

WWSSG Data Sheet

Contract or Licence #:

Location: _____

Precipitation Zone: _____

Water Input Operational Limits:

Shift end (12 hr.): _____ 24-hr _____ 48-hr _____ 72-hr: _____

DIRECTIONS:

Measure temperature and precipitation from gauge at start and end of shift. Record these numbers. Start and end of shift numbers can be used as 12-hour precipitation totals even though work shift length is closer to 10 than 12 hours (so actual measured numbers are more like 14-hour and 10-hour totals).

Add the two precipitation numbers from **end of last shift** and **start of new day's shift** together to determine today's 24 hour precipitation total.

Add yesterday's 24 hour total to today's 24 hour total to determine today's 48 hour total.

Add yesterday's 48 hour total to today's 24 hour total to determine today's 72 hour total.

Count number of Other Risk Factors checked and write down this number (0 to 6) as Zone Modifier. Add this number to Precipitation Zone to determine Modified Zone.

Check 12 hour (start and end of shift), 24 hour, 48 hour and 72 hour precipitation totals against Modified Zone thresholds. Shut down if one or more totals exceed thresholds.

Other Risk Factors:

- **RoS:** Rain falling on snow (any amount of snow) at the job site;
- **WS:** Warm temperatures (greater than 5 °C at the gauge) with any amount snow present on the ground at the job site
- **HW:** High winds (windspeed reported or predicted >60 km/h, or visibly breaking branches, or causing windthrow), at the job site;
- **VW:** Very wet conditions (applies during any period of three weeks (21 days) or longer, with precipitation recorded on every day)
- **HSF:** Visibly high stream flow (ditches full and overflowing onto roads, culverts discharging at capacity, culverts blocked by debris flow and diverting water to adjacent streams, floodwater present on adjacent highways, etc.)
- **E:** Earthquakes of magnitude 5.0 or greater within last week, reported with epicenter within 50 km of work site.

If the presence of additional risk factors increases the zone beyond Zone 6, i.e. beyond the “identified unstable conditions” zone, work should shut down regardless of whether or not the rainfall shutdown value has been exceeded, and should remain shut down until the additional risk factors are no longer present.

If precipitation is intense during the work shift, it may be necessary to check the gauge more frequently than twice a day to determine if 12-hour shutdown threshold is exceeded. Do not empty the gauge on these extra checks or accurate 12-hour precipitation totals will be lost.

Table 1: Shutdown Criteria by Zone within the TSG and TCH Business Areas

Zone	Zone (annual precipitation)	Time Period			
		At start of or before end of shift (12-hr)	24-hr	48-hr	72-hr
1	Very wet (3000 mm to 4000 mm or more)	60 mm	100 mm	150 mm	200 mm
2	Wet (2500 mm to 3000 mm)	50 mm	80 mm	120 mm	160 mm
3	Average (1500 mm to 2500 mm)	40 mm	70 mm	100 mm	130 mm
4	Dry (750 mm to 1500 mm)	30 mm	50 mm	80 mm	110 mm
5	Very dry (less than 750 mm)	20 mm	30 mm	50 mm	80 mm
6	Identified Unstable Conditions	10 mm	20 mm	30 mm	40 mm

Resumption of Work Following Shut Down

Once 12-hour or 24-hour shutdown criteria have been exceeded, work should remain shut down for at least 24 hours after the hazardous conditions end. In the case of 48-hour or 72-hour rainfall criteria being exceeded, work should remain shut down for at least two days (48 hours) after shutdown criteria have been exceeded. If workers and supervisors believe it is safe for work to resume before the recommended 24- or 48-hour period is over, they should consult a qualified professional to confirm and document this before resuming work.

