



#### **SECTION 1: TRACKING DETAILS**

NCR #: 14120305

Service Area: SA14 - Nicola

Name of Contractor: VSA Hwy Maintenance NCR405

Date: March 5, 2012

Prepared by: H.Nelson

#### SECTION 2: DESCRIPTION OF NON-CONFORMANCE

Quote the contractual requirement which is not being met and/or the relevant section of the QMS. Also quote location of non-conformance, e.g., highway number, foreman area, when applicable Failure to meet Maintenance Specification 3-340 Highway condition Reporting Section 3.1 a) vii)
Coquihalla Hwy #5 experienced closures on the morning of March 1/12 from approximately 1:30am to 8:00am in various locations from roughly the Falls Lake exit through to Box Canyon Chain up without VSA providing the applicable notices into Drive BC as required.

#### SECTION 3: REQUIRED CORRECTION

YES		Deadline for correction:	
NO		MOT accepts the non-conforming product/s	service
		Reason:	
N/A	X	Reason:	
Signatu	ires u	pon completion of required correction:	
Contrac	ctor re	epresentative confirms correction complete.	Contractor Signature:
Date ac	ccept	ed by MOT: Click here to enter a date.	MOT Representative:

Does Contractor have to re-do/do the work? Select N/A if non-conformance is not curable or opportunity to rectify has passed.

### SECTION 4: ROOT CAUSE ANALYSIS & CORRECTIVE ACTION PLAN

- 4A) Deadline for submission of corrective action plan to MOT: March 9, 2012
- 4B) Root Cause Analysis: (Why did the non-conformance occur?)
- 4C) Corrective Action Plan: (How will the contractor prevent re-occurrence of the non-conformance?)

Signatures:

SECTION 1, 2 AND 3 TO BE COMPLETED BY MOT SECTION 4 TO BE COMPLETED BY THE CONTRACTOR



Ministry of Transportation and Infrastructure

Name:	Contractor Signature:
	e corrective action plan. Acceptance does not negate the contractor's rvices in accordance with the contract requirements.
Name:	MOT Representative:



Ministry of Transportation and Infrastructure

#### SECTION 4: ROOT CAUSE ANALYSIS & CORRECTIVE ACTION PLAN

4A) Deadline for submission of corrective action plan to MoTI: March 9, 2012

**4B) Root Cause Analysis:** Between 18:00 on March 4, 2012 and 12:00 on March 5, 2012 approx. 44 cm of snow fell in the Coquihalla Summit area with moderate winds. At approximately 00:30 a semi-trailer jackknifed 500m south of the Great Bear Snowshed blocking the southbound lanes and was struck by two passenger vehicles. The Coldwater RF1 contacted PHCC shortly after the accident occurred to have RCMP, Ambulance and an Area Manager attend the MVI and had AEL flaggers go to the Zopkios Brake Check and stop all traffic southbound down the hill. At 01:18 CW14 contacted K30 and advised temp road blockage S/B at snowshed for under 30 minutes, can't put major event in DriveBC for less than 30 minutes. CW14 asked K30 to call back in 30 minutes

01:50 - Should have it cleaned up within 30 min.

02:18 - Still cleaning up.

02:48 - Still cleaning up.

03:19 - Not available.

03:27 - 20 minutes to open.

03:59 - Every thing cleaned up and road is open.

VSA could have had single lane traffic past the accident scene within 30 minutes of it occurring as the jackknifed truck was moved prior to the ambulance arriving at approx 01:30 and blocking the lane that VSA had opened. First ambulance left the scene and the RCMP arrived at approx. 02:18 and VSA was told by the RCMP that they could not open the road until Fraser Valley Traffic arrived to complete an investigation. Up until this time CW14 had felt confident that VSA would be able to have traffic flowing past the accident scene within a 30 minute timeframe not warranting a major event on DriveBC. It would appear that the Ambulance and RCMP did not have the same timeframe in place. The notes from CW14 (copy attached) show that he was in communication with K30 and he felt that the road could be opened much sooner than it did.

**4C)** Corrective Action Plan: VSA requires written direction on how the MoTI wants VSA to report events on DriveBC. This written direction will need to address items such as:

- Road is blocked/closed does VSA close the highway between towns like Merritt Hope?
- If police and ambulance attend should VSA automatically enter a major event on DriveBC and close the highway and update every 30 minutes, every hour?
- Should VSA put in a longer closure with a high confidence or a tight timeline with a low confidence?
- At what point does VSA close the road between towns as opposed to at the scene?

Once VSA has this written direction from MoTI they will review with RF1, RF2, superintendents and management to ensure they are in line with the MoTI written direction.

VSA will review this occurrence with the RF1 that was involved and ensure that when he was informed that Fraser Valley Traffic was to do an investigation he should have at that point put a major event in DriveBC closing the highway.



Ministry of Transportation and Infrastructure

Signatures:

Contractor representative commits to implementing the corrective action plan and confirms that the plan is intended to prevent the re-occurrence of the Non-conformance identified in section 2 of this report...

Name: TED SMART

Contractor Signature:

MOT representative accepts the corrective action plan. Acceptance does not negate the contractor's responsibility to perform the services in accordance with the contract requirements.

Name: Phris Knavlowich

MOT Representative: 100

Date: March 9, 2012

INSTRUCTIONS:

SECTION 1, 2 AND 3 TO BE COMPLETED BY MOT SECTION 4 TO BE COMPLETED BY THE CONTRACTOR

#### Notes on MVA 200M south of snowshed, southbound, March 5, 2012, 0030.

This is as accurate as I remember it, there was lots going on besides the MVA. (Heavy snow, spinning out trucks northbound, equipment failures etc.)

The accident occurred at approximately 1230am just ahead of two plow trucks, see VSA 017 attached.

s.22

I was in the grader on the hill when Lorne called me about the incident. I radioed PHCC and asked for police and ambulance. I asked them to contact Bob Alexandruk as well, as I wasn't sure (at that time) of a time frame for clearing the incident. I also asked AEL flagger (AEL26) to go to the Zopkios brake check and stop all southbound traffic. I informed K30 that we had a blockage and it should be less than 30 minutes, based on what I thought was the ease in clearing the scene to allow one lane of vehicles to pass by. Meanwhile, a single axle Jamie Davis tow truck backed to the scene to straighten out the jackknifed truck so we could pass by and get the traffic moving.

S.22

Shortly after the

truck was straightened, the ambulance arrived and parked in such a way as to delay our anticipated opening. When K30 called to update, I gave them another 30 minutes, which I thought was generous as I assumed the ambulance would be on its way in short order. The ambulance left and the police arrived and stopped on the northbound side. We were about ready to move the plow trucks but they said no, we can't move anything until Fraser valley Traffic arrived to investigate, I think the officers may have been from Abbotsford. I explained that we had a problem with mounting volumes of traffic behind our flagger at the brake check, and that we haven't been able to plow the road north either. We were not allowed to proceed. Meanwhile a second ambulance arrived and blocked our exit. They parked while they evaluated the other two victims, who claimed they were not injured. I had gone back to my grader to keep warm and dry and after a time period I radioed Glen to ask the ambulance operator if he could move so we could get through. The ambulance operators answer was something to the effect of, "I'll move when I'm ready." Another half hour to K30, but I think my confidence was getting low at this point. Then the Fraser Valley Traffic arrived and we were required to wait for their "investigation" before we could plow the road and let the traffic go.

It took 30 to 45 minutes to clean the road before we could release the traffic. By then the trucks and cars were backed up nearly to Falls Lake, many unchained trucks were stuck, and we had extremely slippery conditions which created more temporary blockages and delays. I asked for a southbound chain up to be implemented at 0450.

Bob Alexandruk arrived around 2am but was stuck at the back of the lineup. We were in touch by radio and 1 kept him updated.

This is not the first time I have had issues with some police officers and ambulance operators not looking at, or being interested in, the "big picture".





To: VSA - Ministry Unit #14
From: Northwest Weathernet

1-800-937-8676 24/7

x0 (Seattle)

x105 (Kamloops)

Forecast Date:

Sunday, March 04, 2012

Forecast Begins: 6 pm

Definition and Policy on "Concern Levels" at:

Forecaster: pdb

http://www.nw-weathernet.com/concernlevels.htm

#### Discussion

Sharp cold front is sweeping through the area. New road snow is expected as the snow line dips sharply in the late-night hours. Minor snow accums are expected most areas with some elevations, with a focus on the Coquihalla Summit overnight. As we get into Monday the heavier precip backs off and temperatures drop. Road snow accums are anticipated all areas, with a concentration on the morning hours.

#### Fraser Canyon

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	ı	S
Sunday night	Cloudy. Some rain overnight. Windy.	6			0	0	0
Monday	Cloudy goes to mostly cloudy. Rain showers turn to snow showers.	6		1-5	0	0	6

#### **Botanie Road**

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	ŀ	S
Sunday night	Cloudy. Some rain and snow overnight.	1	dropping to 1000	0-3	0	4	7
Monday	Mostly cloudy. Few snow flurries.	1		1-3	0	4	6

# Highway 8 and Highway 1 (Lytton - Spences Bridge)

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Sunday night	Cloudy. Some rain overnight.	2			0	0	0
Monday	Mostly cloudy. Few snow flurries.	4		Trace-2	0	0	6

# Merritt - 5A North - Douglas Lake

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Sunday night	Cloudy. Some rain overnight.	3	211224		0	0	0
Monday	Mostly cloudy. Few snow flurries.	3		Trace-2	0	0	6

# Logan Lake - Lac Le Jeune

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Sunday night	Cloudy. Some snow overnight. Windy.	0		2-5	0	4	8
Monday	Cloudy. Snow. Windy.	0		2-5	0	4	7

# Elkhart - Okanagan Connector

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Sunday night	Cloudy. Some snow late night. Windy.	-1		2-5	0	4	7
Monday	Cloudy. Snow. Windy.	0		4-8	0	4	8

### Aspen Grove

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Sunday night	Cloudy. Some snow late night. Windy.	0		2-5	0	4	6
Monday	Cloudy with breaks in the overcast. Snow goes to snow showers.	0		3-6	0	4	7

# Coquihalla – Hwy 5/97C Junction

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Sunday night	Cloudy. Some snow overnight. Windy.	0		2-5	0	4	7
Monday	Cloudy. Snow. Windy.	1		3-6	0	4	8

# Coquihalla – Snowshed Hill

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	I.	S
Sunday night	Cloudy. Rain increases early evening, then turns to snow.	0	900	10-15	0	9	9
Monday	Cloudy. Snow.	0		5-10	0	4	9

### **Extended Forecast**

There will be a few hangback snow flurries evening hours, mainly over the Coq, Aspen Grove, and the Connector. Otherwise look for clearing skies with a solid freeze. Tuesday will be mostly clear and dry.



To: VSA - Ministry Unit #14
From: Northwest Weathernet

1-800-937-8676 24/7

x0 (Seattle)

x105 (Kamloops)

Forecast Date:

Monday, March 05, 2012

Forecast Begins: 6 am

Definition and Policy on "Concern Levels" at:

Forecaster: RMS

http://www.nw-weathernet.com/concernlevels.htm

#### Discussion

Snow level will be dropping down to the valley floors this morning with new snow accums expected for most of the area. The heaviest snow will be over the higher elevations today with the Snowshed area especially getting hit hard. Rain down in the canyon areas is also expected to turn to wet snow this morning causing some slushy accums. High temps today will be early in the morning with dropping temps through the day.

Snow showers continue this evening, especially over the higher elevations, then gradually taper off after midnight tonight. New snow accums tonight should be fairly light, however, ice is a high concern all areas. Temps drop well below freezing everywhere tonight.

### Fraser Canyon

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	5
Monday	Cloudy goes to mostly cloudy. Rain showers turn to snow showers.	6		1-5	0	0	6
Monday night	Partial clearing. Snow showers ending.	-1		trace-2	0	9	4

#### **Botanie Road**

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Mostly cloudy. Few snow flurries.	1		1-3	0	4	6
Monday night	Partial clearing. Flurries ending.	-5		trace-1	0	9	4

# Highway 8 and Highway 1 (Lytton - Spences Bridge)

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Mostly cloudy. Few snow flurries.	4		Trace-2	0	0	6
Monday night	Partial clearing. Flurries ending.	-3		trace-1	0	9	4

# Merritt - 5A North - Douglas Lake

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Mostly cloudy. Few snow flurries.	3		Trace-2	0	0	6
Monday night	Partial clearing. Flurries ending.	-4		trace-1	0	9	4

# Logan Lake - Lac Le Jeune

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	t	S
Monday	Cloudy. Snow, breaking up in the afternoon. Windy.	0		2-5	0	4	7
Monday night	Partial clearing. Snow showers end overnight.	-7		1-4	0	9	7

# Elkhart - Okanagan Connector

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Cloudy. Snow, breaking up in the afternoon. Windy.	-1		4-8	0	4	8
Monday night	Mostly cloudy. Snow showers end overnight.	-8		2-5	0	9	8

# Aspen Grove

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Cloudy with breaks in the overcast. Snow goes to snow showers.	0		3-6	0	4	7
Monday night	Mostly cloudy. Snow showers end overnight.	-5		1-4	0	9	7

### Coquihalla - Hwy 5/97C Junction

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Cloudy. Snow, breaking up in the afternoon. Windy.	1		3-6	0	4	8
Monday night	Partial clearing late. Decreasing snow showers, ending late.	-5		1-3	0	9	7

### Coquihalla - Snowshed Hill

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Monday	Cloudy. Snow, breaking up in the afternoon.	-1		8-15	0	8	9
Monday night	Mostly cloudy. Occasional snow showers, tapering off late.	-6		2-5	0	9	9

### **Extended Forecast**

Expect mainly dry weather Tuesday on through the rest of the week. Temps still cool Tuesday with hard freezes Tuesday night. Temps will be warming again during the second half of the week though with minimal concerns.



Ministry of Transportation and Infrastructure

SECTION 1: TRACKING DETAILS

NCR #:14120114-2

Service Area: SA14 - Nicola

Name of Contractor: VSA Hwy Maintenance

Date: January 17, 2012

Prepared by: Bob Alexandruk

### SECTION 2: DESCRIPTION OF NON-CONFORMANCE

3-300 Highway Snow removal: The contractor must keep free of snow, ice, and slush, Rest Areas, pull-outs, parking areas, and other areas designated by the Province with the same priority as a Highway of the next lower class from the adjacent Highway.

On January 14, 2012 snow was measured in the runaway lanes, at the Snow Shed Hill, that exceeded the maximum allowable accumulation. Snow depth in the runaway lanes was measured at 31 cm, which exceeded the maximum allowable amount for a Class "B' highway. The berm created by ploughing activities on the Highway was also not removed from in front of the run-away lanes. The measurement were taken in Runaway lane # 1 at approx 10 am.

Does Contractor have to re-do/do the work? Select N/A if non-conformance is not curable or opportunity to rectify has passed.

The Runaway Lanes are located on the Coguihalla, Hwy 5, Segement 2005 LKI 72.17

### SECTION 3: REQUIRED CORRECTION

YES		Deadline for correction: Click here to enter	a date.
NO		MOT accepts the non-conforming product/s	service
	-	Reason:	
N/A	X	Reason: The storm event has passed, and	I the area has been corrected.
Signatu	ıres ı	pon completion of required correction:	
Contrac	ctor re	epresentative confirms correction complete.	Contractor Signature:
Date a	cept	ed by MOT: N/A	MOT Representative: Millen An

Distribution: Original to District; Copy to Contractor

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Ministry of Transportation and Infrastructure

#### SECTION 4: ROOT CAUSE ANALYSIS & CORRECTIVE ACTION PLAN

4A) Deadline for submission of corrective action plan to MoTI: January 24 2012

4B) Root Cause Analysis: Between 21:00 on January 13, 2012 and 19:00 on January 14, 2012 approx. 25 cm of snow fell in the Coquihalla Summit area with moderate to strong winds. VSA had 8 pieces of equipment and operators on the night shift on January 13, 2012 of which 6 stayed overtime in the morning. VSA had 8 pieces of equipment and operators on the day shift plus SO146 and the towplow with an operator from Merritt working between Larson Hill and Falls Lake on the day shift on January 14, 2012. All of the operators including the Merritt operator stayed overtime at the end of their shifts. VSA's practice which has been acceptable to the MoTI in the past is to focus the equipment on clearing the snow and restoring traction in the travelled lanes of the highway and clearing the berm created by plowing activities from in front of the runaway lanes then clearing the runaway lanes in a timely manner during the storm cycle. During this storm event the wing on one of the graders was damaged and the wing could not be used. VSA did not remove the berm in front of the runaway lane during this storm.

**4C)** Corrective Action Plan: VSA has instructed all Road Foremen and Superintendents to ensure that the berm created by plowing activities from in front of the runaway is removed by the grader during the snow event and clear the runaway lanes in a timely manner during the storm cycle. VSA successfully implemented this during the storm that occurred on the night of January 16, 2012 and kept the berm cleared in front of the runaway lanes and cleared the runaway lanes with the blower on January 18, 2012

Distribution: Original to District; Copy to Contractor



Ministry of Transportation and Infrastructure

Signatures
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Contractor representative commits to implementing the corrective action plan and confirms that the plan is intended to prevent the re-occurrence of the Non-conformance identified in section 2 of this report..

Name: TED SMART

Contractor Signature:

MOT representative accepts the corrective action plan. Acceptance does not negate the contractor's responsibility to perform the services in accordance with the contract requirements.

Name: Bob Hlexandruk

MOT Representative: Bollom

INSTRUCTIONS:

SECTION 1, 2 AND 3 TO BE COMPLETED BY MOT SECTION 4 TO BE COMPLETED BY THE CONTRACTOR

### Ku ylowich, Dennis TRAN:E.

From: Kurylowich, Dennis TRAN:EX

Sent: Wednesday, January 11, 2012 9:48 PM

To: XT:DBC MC BlairBarr.vsahwy TRAN:IN; Alexandruk, Bob TRAN:EX; Cumming, Dan

TRAN:EX; McDonald, Brent G TRAN:EX; Lutter, Jurgen K TRAN:EX; Eland, Sherry TRAN:EX; Nelson, Harvey TRAN:EX; XT:DBC MC GaryZecchel.vsahwy TRAN:IN;

'renns@vsahwy.com'; 'wingbob@vsahwy.com'; 'derekk@vsahwy.com'

Subject: Re: Narrow road widths

#### Blair,

In response the runaway lanes were ploughed after they were brought to the supervisor's attention on Sunday afternoon by MOT. The work was finally completed today, the specification to clear the lanes is based on snow accumulation. The runaway lanes are an important safety feature of the highway and must be cleared in a timely manner. A five day window to complete the work is not acceptable.

The traveled portions of the highway must be pushed back shoulder line to fog line, including de-accel and acceleration lanes during the storm cycle prior to accumulation exceeding the allowable limit of the specifications.

The R/A areas are to ploughed out during storm cycles prior to the accumulations exceeding the Class "B" classification specifications. The Ministry recognized that the Britton Creek area can be problematic, but there have been opportunity's to clean the area at night when sledders and truckers are not present. Please take advantage of the times when the lots are empty.

Crossing pushing and cleaning the snow storage areas is an ongoing activity that need to be addressed after each storm maximizing the storage capacity prior to the next event, it is crucial that we do not get into a situation where we have no where to deposit the snow during a storm cycle resulting in the loss of the slow lanes and the narrowing of the traveled portions. During periods of chain up it is critical that the maximum lane widths is available to safely move traffic through the corridor.

The entrance to the shed when tied to the traffic volumes, speeds, the transition from light to dark, the melt and thaw of the stacked snow and the colder inside deck temperatures warrants a high priority. It should be cleaned following each storm cycle as the crossfall of the highway transitions to the inside or fast lane and has a tendency at times to create an icing problem across the lanes. It should be treated following the time lines established in the specifications.

Please ensure that VSA reviews the specifications with the applicable personal and that the activities are planned within the time lines of Schedule 21.

Regards,
Dennis
Dennis Kurylowich
Operations Mgr.
Service Area 14
Thompson Nicola
Office-250-378-1414
Fax. -250-378-1449

From: Blair Barr [mailto:bbarr@vsahwy.com] Sent: Monday, January 09, 2012 06:14 PM

To: Kurylowich, Dennis TRAN:EX; 'Gary Zecchel' <garyz@okagg.com>

Cc: Alexandruk, Bob TRAN:EX; Lutter, Jurgen K TRAN:EX; McDonald, Brent G TRAN:EX; Cumming, Dan TRAN:EX

Subject: RE: Narrow road widths

Dennis

The run-away lanes on Snowshed hill were ploughed out last night with the grader. During a storm event the grader does maintain the access to the run. It is pass on the hill. Generally the runaway lanes are ploughed out after the priority work on the travelled lanes is complete. The entrance to the Snowshed southbound was originally scheduled for cleaning on Jan 4 however that had to be cancelled due to the increasing avalanche hazard and the proximity of this location to the avalanche path. It is now scheduled to be completed this evening with a front end loader. Cross pushing with a loader did occur over the weekend at Box Canyon chain up and Zopkios brake check. Graders were also used in Britton Creek and Zopkios. Note that VSA could not work effectively in Britton Creek until after the sledders left on Sunday afternoon.

A snow blower (M003) was working part way into night shift on Jan 7 until it broke down in one of the toll plaza rest areas. VSA expects to have M005 running later tomorrow.

The 320 excavator has been moved back from Lytton to Merritt. It needs some maintenance work and then will be moved down to Coldwater; specifically the Zopkios to Falls Lake area.

Also note that we currently have two plow trucks down with clutch issues; S0111 and S0134. One truck (S0111) has been brought to Merritt for repair and has been replaced with S0086.

From: Kurylowich, Dennis TRAN:EX [mailto:Dennis.Kurylowich@gov.bc.ca]

Sent: January-09-12 1:34 PM

To: XT:DBC MC BlairBarr.vsahwy TRAN:IN; 'Gary Zecchel'

Cc: Alexandruk, Bob TRAN:EX; Lutter, Jurgen K TRAN:EX; McDonald, Brent G TRAN:EX; Cumming, Dan TRAN:EX

Subject: Narrow road widths

#### Blair,

The Coquihalla Corridor is an important travel route for the province. We have noticed that over the weekend some key work did not get done, most notably the cleaning of the runaway lanes on the snow shed hill. It should be noted that having an accumulation of over more than the allowable limit of a Class "B" highway puts the lanes out of specification. The runaway lanes need to be ploughed in conjunction with the snowploughing activates during snow events, and keep below the maximum accumulations.

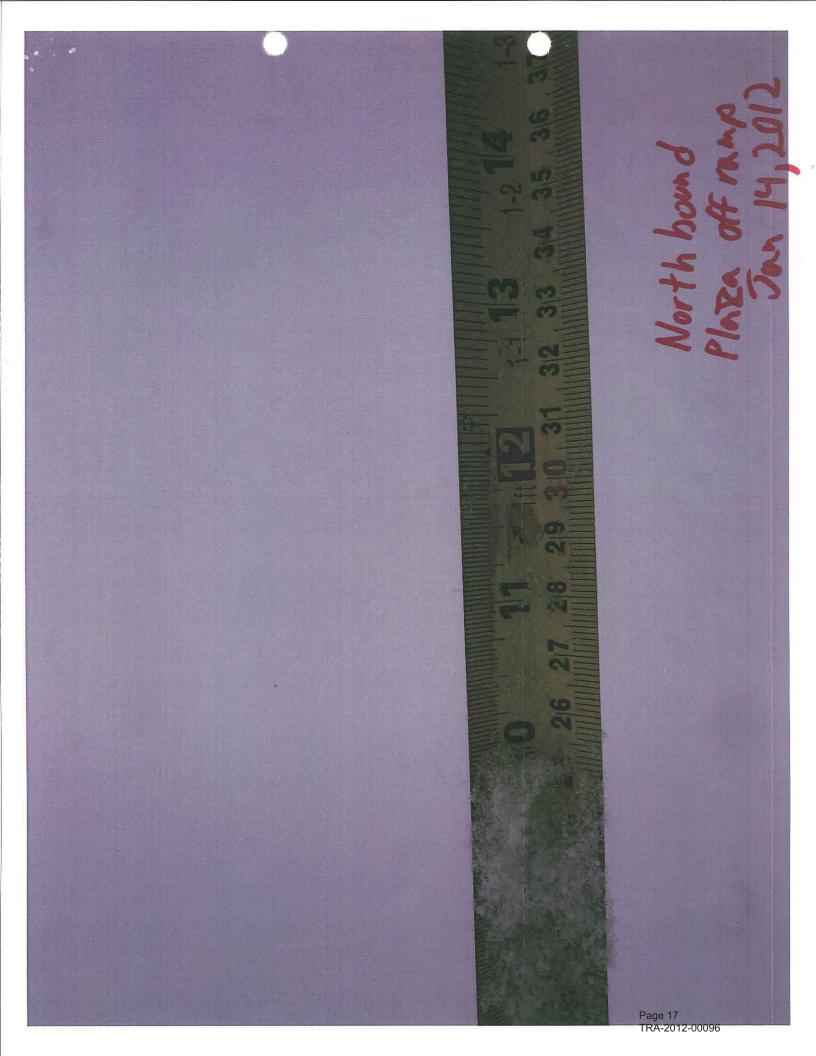
It is also noted that the lanes in various areas between Britton Creek and Box canyon are narrow and the full travelled portion of the highway surface has not been cleared past the shoulder lines. As there was not any significant snowfall since Friday, the question must be asked ,what occurred over the weekend and on Friday evening? The entrance to the snow shed SB is also out of standard as the accumulated snow encroaches on to the travelled portion of the highway.

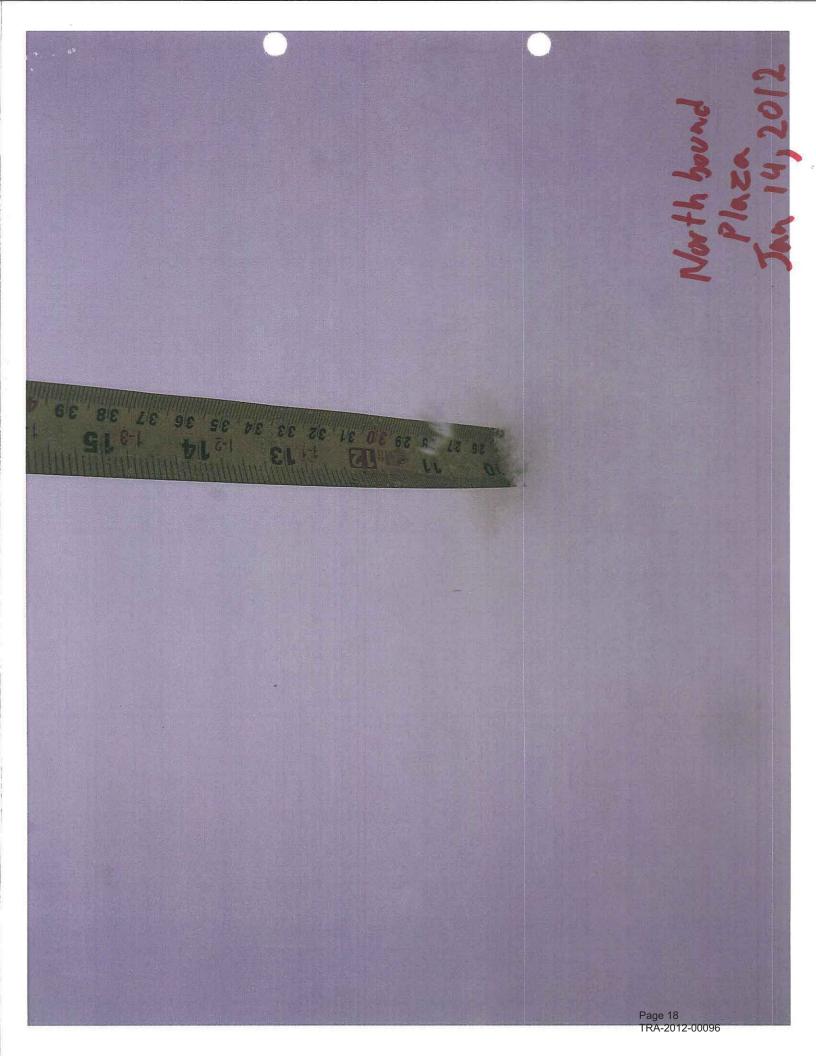
It should be noted that VSA has four days on a Class "A" highway to push all snow and ice past the edge of the shoulder to achieve drainage and to allow for maximum snow storage. Excavators have been used in the past to achieve good results, proactively VSA has maintained storage in the past using this method.

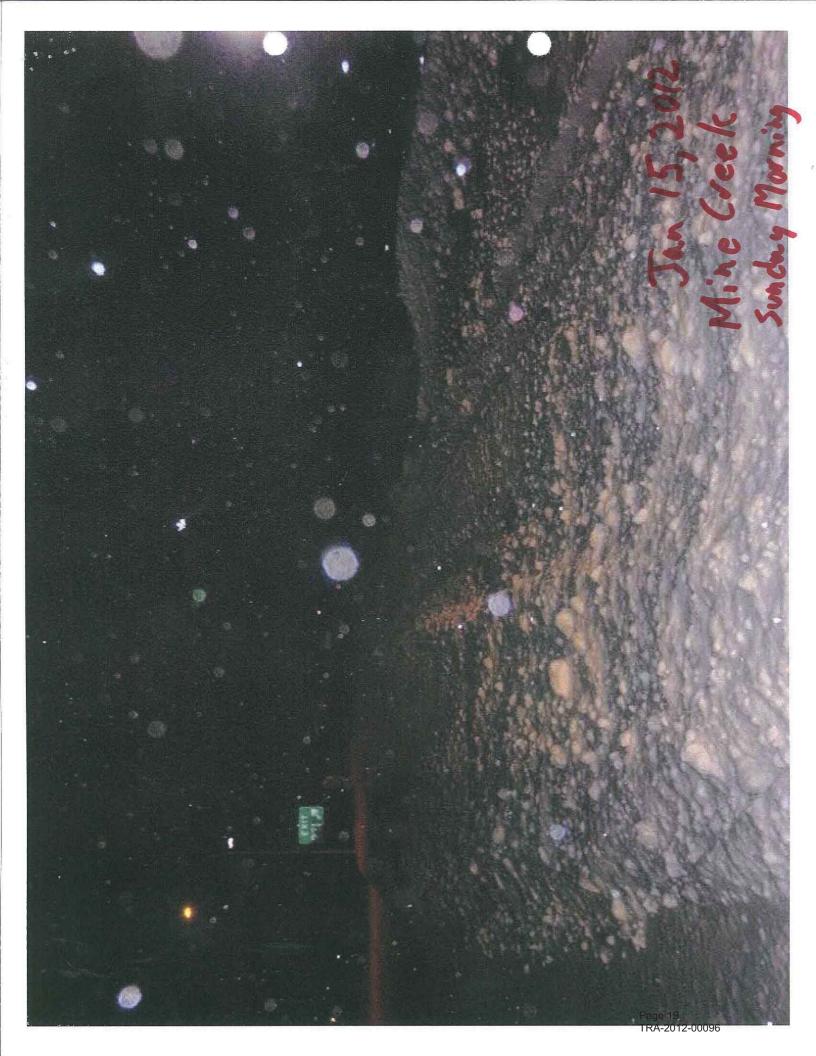
Blair, it is obvious from our observations of this morning that VSA has not or did not have the snow blowers and loaders working over the weekend, please forward a timeline on how VSA will achieve clearing all travelled lanes of snow and in all areas move the snow and ice past the shoulder edge, Please respond.

"Live with intention, Walk to the edge, Choose with no regret, Appreciate your friends."

Dennis Kurylowich
Operations Manager
Ministry of Transportation and Infrastructure
Thompson Nicola
Merritt, B.C.
1-250-378-1414
Fax 1-250-378-1449









# Thompson Nicola District ROAD MONITORING RECORD

Number: MR/14/D/120105/10:30

Service Area: 14, Nicola

Road & Bridge Contractor: VSA Highway Maintenance

Prepared By:

Bob Alexandruk

WEATHER:

OVERCAST

TEMPERATURE:

ROAD CONDITION: N/A

ROAD NAME & #: PHASE 1 HWY 5

MAINTENANCE SPECIFICATION # AND NAME: 3-300 HIGHWAY SNOW REMOVAL

NON-CONFORMANCE ISSUED: if yes NCR #

#### **OBSERVATION & SUMMARY:**

Snow in rest areas is being allowed to accumulate beyond maximum allowable levels. Snow in the NB plaza Washroom was 18cm deep on the morning of the 5<sup>th</sup>. Only a single pass had been done at Britton Creek by 11am. The NB Plaza parking area was not cleaned out until 3:30 pm.



Bob Alexandruk Area Manager Responsible

Email to VSA on Jan 6, 2012. Monitoring Record Disposition



To: VSA - Ministry Unit #14
From: Northwest Weathernet
1-800-937-8676 24/7

x0 (Seattle) x105 (Kamloops)

Forecast Date: Saturday, January 14, 2012

Forecast Begins: 6 pm

Definition and Policy on "Concern Levels" at:

Forecaster: dlg

http://www.nw-weathernet.com/concernlevels.htm

#### Discussion

Heavy snow continues the rest of the afternoon for the Snowshed and then begins to taper off by early evening. Elsewhere periods of snow continue the rest of the afternoon and overnight with some localized heavy accumulations.

Some flurries linger tomorrow mostly in the morning with gusty north winds picking up in the afternoon as arctic air starts to move into the area. Flurries, gusty winds and colder temps for tomorrow night.

### Fraser Canyon

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. A few snow showers.	-4		1-3	0	9	9
Sunday	Cloudy. Chance of flurries. Becoming windy.	-4		0-2	0	8	5

#### **Botanie Road**

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. Periods of light snow.	-5		2-8	0	0	8
Sunday	Cloudy. Morning flurries.	-8		1-3	0	0	8

# Highway 8 and Highway 1 (Lytton - Spences Bridge)

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. Periods of light snow.	-4		1-5	0	2	8
Sunday	Cloudy. Morning flurries. Becoming windy.	-7		Trace-2	0	0	8

# Merritt - 5A North - Douglas Lake

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	5
Saturday night	Cloudy. Periods of light snow.	-4		1-5	0	0	8
Sunday	Cloudy. Morning flurries. Becoming windy.	-7		Trace-2	0	0	8

### Logan Lake - Lac Le Jeune

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. Periods of light snow.	-10		2-8	0	0	8
Sunday	Cloudy. Morning flurries. Becoming windy.	-9		2-5	0	0	8

# Elkhart - Okanagan Connector

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. Periods of light snow.	-10		2-8	0	0	9
Sunday	Cloudy. Morning flurries.	-10		2-5	0	0	8

# Aspen Grove

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. Periods of light snow.	-9		2-8	0	0	8
Sunday	Cloudy. Morning flurries.	-9		2-5	0	0	8

# Coquihalla – Hwy 5/97C Junction

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday night	Cloudy. Periods of light snow.	-9		2-8	0	0	8
Sunday	Cloudy. Morning flurries.	-9		2-5	0	0	8

# Coquihalla – Snowshed Hill

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	I	S
Saturday night	Cloudy. Heavy snow possible early then a few flurries.	-8		2-8	0	0	9
Sunday	Cloudy. Chance of flurries.	-7		0-2	0	0	7

### **Extended Forecast**

Fairly dry on Monday with light snow picking up mostly in the south on Monday night, Tuesday and Wednesday.



To: VSA - Ministry Unit #14
From: Northwest Weathernet

1-800-937-8676 24/7

x0 (Seattle)

x105 (Kamloops)

Forecast Date:

Saturday, January 14, 2012

Forecast Begins: 6 am

Definition and Policy on "Concern Levels" at:

http://www.nw-weathernet.com/concernlevels.htm

Forecaster: sk

#### Discussion

Main snowband tends to move eastward midday/afternoon on Saturday with light snow to follow on Sat night, turning colder.

#### Fraser Canyon

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	5
Saturday	Cloudy. Light snow, most midday.	0		3-6	0	9	9
Saturday night	Cloudy. Light snow.	-6		1-3	0	4	8

#### **Botanie** Road

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Light snow, most midday.	-4		4-8	0	8	9
Saturday night	Cloudy. Light snow.	-11		1-3	0	0	8

# Highway 8 and Highway 1 (Lytton - Spences Bridge)

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Light snow, most midday.	-1		2-5	0	9	9
Saturday night	Cloudy. Light snow.	-7		1-3	0	2	8

# Merritt - 5A North - Douglas Lake

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Light snow, most midday.	-2		3-6	0	9	9
Saturday night	Cloudy. Light snow.	-9		1-3	0	0	8

### Logan Lake - Lac Le Jeune

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Light snow, most midday.	-5		4-8	0	6	9
Saturday night	Cloudy. Light snow.	-11		1-3	0	0	8

### Elkhart - Okanagan Connector

1	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Light snow, most midday.	-7		5-10	0	2	9
Saturday night	Cloudy. Light snow.	-13		2-4	0	0	9

# Aspen Grove

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Light snow, most midday.	-5		4-8	0	6	9
Saturday night	Cloudy. Light snow.	-11		1-3	0	0	8

# Coquihalla – Hwy 5/97C Junction

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	I	S
Saturday	Cloudy. Light snow, most midday.	-5		3-6	0	6	9
Saturday night	Cloudy. Light snow.	-11		1-3	0	0	8

# Coquihalla - Snowshed Hill

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Saturday	Cloudy. Snow, most in the morning.	-6		10-20	0	4	9
Saturday night	Cloudy. Light snow.	-10		2-5	0	0	9

### **Extended Forecast**

Colder and breezy on Sunday and Monday with light snow/flurries at times.



To: VSA - Ministry Unit #14
From: Northwest Weathernet

1-800-937-8676 24/7

x0 (Seattle)

x105 (Kamloops)

Forecast Date: Friday, January 13, 2012

Forecast Begins: 6 pm

Definition and Policy on "Concern Levels" at:

Forecaster: dlg

http://www.nw-weathernet.com/concernlevels.htm

#### Discussion

Snow moves into the area late this evening for the Snowshed then starts to impact areas further inland later tonight. Amounts overnight for the Snowshed will be moderate, but heavy snow is expected tomorrow.

Periods of light snow are expected throughout the area tomorrow with most snow expected during the afternoon hours. For all areas the snow is expected to become more the 'fluffy' type as the day goes on.

Flurries linger tomorrow night but shouldn't amount to much.

#### Fraser Canyon

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	E	1	S
Friday night	Cloudy. Light snow develops after midnight.	-4		2-5	0	9	9
Saturday	Cloudy. Snow showers.	-2		3-6	0	9	9

#### **Botanie** Road

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-8		1-3	0	0	9
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-5		4-8	0	0	9

# Highway 8 and Highway 1 (Lytton - Spences Bridge)

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-4		Trace-2	0	0	8
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-2		2-5	0	9	9

# Merritt - 5A North - Douglas Lake

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-5		Trace-2	0	0	9
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-2		3-6	0	9	9

# Logan Lake - Lac Le Jeune

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-10	- 1	1-3	0	0	9
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-8		4-8	0	0	9

# Elkhart - Okanagan Connector

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-11		1-3	0	0	9
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-8		5-10	0	0	9

# Aspen Grove

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-10		1-3	0	0	9
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-8		4-8	0	0	9

# Coquihalla – Hwy 5/97C Junction

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday night	Cloudy. Light snow develops round 3am.	-9		Trace-2	0	0	9
Saturday	Cloudy. Periods of light snow, most in the afternoon.	-6		3-6	0	0	9

# Coquihalla – Snowshed Hill

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	5
Friday night	Cloudy. Snow develops late evening.	-8		5-10	0	9	9
Saturday	Cloudy. Heavy snow.	-7		15-20	0	9	9

### **Extended Forecast**

Some flurries at times Sunday through Monday. Mostly just getting colder as arctic air starts to move into the area.



To: VSA - Ministry Unit #14 From: Northwest Weathernet

1-800-937-8676 24/7

x0 (Seattle)

x105 (Kamloops)

Forecast Date:

Friday, January 13, 2012

Forecast Begins: 6 am

Definition and Policy on "Concern Levels" at:

Forecaster: sk

http://www.nw-weathernet.com/concernlevels.htm

### Discussion

Clouds increase on Friday, then snow develops after 18/1900, most of the snow in the SW.

### Fraser Canyon

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	ı	S
Friday	Increasing clouds.	1			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-2		4-8	0	9	9

#### **Botanie Road**

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday	Increasing clouds.	-3			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-6		2-5	0	4	9

### Highway 8 and Highway 1 (Lytton - Spences Bridge)

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday	Increasing clouds.	0			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-3		1-3	0	7	8

# Merritt - 5A North - Douglas Lake

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday	Increasing clouds.	-1			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-4		2-5	0	8	9

### Logan Lake - Lac Le Jeune

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	I	S
Friday	Increasing clouds.	-3			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-8		3-6	0	1	9

### Elkhart - Okanagan Connector

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	ı	S
Friday	Increasing clouds.	-4			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-9		4-8	0	0	9

### Aspen Grove

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday	Increasing clouds.	-3			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-8		3-6	0	1	9

# Coquihalla – Hwy 5/97C Junction

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday	Increasing clouds.	-3			0	0	0
Friday night	Cloudy. Light snow develops early evening.	-8		3-6	0	1	9

# Coquihalla - Snowshed Hill

	Weather	Temp (C)	Snow Level (m)	Road Snow (cm)	F	1	S
Friday	Increasing clouds.	-4			0	0	0
Friday night	Cloudy. Snow develops early evening.	-7		10-20	0	2	9

### **Extended Forecast**

Snow at times through the weekend and into the new work week. Temps drop as northerly winds settle in.



Ministry of Transportation and Infrastructure

#### SECTION 1: TRACKING DETAILS

NCR #:14120114-1

Service Area: SA14 - Nicola

Name of Contractor: VSA Hwy Maintenance

Date: January 17, 2012

Prepared by: Bob Alexandruk

#### SECTION 2: DESCRIPTION OF NON-CONFORMANCE

3-300 Highway Snow removal: The contractor must keep free of snow, ice, and slush, Rest Areas, pull-outs, parking areas, and other areas designated by the Province with the same priority as a Highway of the next lower class from the adjacent Highway.

On January 14, 2012 snow was measured in the de acceleration lane at the NB Coquihalla Lakes Washroom Seg. 2000, LKI 48.05 at 11 am, the snow depth was measured at 15 cm.

The Mine Creek turnaround Seg. 2005, LKI 54.65 was measured twice once on Jan.14,2012, at 9am total snow was 14 cm, it was measured again at 7 am on Jan.15,2012 the snow depth was 20 cm. The entrance appeared to have been ploughed but truck had backed out.

Both areas exceeded the maximum allowable accumulation .

#### SECTION 3: REQUIRED CORRECTION

YES		Deadline for correction: Click here to enter	a date.
NO		MOT accepts the non-conforming product/s	service
		Reason:	
N/A	X	Reason: The Storm Event has passed and	The areas have been corrected.
Signatu	ires L	pon completion of required correction:	
Contrac	ctor re	epresentative confirms correction complete.	Contractor Signature:
Date a	ccept	ed by MOT: N/A	MOT Representative: Kallenda

Does Contractor have to re-do/do the work? Select N/A if non-conformance is not curable or opportunity to rectify has passed.



Ministry of Transportation and Infrastructure

### SECTION 4: ROOT CAUSE ANALYSIS & CORRECTIVE ACTION PLAN

4A) Deadline for submission of corrective action plan to MoTI: January 24, 2012

4B) Root Cause Analysis: Between 21:00 on January 13, 2012 and 06:00 on January 15, 2012 approx. 27 cm of snow fell in the Coquihalla Summit area with moderate to strong winds. VSA had 8 pieces of equipment and operators on the night shift on January 13, 2012 of which 6 stayed overtime in the morning. VSA had 8 pieces of equipment and operators on the day shift plus SO146 and the towplow with an operator from Merritt working between Larson Hill and Falls Lake on the day shift on January 14, 2012. All of the operators including the Merritt operator stayed overtime at the end of their shifts. VSA had 8 pieces of equipment and operators on night shift on January 14, 2012 of which 4 stayed overtime in the morning. VSA's practice which has been acceptable to the MoTI in the past is to focus the equipment on clearing the snow and restoring traction in the travelled lanes of the highway. During this storm event the wing on one of the graders was damaged and the wing could not be used. VSA did not remove snow from the de acceleration lane at the NB Coquihalla Lakes Washroom or from the Mine Creek turnaround and allowed the snow accumulation to exceed the maximum allowable.

**4C)** Corrective Action Plan: VSA has instructed all Road Foremen and Superintendents to ensure that all acceleration/de-acceleration lanes, rest areas and turnarounds are not allowed to exceed the maximum allowable accumulation as detailed in BC Ministry of Transportation Schedule "21" Maintenance Specifications. VSA successfully implemented this during the storm that occurred on the night of January 16, 2012.

Signatures:

Distribution: Original to District; Copy to Contractor



Ministry of Transportation and Infrastructure

Signatures:

Contractor representative commits to implementing the corrective action plan and confirms that the plan is intended to prevent the re-occurrence of the Non-conformance identified in section 2 of this report..

Contractor Signature:

MOT representative accepts the corrective action plan. Acceptance does not negate the contractor's responsibility to perform the services in accordance with the contract requirements.

MOT Representative: /

Date: Click here to enter a date. Jan 24, 2012

INSTRUCTIONS:

SECTION 1, 2 AND 3 TO BE COMPLETED BY MOT SECTION 4 TO BE COMPLETED BY THE CONTRACTOR

