



District of
North Saanich

STAFF REPORT

To: Tim Tanton
Chief Administrative Officer

Date: February 5, 2020

From: John Trelford
Director of Emergency Services

File: 0640-60

Re: **Outdoor Burning**

RECOMMENDATION:

That Council direct staff to bring forward Fire Prevention and Regulation Bylaw No. 962 (2000) with the following changes for Council's consideration:

1. Eliminate the burning calendar and instead, only allow burning on those days that the Venting Index is rated **GOOD**.
2. Eliminate machine stacked burn piles for land clearing and development.

STRATEGIC PLAN IMPLICATIONS:

This matter relates to the following Council strategic priorities:

Protect and Enhance Rural, Agricultural, Heritage, Marine and Environmental Resources

Maintain a Safe and Healthy Community

Ensure Strong Leadership, Fiscal Responsibility and Transparent Government

INTRODUCTION/BACKGROUND:

Outdoor burning is regulated by North Saanich Fire Prevention and Regulation Bylaw No. 962 (2000). Concerns have been raised about air quality issues when outdoor burning is allowed by permits granted under the existing bylaw.

In 2008, an informal survey was completed regarding a proposed ban on outdoor burning. There were 374 written responses with 328 opposed and 46 in favour of a ban. As a result, a ban was not implemented. Since then the District has maintained the same schedule for burning which is the first and third consecutive Thursday, Friday, and Saturdays of the month (see calendar in appendix A). Residents with a permit to burn can do so irrespective of the conditions of the atmosphere often leading to very poor air quality throughout the District.

DISCUSSION:

Current System:

The burning season is open, with all fires requiring a permit, from November to May.

Burning permits are issued in person at the Fire Hall to property owners during normal business hours.

Permit Types:

Up to 3' x 3' x 3' (2018 – 2019 season, 356 permits issued)

Most permits issued are for 3' x 3' x 3' open burning at a cost of \$25 annually. Residents with this type of permit collect their debris until it is a burn week. The fires normally last only a few hours.

Outdoor Appliances/Domestic Incinerators (2018 – 2019 season, 67 permits issued)

Outdoor fire appliances make up only a small percentage of burning permits issued. Most are found built into a patio type area or other area in residents' back yards. The burning surface area is usually no more than 1' x 1' x 1' where clean fuel or charcoal is used for enjoyment and cooking. These permits are \$25 annually.

Up to 10' x 10' x 10' (2018 – 2019 season, 66 permits issued)

Permits for fires up to 10' x 10' x 10' cost the resident \$35 and are valid for one burning season. These are issued to farms, residents with larger properties, or where a large quantity of debris has been accumulated. Due to the increased size of these fires there is also an increase in smoke and ash that can affect air quality.

Machine Stacked / Lot Clearing (2018 – 2019 season, 10 permits issued)

Larger than 10' x 10' x 10' fires are usually stacked by a machine (excavator) and are mostly used for clearing land where development is taking place. These fires often burn for several days and can create large amounts of smoke and ash. Calls of concern or complaint are frequent when these types of fires are ignited. Machine stacked piles are not to be lit unless the venting index that day is GOOD, however, because of the long duration of these burns sometimes for many days the venting index easily changes from day to day therefore these fires can greatly affect air quality in the area. These permits cost \$200 per pile.

Venting Index:

Environment Canada provides the Venting Index (VI) to assist in determining if weather conditions are such that the smoke generated from fires will contribute significantly to air pollution. The VI is a measure of the atmosphere's ability to disperse smoke. The higher the number, the less the risk of air pollution. The index ranges from 0 to 100. An afternoon VI value of 55 or greater (i.e. in the "GOOD" category) is the minimum value at which open burning should be considered. Outdoor burning when the venting index is GOOD significantly reduces the impact to air quality.

The Senior Air Quality Science Officer at the Ministry of Environment was contacted to obtain statistics on the frequency of GOOD venting days in past District burning seasons. Historical information from 2002 to 2016 (appendix B) was obtained showing the average number of days per month that the VI is GOOD, FAIR, or POOR. In the seven months that make up the District's outdoor burning season (November to May) only two months (January and February) have fewer GOOD venting days than the current six burn days allowed.

Statistical averages obtained from the Ministry of environment showing the number of GOOD venting days per month are as follows:

November	7.9
December	7.6
January	5.2
February	5.1
March	10.7
April	10.7
May	10.0

If North Saanich were to move to a system based on allowing burning only on GOOD venting days, these numbers suggest that (on average) residents will have more allowable burning days per month than the current six. The use of a new system based on the Venting Index would help to improve the air quality within the District of North Saanich and that of our neighbors in Sidney and Central Saanich.

Since 2008 the Fire Department has responded to 1073 complaints for nuisance burning and smoke. Machine stacked piles for clearing land for development make up a large percentage of these. Currently developers are asked to watch the venting index and only light the fires when the venting is GOOD however these fires usually burn for many days. If the venting index changes during this time, which it often does, air quality is greatly reduced within the District. Due to these problems with large, machine stacked pile fires staff recommend that this type of burning no longer be allowed in North Saanich.

Recent Changes in Central Saanich:

The Central Saanich Fire Chief presented a report; Open Burning Regulation Bylaw 2009 to council in October 2019. The report recommended that Council adopt burning only on GOOD and FAIR venting days. This bylaw was adopted with a temporary exception that for the rest of the burning season for 2019 – 2020 residents would be permitted to burn every Friday however commencing in October 2020 when the burning season begins residents will only be permitted to burn on GOOD and FAIR venting days.

In summary, allowing outdoor burning on GOOD venting index days only and eliminating the burning of machine stacked piles will improve air quality and also allow for an increase in the number of burning days. However, as the current system has been in place for many years, a change will require some adjustment for those residents making use of burning permits. Also, some will be challenged with checking the venting index as it is only available online. It would be staff's intent to provide daily updates on the web site and on social media to help residents. For those residents that do not have access to the internet, they would also have the option to contact the Fire or Municipal Hall directly for the information. Some residents may also be concerned that GOOD venting days may not fall on weekends when they have more time to arrange outdoor burning activities.

OPTIONS:

Council can:

1. Allow burning with a permit only on days that the venting index is rated GOOD.
2. Discontinue permitting burning of machine stacked and land clearing piles.
3. Keep the current outdoor burning system in place with no changes.
4. Eliminate outdoor burning in the District completely.
5. Direct Staff to conduct a public consultation process to review these options.

FINANCIAL IMPLICATIONS:

Negligible amount of revenue reduced if machine stacked piles are no longer accepted.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

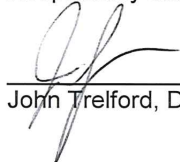
Changes in the allowable burning days could result an increased volume of material dropped off at the green waste facility which could impact the Works Department responsible for its operation.

The Communications team would likely be involved with daily updates to the web site and social media throughout the burning season to inform residents of the Venting Index

SUMMARY/CONCLUSION:

Allowing outdoor burning on GOOD venting index days only and eliminating the burning of machine stacked piles will improve air quality on the Peninsula. The District is fortunate to have a green waste facility that provides residents with an alternative to outdoor burning. Staff believe that this is a balanced approach to dealing with green waste in North Saanich.

Respectfully submitted,



John Trelford, Director Emergency Services

Concurrence,



Tim Tanton,
Chief Administrative Officer

Concurrence:



Eymond Toupin, Director Infrastructure Services



North Saanich Fire Department

Allowable Burning Days 2019 - 2020

APPENDIX A

2019 - 2020

Burning days are in **RED**

November 2019

S	M	T	W	T	F	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2019

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January 2020

S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 2020

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

March 2020

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April 2020

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May 2020

S	M	T	W	T	F	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Green Waste Drop-Off Schedule

Location: Municipal Pit, 10180 Littlewood Road.

This calendar is subject to change. For a complete schedule and any amendments visit www.northsaanich.ca Note: extreme weather events may result in a closure without notice.

2019 - 2020

Hours of Operation

Thursdays 8:00 a.m. – Noon
Saturdays 8:00 a.m. – Noon
Fees are in effect. Please see the website for current rates.

Drop off days are in **Green**

***Note:** The drop-off will be closed December 26.

November 2019

S	M	T	W	T	F	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2019

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26*	27	28
29	30	31				

January 2020

S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 2020

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

March 2020

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April 2020

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May 2020

S	M	T	W	T	F	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

October 2019

APPENDIX B

Total Number of Days - 2002 to 2016

	POOR	FAIR	GOOD
Nov	239	91	119
Dec	243	107	114
Jan	306	79	78
Feb	249	98	76
Mar	176	125	160
Apr	142	146	160
May	144	161	150

Average Number of Days - 2002 to 2016

	POOR	FAIR	GOOD
Nov	15.9	6.1	7.9
Dec	16.2	7.1	7.6
Jan	20.4	5.3	5.2
Feb	16.6	6.5	5.1
Mar	11.7	8.3	10.7
Apr	9.5	9.7	10.7
May	9.6	10.7	10.0

