

Debris Burning 2024  
Presentation by Colin Vandergaag,  
Jan 17, 2025, for the BVLD AMS





# OUTLINE

Debris  
Burning  
Background

PIR's  
burning  
process

PIR's 2024  
burning  
summary



## Debris burning background



Logging debris not utilized in sawmill, pellet plant, or other facility

Primary fiber use- Sawmill  
Secondary- Pellet plant, Seaton, Pulp mills



Requirement of the Wildfire Regulation to abate fire hazard (burn piles) within 30 months (or 24 months if close to town)



Open Burning Smoke Control Regulation (OBSCR) is what regulates the burning of piles

Requires Burn Registration numbers for each site  
Regulates venting conditions and length of burn depending on smoke sensitivity zones



Request Burn Reference Numbers



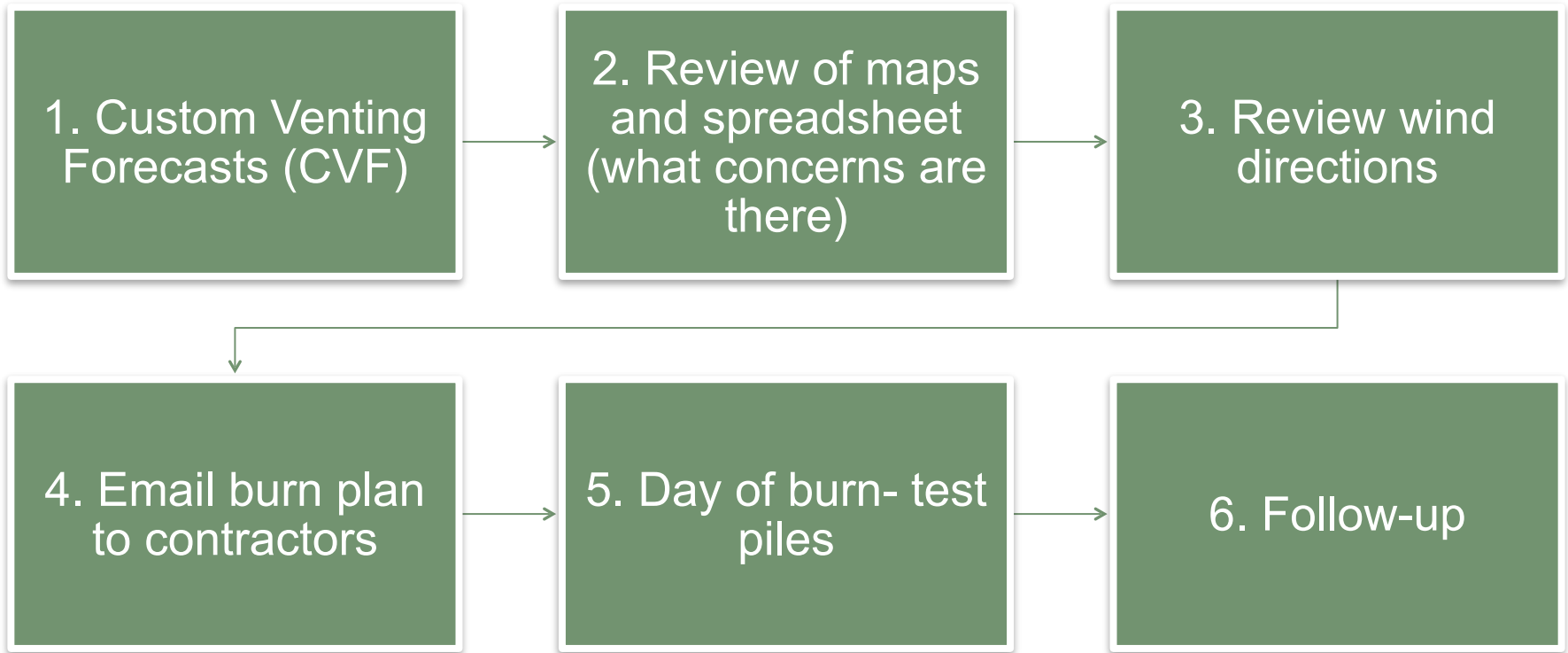
Notify stakeholders- First Nations, Guides, Lodges, local residences



Ensure fire weather indices are adequate to burn

Requirement in the Wildfire regs to have a fuel break (this can also include a change in fuel type or conditions)

Discussion with local BCWS staff



**(Steps 1-4 & 6 completed by PIR forester)**



# 1. Custom Venting Forecasts (CVF)

Company: Pacific Inland Resources  
 Burn Reg. Number(s): On file  
 Issued: Saturday, October 5, 2024  
 FOR BURNING ON: Sunday, October 6, 2024

**Synopsis:**

**Sunday:** Southerly winds increase through the day, as another strong trough tracks over northern BC. Ventilation remains good in spite of airmass stability increasing slightly. Burning in the Blunt block is very unlikely to affect Smithers and points south.

**Monday:** Winds diminish on Monday as pressure gradients slacken over the area. However, instability increases. So good venting continues but it may not reach the good category until late morning.

**Tuesday:** A weak upper trough passes through the area in the morning and a surface ridge builds onto the coast. Winds are relatively light but the atmosphere remains weakly unstable and so good ventilation continues.

**Comments:** Winds could gust up to 50 km/h Sunday afternoon. Areas at and above 1000 m more likely to see gusts.

Nlakitwa		Lat & Long:	55.641, -126.723	Elev:	1000m
		Venting:	Optimal Time:	Mixing Height ASL(m):	Wind: (km/h)
Sunday	AM:	Poor	10 am - 4 pm	surface	calm
	PM:	Good		2500	SE 12-17
Monday		Good	10 am - 4 pm	2500	SW 10-15
Tuesday		Good	10 am - 4 pm	2400	S 9-13

Morrison/Babine		Lat & Long:	55.271, -126.490	Elev:	900m
		Venting:	Optimal Time:	Mixing Height ASL(m):	Wind: (km/h)
Sunday	AM:	Poor	10 am - 4 pm	surface	calm
	PM:	Good		2700	SE 10-15
Monday		Good	10 am - 4 pm	2500	SSW 10-15
Tuesday		Good	10 am - 4 pm	2600	S 9-14

Harold Price		Lat & Long:	54.990, -126.825	Elev:	1000m
		Venting:	Optimal Time:	Mixing Height ASL(m):	Wind: (km/h)
Sunday	AM:	Poor	10 am - 4 pm	surface	calm
	PM:	Good		2500	SSE 12-16
Monday		Good	10 am - 4 pm	2500	SW 15
Tuesday		Good	10 am - 4 pm	2300	SE 8-12

Blunt/Ganokwa		Lat & Long:	54.921, -127.152	Elev:	900m
		Venting:	Optimal Time:	Mixing Height ASL(m):	Wind: (km/h)
Sunday	AM:	Poor	10 am - 4 pm	surface	calm
	PM:	Good		2700	SSE 12-17
Monday		Good	10 am - 4 pm	2700	SW 10-15
Tuesday		Good	10 am - 4 pm	2500	S 8-12

–Government forecast is very broad (either Smithers or Burns Lake)- distributed morning of burning

–CVF is more specific for an area, and can get very specific if requested (usually utilize if near a stakeholders/residences)- distributed evening prior to burning

–Do the venting conditions allow us to burn?

–Is it safe to burn? (e.g. wind speed).

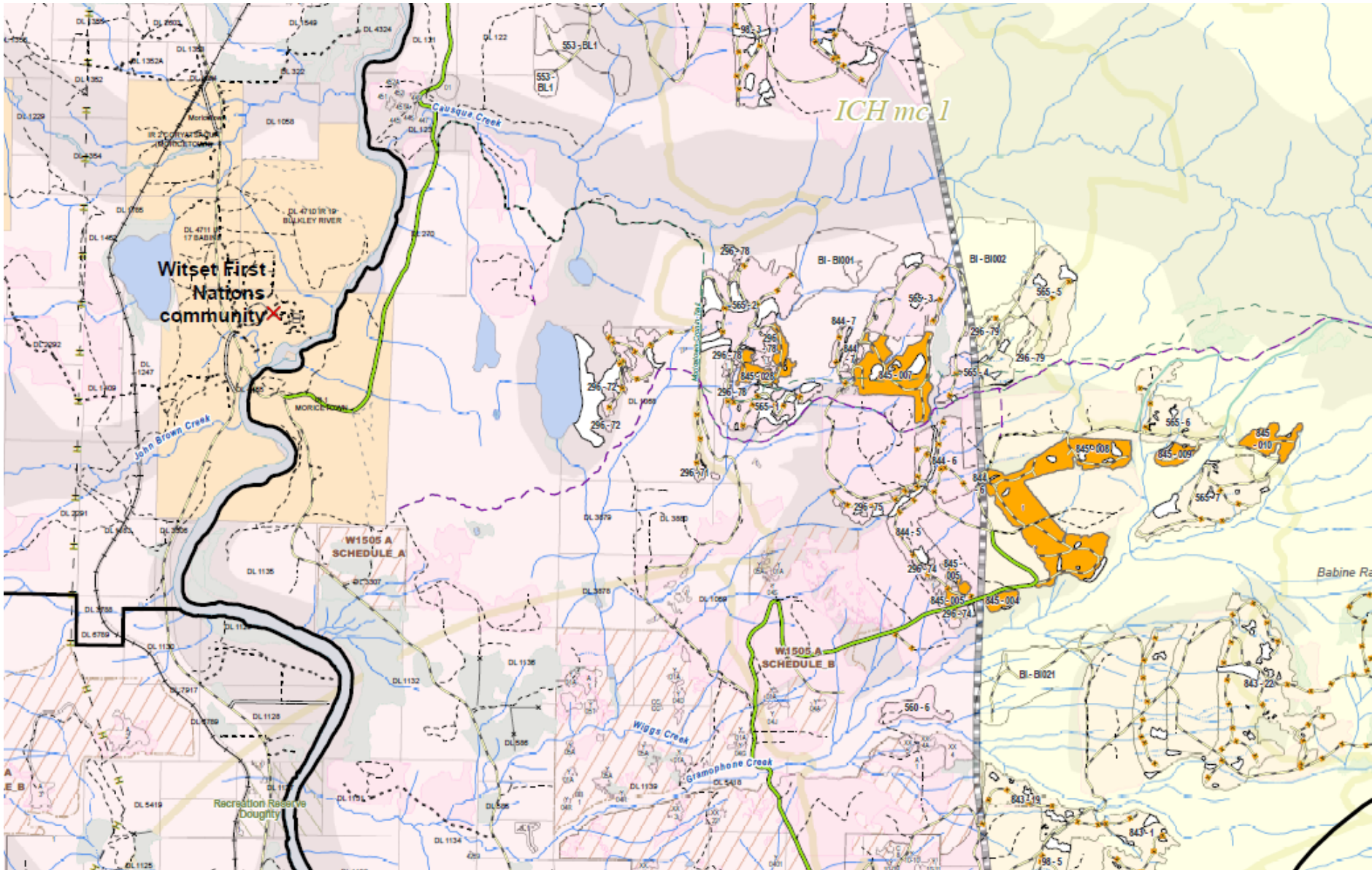




## 2. Review of maps and spreadsheet with comments

Stakeholders, residences, contractors are listed on maps and concerns located in spreadsheet

CP	Block	NAR Area	Approved to burn	Waste Survey Approved Y/N	Piles to Burn	Piles Burned (Y/N)	Date Burned	Comments
661	020	21.3	Y	Y	43	43	12-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
661	021	1.9	Y	Y	4	4	12-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
661	022	2.5	Y	Y	5	5	12-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
661	035	5.6	Y	Y	11	11	11-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
661	083	10.23	Y	Y	20	20	Oct 3 &	
661	156	29.3	Y	Y	59	59	11-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
661	222	2.11	Y	Y	4	4	30-Sep-24	
661	238	2.3	Y	Y	5	5	11-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
661	239	6.6	Y	Y	13	15	11-Nov-24	Ft Babine, Babine Fish fence and Norlakes close by
663	091	2.45	Y	Y	5	5	30-Sep-24	





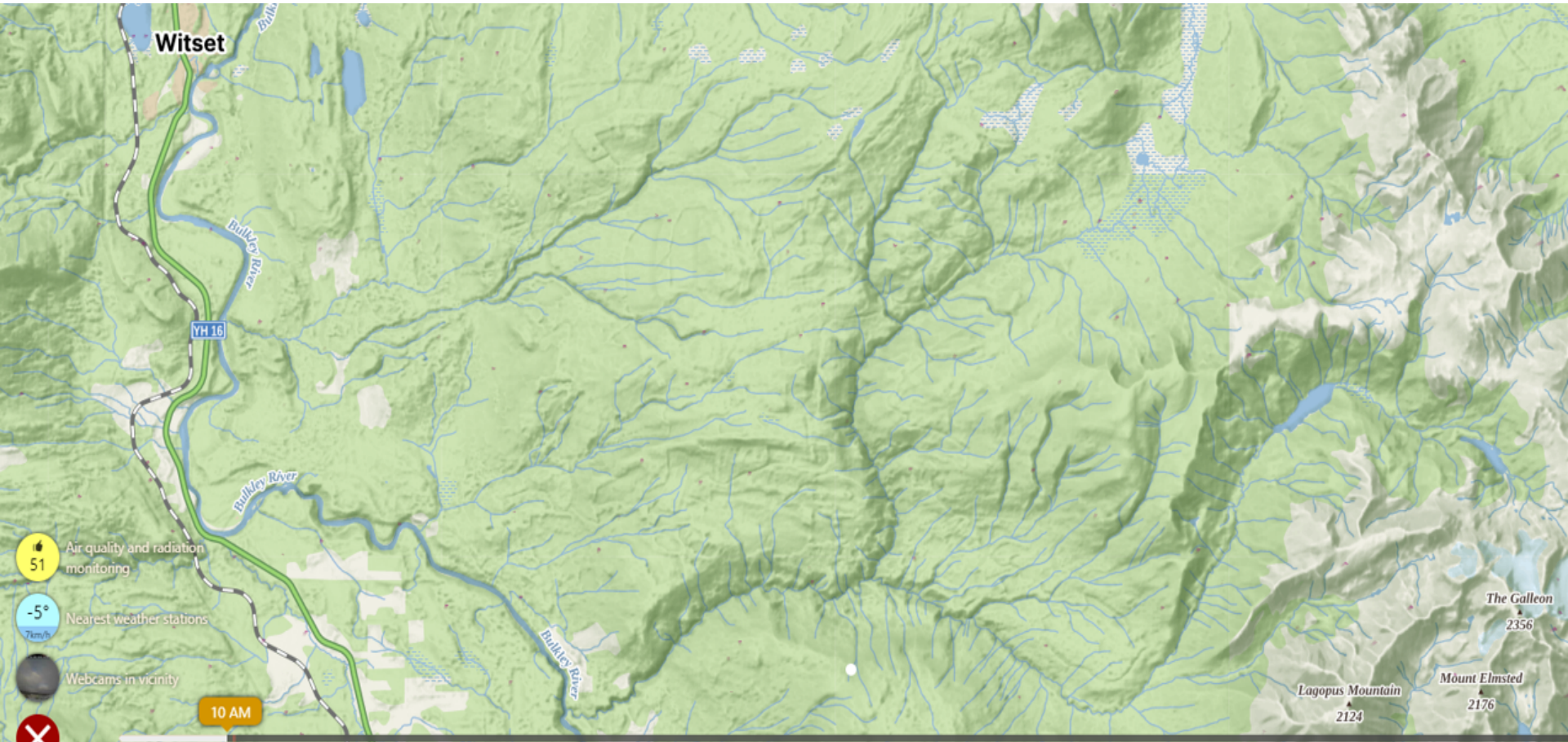


### 3. Review wind directions

- Wind Directions from the CVF

Blunt/Ganokwa		Lat & Long:	54.921, -127.152	Elev:	900m	
		Venting:	Optimal Time:	Mixing Height ASL(m):	Wind: (km/h)	
Sunday	AM:	Poor	10 am - 4 pm	surface	calm	
	PM:	Good		2700	SSE 12-17	
Monday		Good	10 am - 4 pm	2700	SW 10-15	
Tuesday		Good	10 am - 4 pm	2500	S 8-12	

- Wind Directions also reviewed in Windy.com



	Monday 13				Tuesday 14				Wednesday 15				Thursday 16				Friday 17				Saturday 18																											
Hours	1AM	4AM	7AM	10AM	1PM	4PM	7PM	10PM	1AM	4AM	7AM	10AM	1PM	4PM	7PM	10PM	1AM	4AM	7AM	10AM	1AM	4AM	7AM	10AM	1AM	4AM	7AM	10AM	1PM																			
Temperature °C	-5°	-3°	-2°	-1°	2°	1°	1°	1°	2°	1°	1°	2°	4°	3°	2°	1°	1°	1°	1°	2°	3°	3°	0°	-3°	-6°	-7°	-8°	-6°	-3°	-3°	-6°	-6°	-6°	-7°	-8°	-9°	-4°	-6°	-11°	-11°	-9°	-9°	-9°	-5°				
Rain mm					0.4	0.8	2.7		0.2								0.3	1.8	1.3	0.2	0.3	4cm	2cm		0.2cm	0.2cm			0.2cm	0.3cm	0.2cm										0.2cm							
Wind km/h	1	2	1	3	6	8	9	9	10	5	4	1	3	3	2	1	1	5	9	11	12	13	8	5	5	3	3	2	2	2	4	3	2	1	3	2	1	1	2	3	3	3	4	4	1			
Wind gusts km/h	18	20	21	19	20	24	27	28	32	31	23	22	27	28	26	22	17	17	26	33	37	40	45	38	28	31	23	21	21	22	19	15	13	12	13		9	8	9	9	12	11	9	10	9	11		
Wind dir.	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖				



## 4. Email to contractor with burn plan

The burning plan for Saturday on the 8000rd:

- Lighting a test pile will be important in the morning to make sure the smoke is going to blow away from both Smithers and Witset. Smoke is forecasted to go NE tomorrow.
- The winds are supposed to pick up tomorrow so careful while burning. Winds above 1000m could gust up to 60km/hr but below 1000m could gust up to 40km/hr
- After burning a few piles see if they are prone to spread or not. If winds pick up past comfort level, stop and observe.
- We will focus on blocks below 1000m tomorrow
  - 845-028
  - The lower block roads in 845-008
  - 845-004 and 845-005
  - Could work your way up 845-008 if things are looking good.
- Please check in with me at 11am on my cell 250-877-9791 (either text or phone call)

### Email sent to burning contractor with burning plan

- Blocks to burn
- Smoke dispersal information
- Safety considerations



## 5. Day of burn

### Test Piles

- Test piles are lit to confirm venting is occurring as forecasted
  - Smoke is venting
  - Smoke is not blowing towards stakeholders
- Safety consideration at this stage as well

### 11am check in

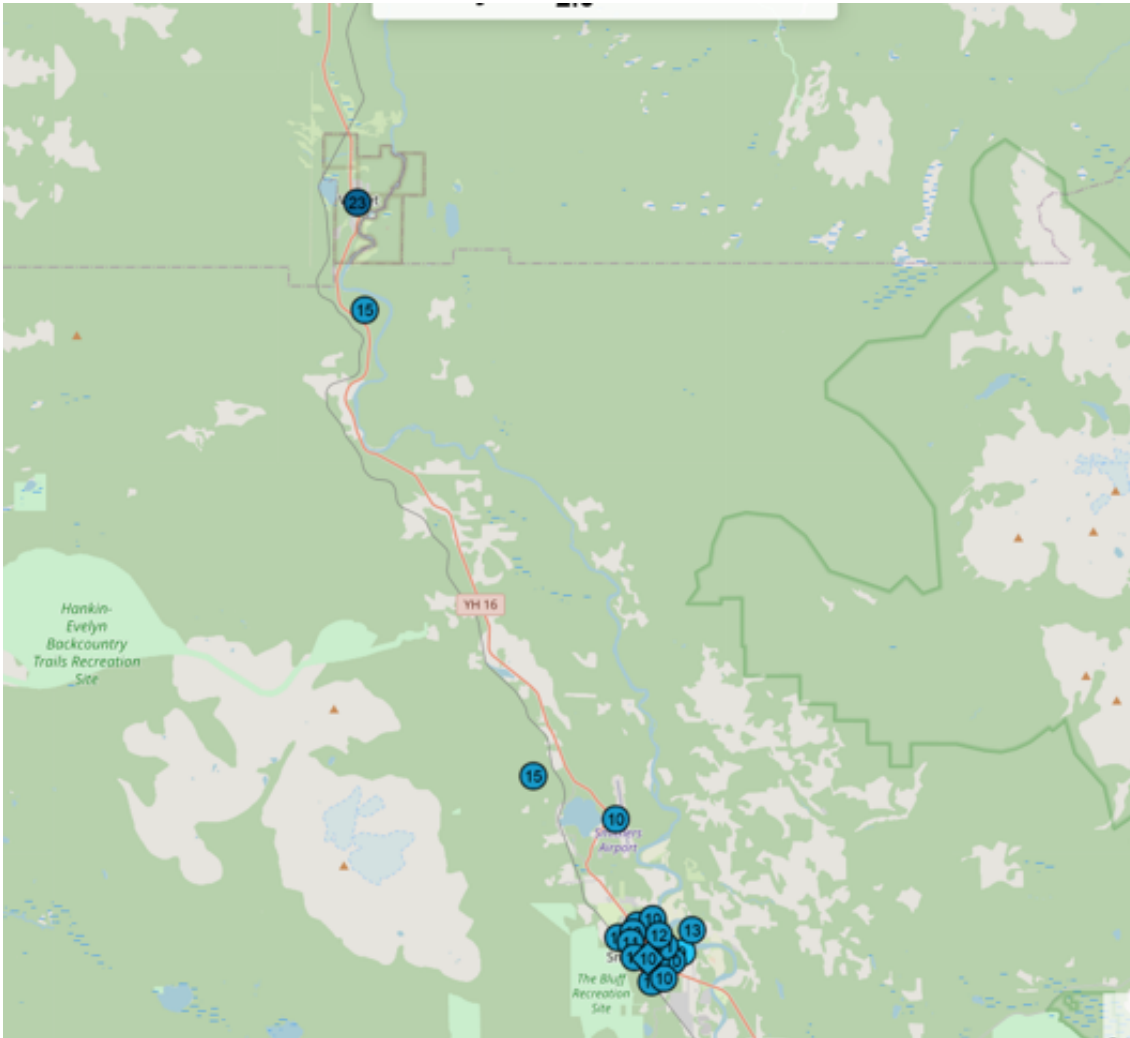
- To confirm with “office” that everything is going as planned







## 6. Post burning checks



After burning near sensitive areas, we review air quality monitors to see if venting proceeded as planned



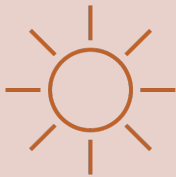


## Post burning checks



1 to 2 days later

Check piles to ensure they are no longer smoking  
Check piles to ensure there is no risk of escape\



Spring scanning

Complete heli infrared scans of all piles to ensure there are no winter hold overs



- 67 blocks (~1800ha of cutblocks) had piles burnt
- Started burning Sept 27 and finished Nov 12 (note: not much burning occurred in November due to poor venting)

### Challenges

- Difficult burning year due to dry weather up until the end of September, then very wet conditions persisting through the fall
- Timing due to completing waste surveys
- Managing venting vs risk of wildfire
  - Early in year= better for venting
  - Later in year= better for fire risk