

Final Qualification Review Vehicle Demonstration and Safety Inspection Checklist

Team: _____

Category	Initial Inspection	Additional Inspection
Snowplow Vehicle Physical Dimensions		
Length: ≤ 2 m		
Width: ≤ 2 m		
Height: ≤ 2 m		
Snowplow Vehicle: Tires		
Tires: rubber; plastic or rubber augmentations		
Snowplow Vehicle Speed Limit		
Software review (printout): ≤ 2 m/s		
Snowplow Vehicle Power & Ground		
Power Source: combustible fuel and/or batteries		
Electrical Ground		
Snowplow Vehicle Safety: Physical Kill Switch		
Color: red		
Diameter: ≥ 40 mm		
No protruding objects within 30 cm of Switch		
Vehicle Stop: ≤ 3 m from Switch activation		
No Single Point of Failure: demonstrate Switch routing to motor power cut-off		
Snowplow Vehicle Safety: Wireless Kill Switch		
Range: ≥ 50 m		
Vehicle stop: ≤ 3 m from Switch activation		
No Single Point of Failure: demonstrate Switch routing to motor power cut-off		
Snowplow Vehicle Safety: Navigation Sensors		
Sensors: lasers eye-safe (Class 1)		
Laser Harness: lasers safely mounted and secured		
Laser Boresight: points towards ground; angle at or below the local horizontal plane of device		

Navigation Aiding Sources: Operation		
Fluids or objects expelled by aiding source		
Navigation Aiding Sources: Power & Ground		
Power Source: batteries		
Electrical Ground		
Navigation Aiding Sources: Navigation Sensors		
Sensors: lasers eye-safe (Class 1)		
Laser Harness: lasers safely mounted and secured		
Laser Boresight: points towards ground; angle at or below the local horizontal plane of device		
Vehicle Operation		
Autonomous Operation		
Fluids or objects expelled by vehicle		