver horsepower equal to one ton of refrigeration)		
Calculated evaporator tonnage, based upon maximum actual operating and design conditions.		
Type of plant:		
Refrigeration		
Air Compressor		
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
Other items requiring modification or upgrade, as per CSA B52 Mechanical Refrigeration code	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	Yes	No
Plant is an unoccupied building	Yes	No

Checklist Items for Guarded Status	Yes	No	Comments/ Remarks
<b>MACHINERY ROOM: CSA B52-18 Clauses 6.2, 6.3</b>			
Meets the latest CSA B52 machinery room requirements			
Machinery room is upgraded to the requirements of a "Class T" machine room			
<b>EMERGENCY SHUT DOWN SWITCH: CSA B52-18 Clause 6.3</b>			
Remote pilot control of the mechanical equipment located immediately outside the machinery room			
<b>AUDIO-VISUAL ALARM READ-OUT SYSTEM: CSA B52-18 Clauses 6.2.3, 6.3, 9.2</b>			
Audio-visual read-out systems present			
Audio-visual read-out systems located in the refrigeration plant and at least one other remote location selected by the owner			
Audio alarm equipped with silencing buttons			
<b>HIGH PRESSURE LIMIT CONTROL: CSA B52-18 Clauses 6.3, 7.2, 9.2</b>			
Energizes an Audio- Visual Alarm			
Requires a manual reset before the plant can be restarted			
Devised by a means to bypass the function of the operating control while the high limit is being tested			
Pressure gauge installed in the vicinity of the control being tested			
<b>HIGH DISCHARGE GAS TEMPERATURE LIMIT CONTROL: CSA B52-18 Clauses 6.3, 9.2</b>			
Energizes an Audio- Visual Alarm			
Requires a manual reset before the plant can be restarted			
Thermometer installed in the vicinity of the control for testing			
Temperature-sensitive limit control is of the type to allow ease of testing for set point accuracy			
<b>LOW OIL PRESSURE SENSOR: CSA B52-18 Clauses 6.3, 7.2, 9.2</b>			
Energizes an Audio- Visual Alarm			
Requires a manual reset before the plant can be restarted			
Low-oil pressure sensor shall have the shortest time-delay heater installed, as permitted by the compressor manufacturer			
Labeled three-way valve installed in the pressure sensing line, with one of the lines returning back to the crankcase (Testing purpose)			
<b>COMPRESSOR JACKET/COOLING WATER/TEMPERATURE CONTROL: CSA B52-18 Clauses 6.2, 6.3, 7.2, 9.2</b>			
Energizes an Audio- Visual Alarm			
Requires a manual reset before the plant can be restarted			
Temperature-sensitive limit control is of the type to allow ease of testing for set point accuracy			
Cooling water flow is proven by a pressure-sensitive element with a means shall be provided to easily prove its functionality			

Checklist Items for Guarded Status	Yes	No	Comments/ Remarks
<b>MECHANICAL ROOM VENTILATION AND REFRIGERATION VAPOUR DETECTION SYSTEM: CSA B52-18 Clauses 6.2.5, 6.3, 9.2</b>			
Ventilation system continuously operating			
Air-proving device used to prove the ventilation system is operating, and trigger an Audio-Visual Alarm to indicate ventilation system failure			
Mechanical ventilating system, detectors, and alarms, are subject to annual testing and calibration or more frequently in accordance with manufacturer's recommendations			
<b>REFRIGERATION VAPOUR DETECTION SYSTEM: CSA B52-18 Clauses 6.2, 6.3, 8.4.2</b>			
An approved two-stage refrigeration detection system shall be used			
The first-stage (low level) alarm start supervised alarm annunciation, including a strobe light and audible alarm, and activate the mechanical ventilation system on high airflow			
Second-stage alarm shut down the refrigeration plant at or below the threshold limit value for the refrigerant (For ammonia, threshold limit values of up to 300 ppm may be used in accordance with the current B52 Mechanical Refrigeration Code)			
<b>TRAINING AND PROCEDURES</b>			
Emergency procedures posted in a safe and easily accessible location			
Operators trained on how to operate the guarded status panel and on how to conduct the Guarded Status tests.			
Documented maintenance records provided			
Documented training program for operators available			
<b>TESTING AND MAINTENANCE REQUIREMENTS</b>			
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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<b>INSPECTION ADMINISTRATION</b>		
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
Other items requiring modification or upgrade, as per CSA B52 Mechanical Refrigeration code	Yes	No
Additional remark(s)/note(s) or comment(s):		
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: _____	

<b>FINAL ADMINISTRATION</b>		
Accepted and letter of guarded status acceptance issued :	Yes	No
Signature of engineer	Date: _____	
Additional note(s):		