

Adaptative Management Plan Report 1 August – 31 August 2020

On 19 May 2020, Environment Canterbury and Christchurch City (CCC) agreed to an Adaptive Management Plan to address long standing odour issues in Bromley.

As part of the plan, regular monthly reviews on progress on monitoring and odour mitigation were required on 7 July, 4 August and 8 September 2020. This third and last AMP report covers the reporting period from 1 August to 31 August 2020.

The CCC has been provided with weekly summaries of site assessments each Friday by email. These summaries are available to key CCC staff. This report does not include notifications of odour given directly to CCC, as required by CRC080301.1 condition 29.

In this third month reporting period, we note an increase in Smelt-It reports and an increase in reporting at the higher end of the amenity impact scale. There has also been an increase in substantiated AMP notifications to Living Earth.

There have been no substantiated or detected reports from EcoDrop over this reporting period although community notifications at the higher end of the amenity impact scale noted the odour profile as rubbish, meaty-rancid and faecal-sickening. Officers responding to these notifications were able to rule out EcoDrop as a source and confirm Living Earth as the source. Consequently, we have high confidence that EcoDrop is operating within the Permitted Activity rule.

Summary of findings over the three- month period

The community reported an increasing number of odour events over the three months. ECan officers substantiated an increasing number of offensive odour incidents relating to Living Earth, noting officers attended a greater number of events overall each reporting period. The independent odour assessor(s) have also noted compost odours beyond the boundary of Living Earth.

Our conclusion is that there has been no reduction in offensive odours from Living Earth over the three-month period.

EcoDrop has employed effective mitigations on site throughout the AMP period to the extent that through July and August there have been no substantiated cases of offensive and objectionable odour beyond the boundary.

It is noteworthy that the community and our warranted officers have noticed a change in odour profile discharging from Living Earth. The change in profile is from a strong earthy odour to a more rancid rubbish-like odour that is still identifiable as having compost characteristics.

Comparison of reports of odour

Most reports of odour received were via the Smelt-It app and there was a noticeable increase in Smelt It reports in August. Phone calls accounted for about 10% of odour reports with three reports via Snap Send Solve in August. It is becoming apparent that the community is well accustomed to using Smelt-It to report odours in the area.

Location of sites where odour was detected or substantiated:

	June 2020 (NONCs)	July 2020 (AMP detected)	July 2020 (AMP substantiated)	August 2020 (AMP detected)	August 2020 (AMP substantiated)	August (NONCS)
Living Earth	6	10	7	8	11	0
EcoDrop	2	1	0	0	0	0
Other sites	1	0	0	0	0	1

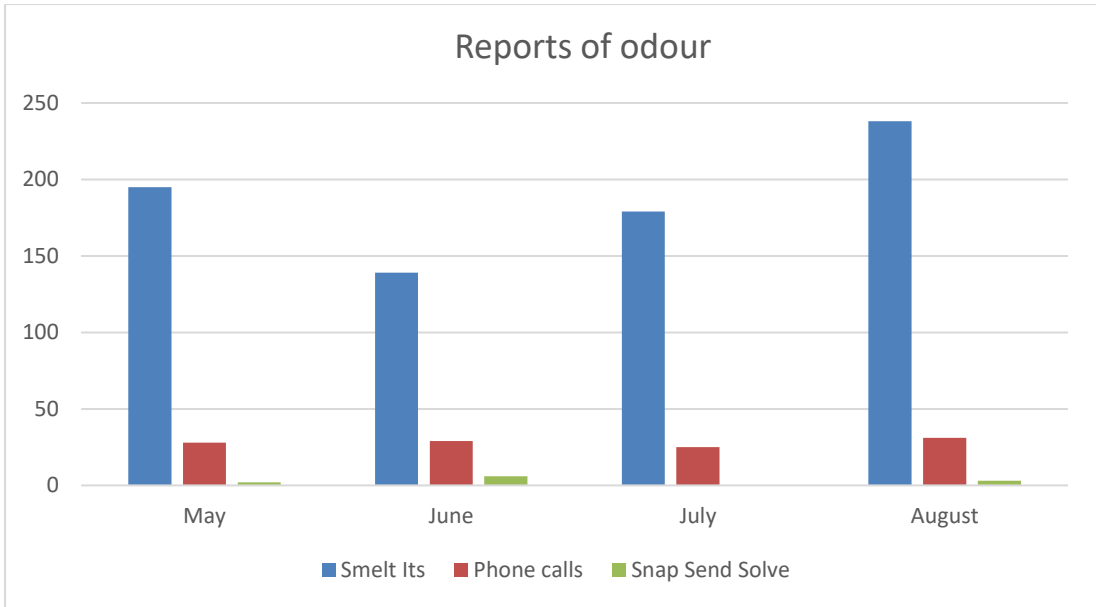
Note: AMPs are only issued to Living Earth and EcoDrop.

Highest amenity impact odour type

The reports for August show an increase of reporting for compost, rubbish, meaty-rancid and faecal-sickening at the higher end of the amenity impact.

1. Summary of reports of odour:

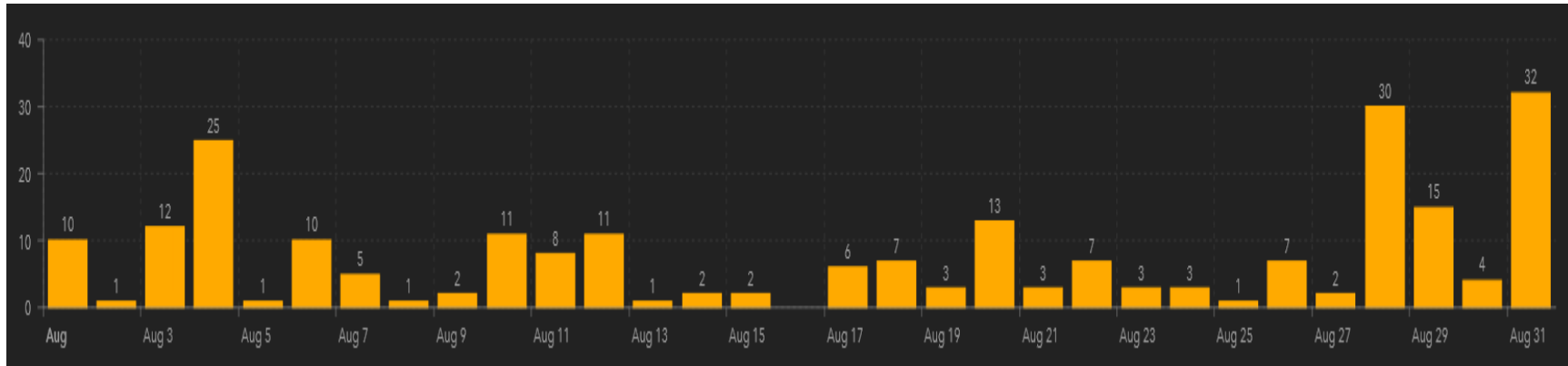
	May 2020	June 2020	July 2020	August 2020
Smelt Its	195	139	179	238
Phone calls	28	29	25	31
Snap Send Solve	2	6	0	3
Total	225	174	204	272



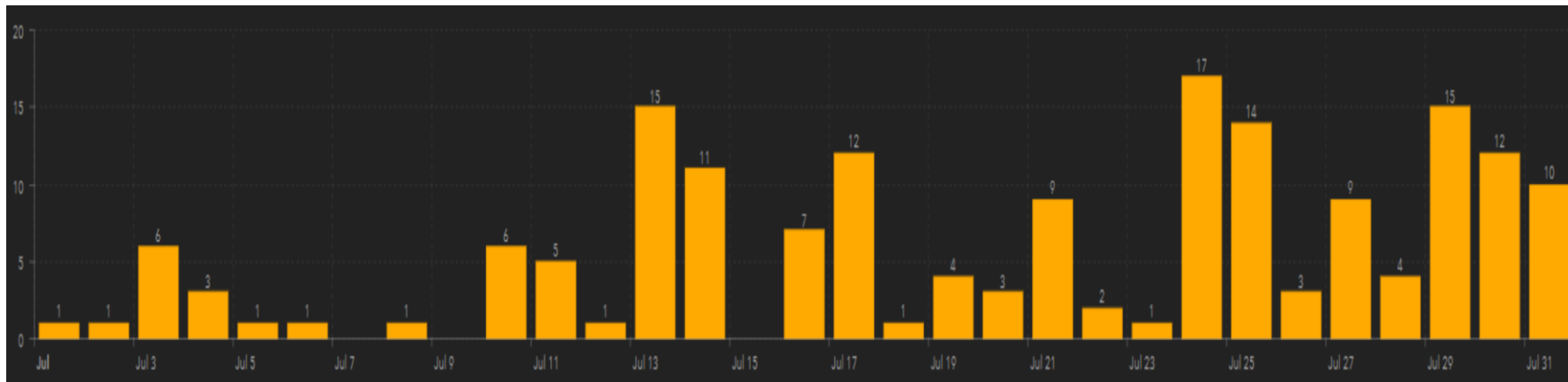
2. Smelt-It reports per day

The following graphs show how many Smelt-Its were received per day over the month of May, June, July and August 2020

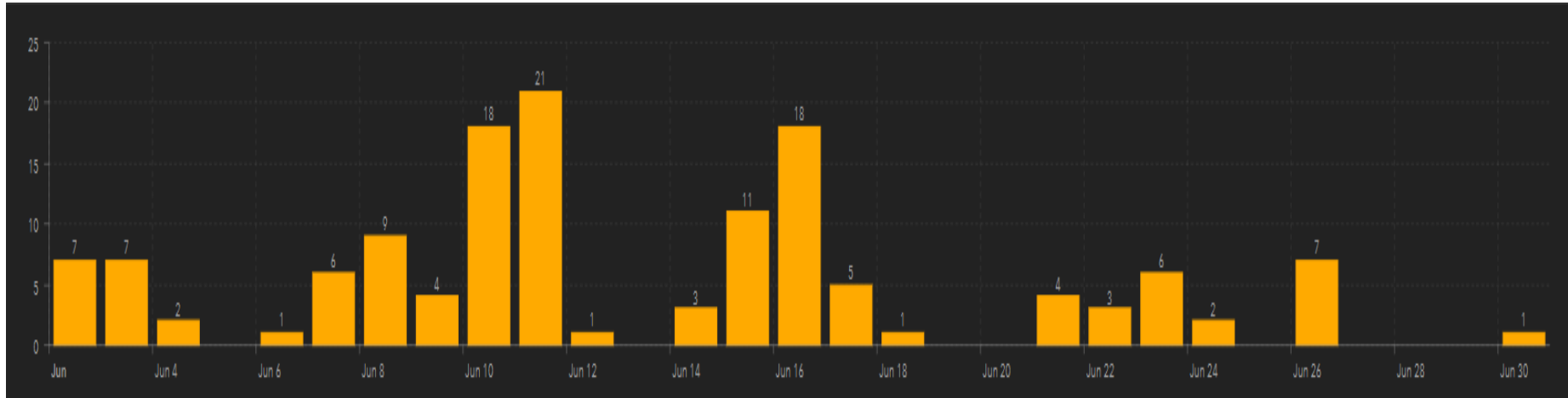
238 Smelt-Its August 2020



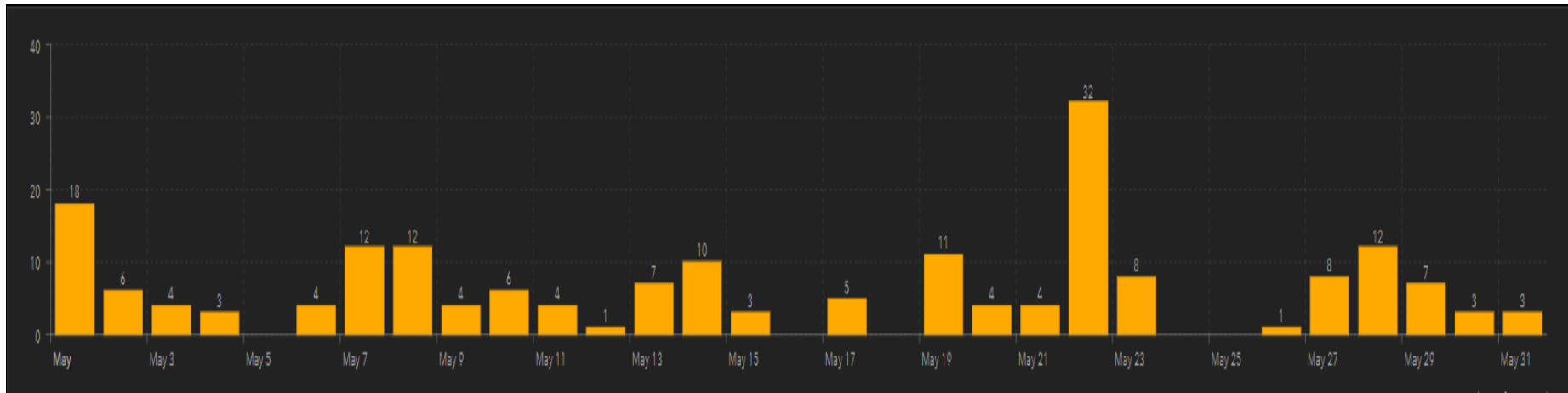
179 Smelt-Its July 2020



139 Smelt-Its June 2020



195 Smelt-Its May 2020



3. Total Pollution Events (PEs)

August 2020: 62

Unable to attend, outside normal operating hours: 24

July 2020: 62

Unable to attend, outside normal operating hours: 24

June 2020: 42

Unable to attend, outside normal operating hours: 12

*Common reasons for not attending includes the notification being received after hours and /or staff were not able to attend.

May 2020: 45

Unable to attend, outside normal operating hours: 36

Mostly related to the Covid lockdown when staff could not attend.

4. Assessments by warranted officers in Bromley:

	May 2020	June 2020	July 2020	August 2020
No environmental impact	1	5	5	10
Unable to locate source of odour	3	10	4	4
Substantiated (Notice of Non-Compliance issued)	3	9	0	0
AMP detected notifications	N/A	N/A	11	8
AMP substantiated notifications	N/A	N/A	7	11
Total	7	24	27	33

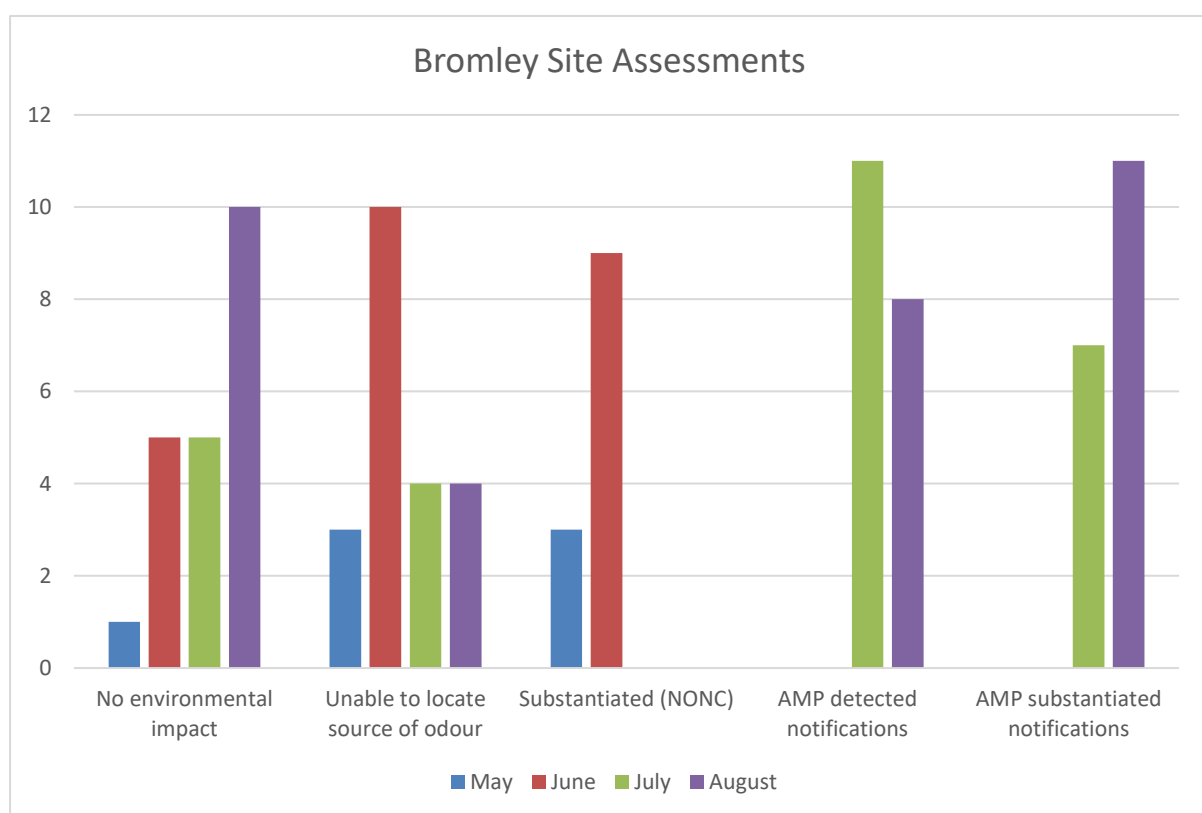
*No environmental impact: The odour was not considered offensive or objectionable and/or complied with regional rules or a resource consent.

*Unable to locate source of odour: Staff detected an odour but could substantiate the odour source.

*Substantiated (Notice of Non-Compliance issued): A warranted officer confirmed the source of the odour and that it was offensive and objectionable beyond the boundary of the site, by completing an odour assessment (including a 360 appraisal) at the site or site boundary in accordance with Ministry for the Environment guidelines.

An *AMP detected notification* is issued if, in the warranted officer’s opinion, there was offensive and objectionable odour beyond the property boundary and are issued where a full assessment was not required or not able to be completed due to climatic conditions.

An *AMP substantiated notification* is issued if a warranted officer confirmed the source of the odour and that it was offensive and objectionable beyond the boundary of the site, by completing an odour assessment (including a 360 appraisal) at the site or site boundary in accordance with Ministry for the Environments guidelines.



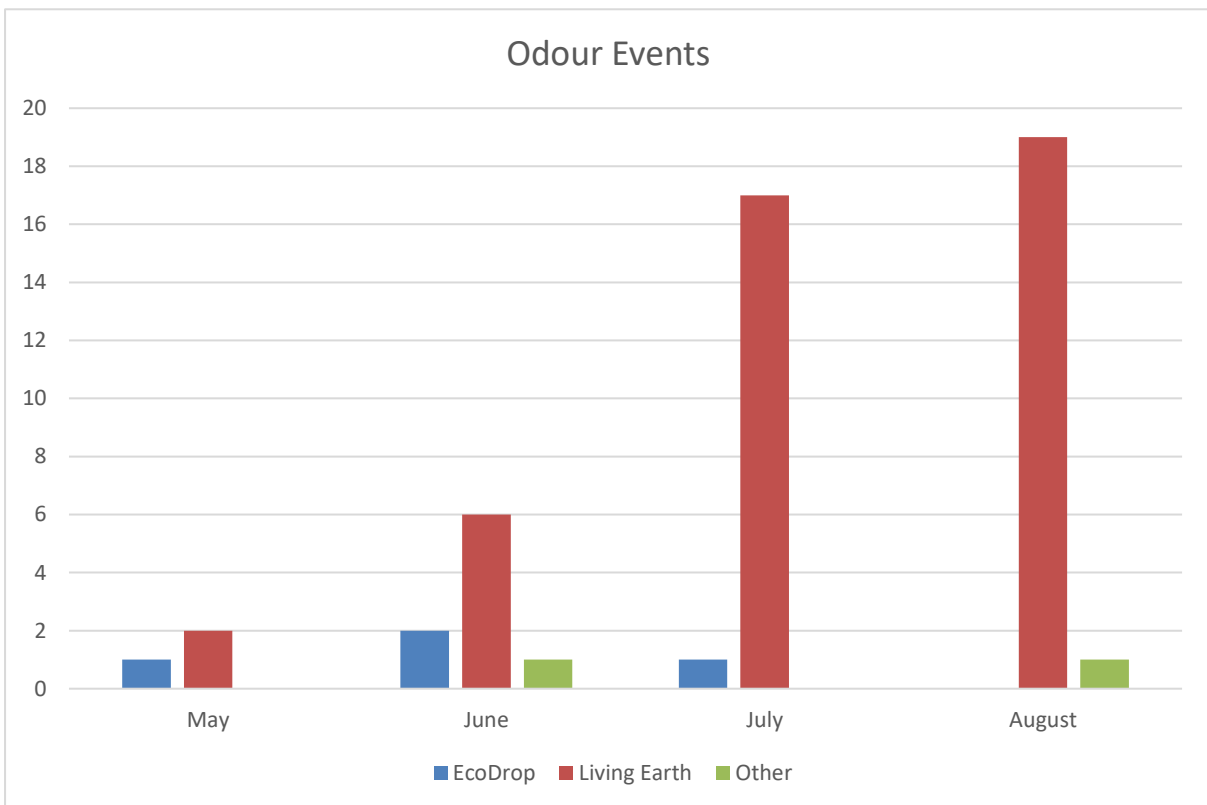
5. Independent Odour Assessor (IOA):

In summary, odour assessments were carried out on 5 days (17 – 21 August). The IOA has advised provisionally that compost odours are still being detected and as far as South Brighton on one occasion.

These provisional results again support the reports from the community and direct observations by warranted officers.

6. Summary of when a Notice of Non-Compliance notice or AMP notification was issued:

	May 2020	June 2020	July 2020	August 2020
EcoDrop	1	2	1	0
Living Earth	2	6	17	19
Other Sites	0	1	0	1
Total	3	9	18	20



7. Amenity Impact

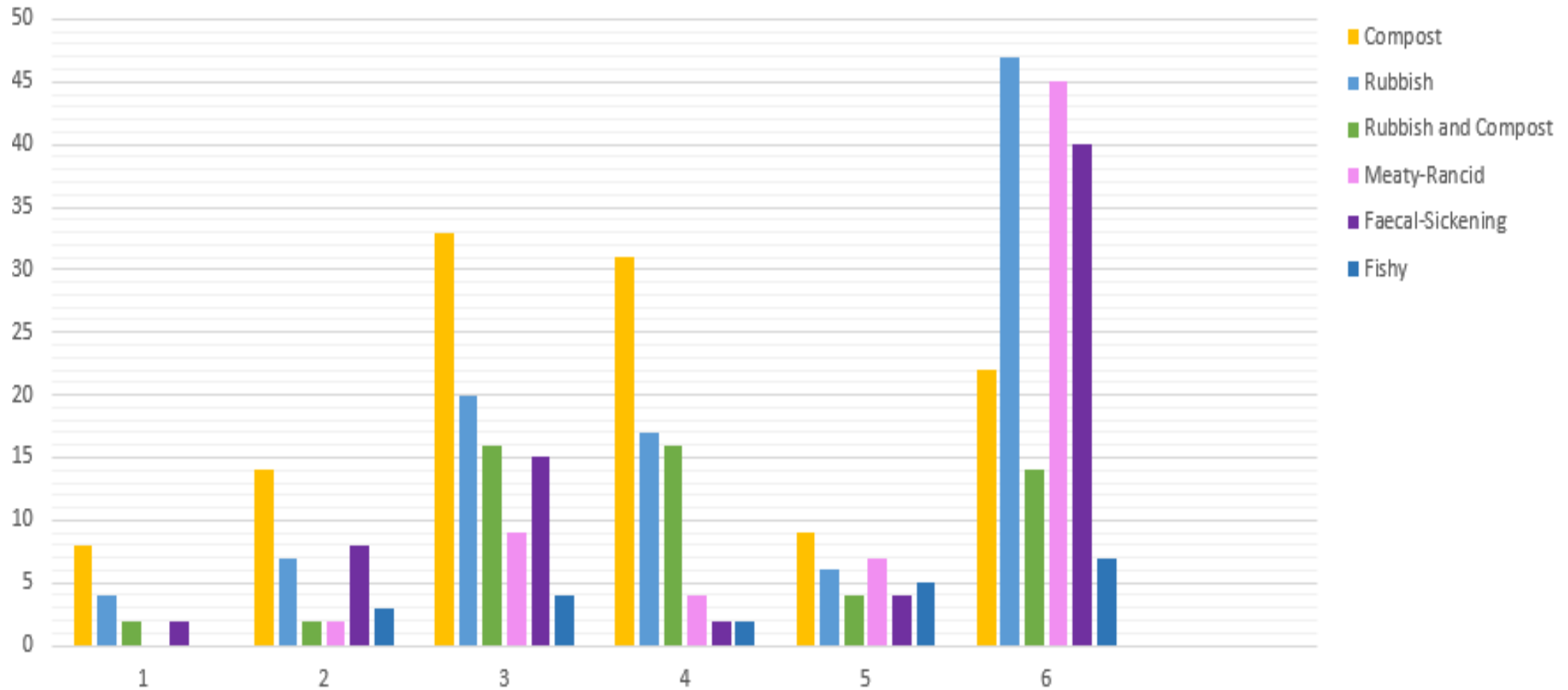
The graphs below depict Smelt It submissions by odour type reported (in line with Ministry for the Environment guidelines) and the most reported odour types. The amenity impact is explained below:

Smelt-it Odour impact scale



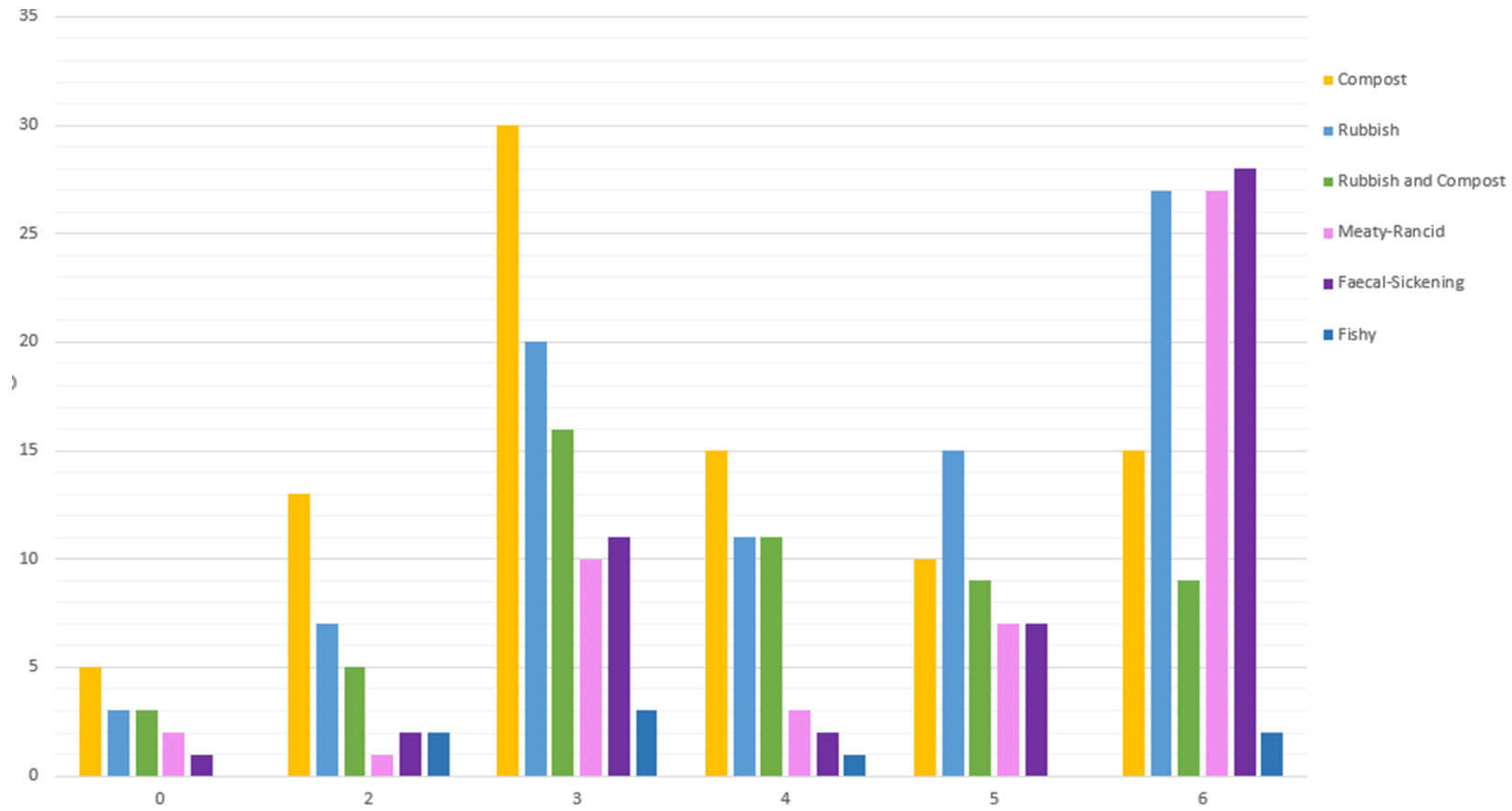
0	I haven't noticed any smell.
1	I noticed a faint smell outside, I wonder what that is?
2	I noticed a smell outside but it doesn't really change what I do.
3	I can't use my outside areas, if I keep the windows closed it's OK inside.
4	I can smell the odour inside my house.
5	I can't use my house for certain activities because of the smell.
6	I don't want to be at home because of the odour.

Amenity Impact August 2020

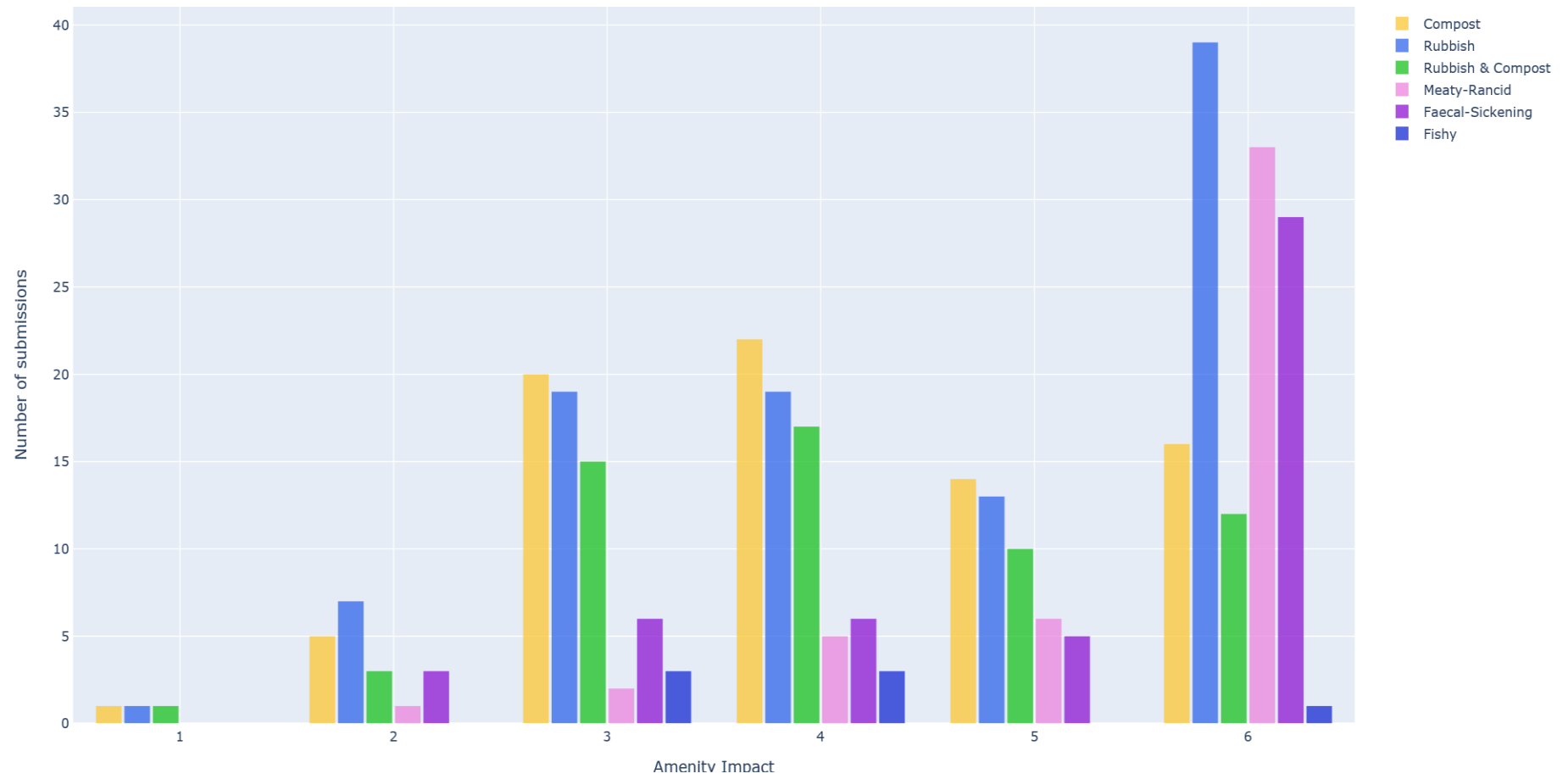


Main points are that reports of compost at amenity impact 4 has doubled. There is also a noticeable increase in reports at the higher end of the amenity impact scale.

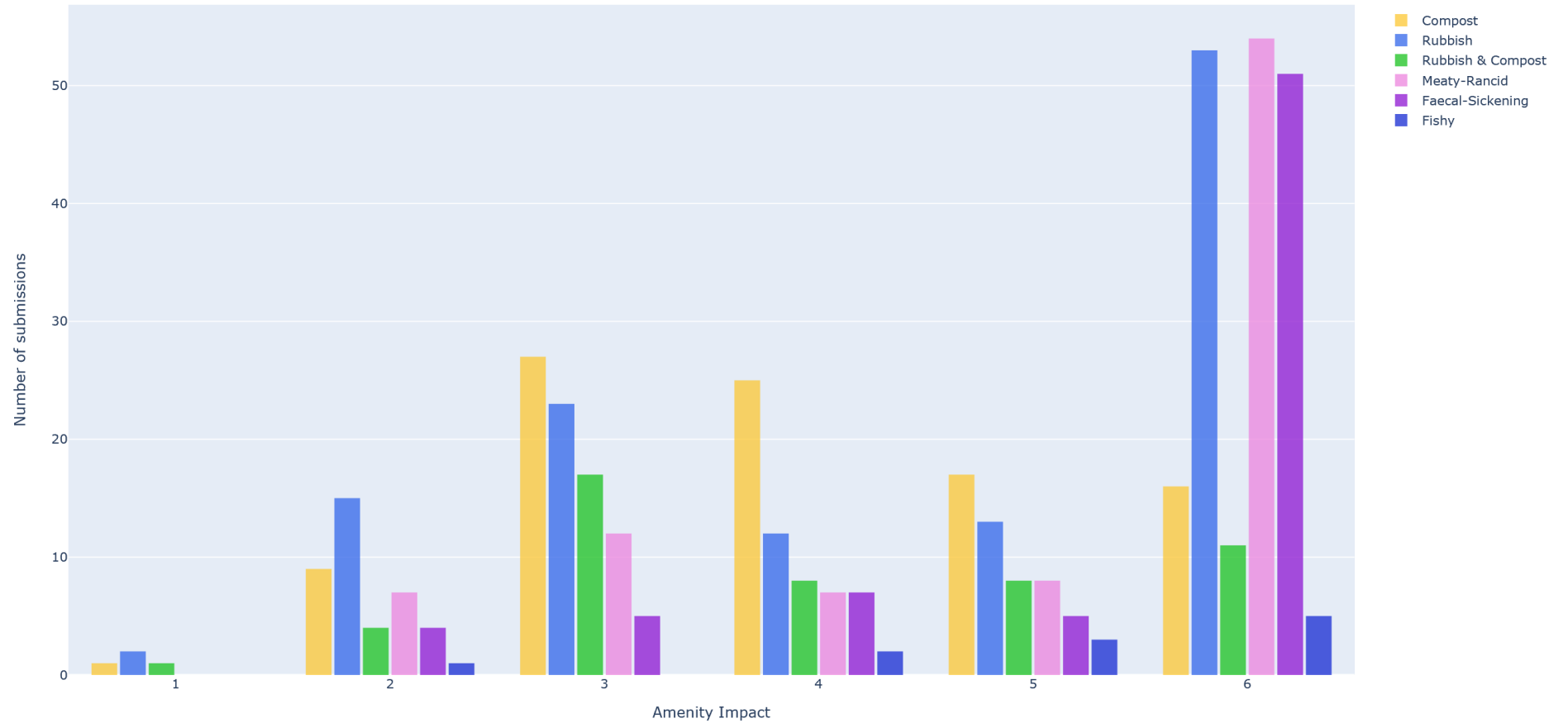
Amenity Impact July 2020



Amenity Impact June 2020



Amenity Impact May 2020



8. BackTrack Plumes

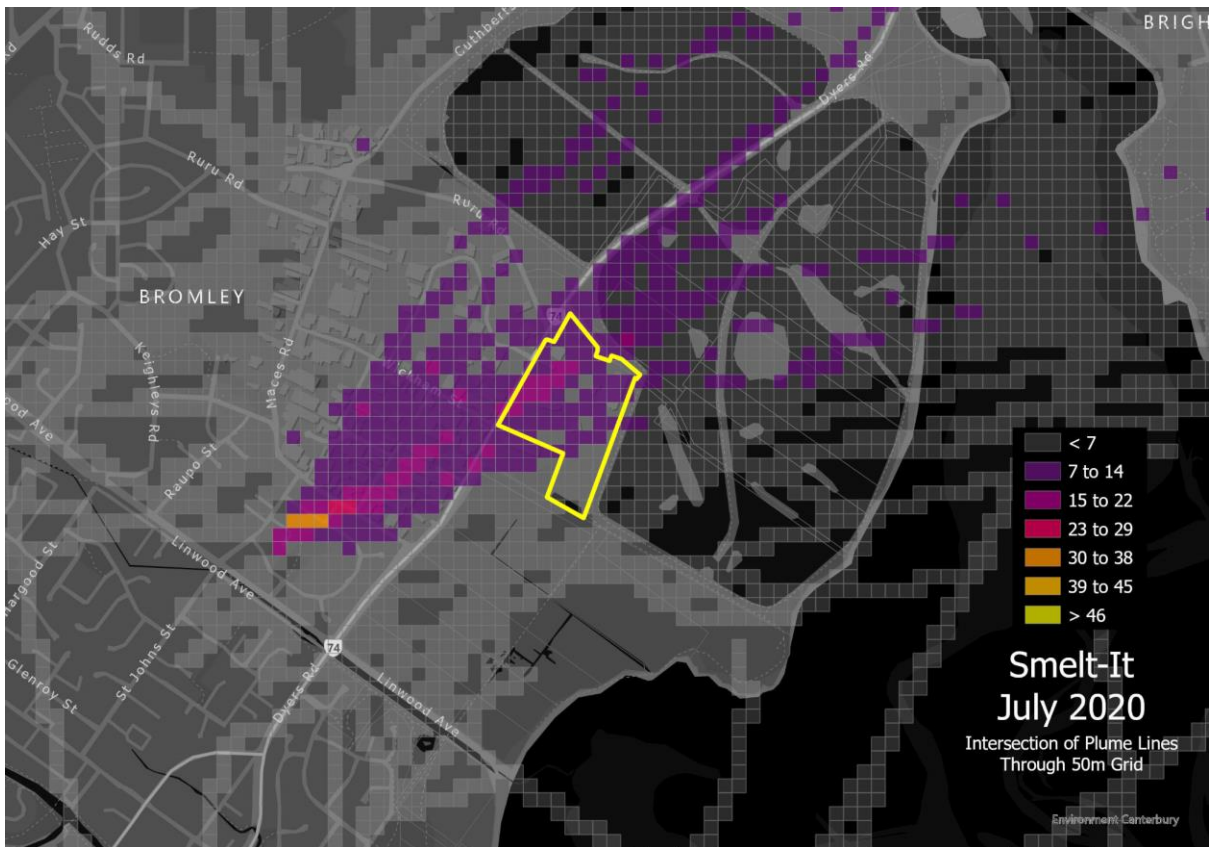
The following images depict the plumes modelled for each Smelt-It reported in May, June and July 2020. As soon as a Smelt-It is received, Environment Canterbury's BackTrack modelling software is able to generate a plume based on wind speed and direction to model a likely trajectory.

The images below depict the number of times a plume model has intersected a 50m square grid. The yellow area shows the Living Earth and EcoDrop property boundary. **Please note** plumes are only shown where seven or more plumes intersect a 50m area for the images in May and June. The July and August image depicts all plumes.

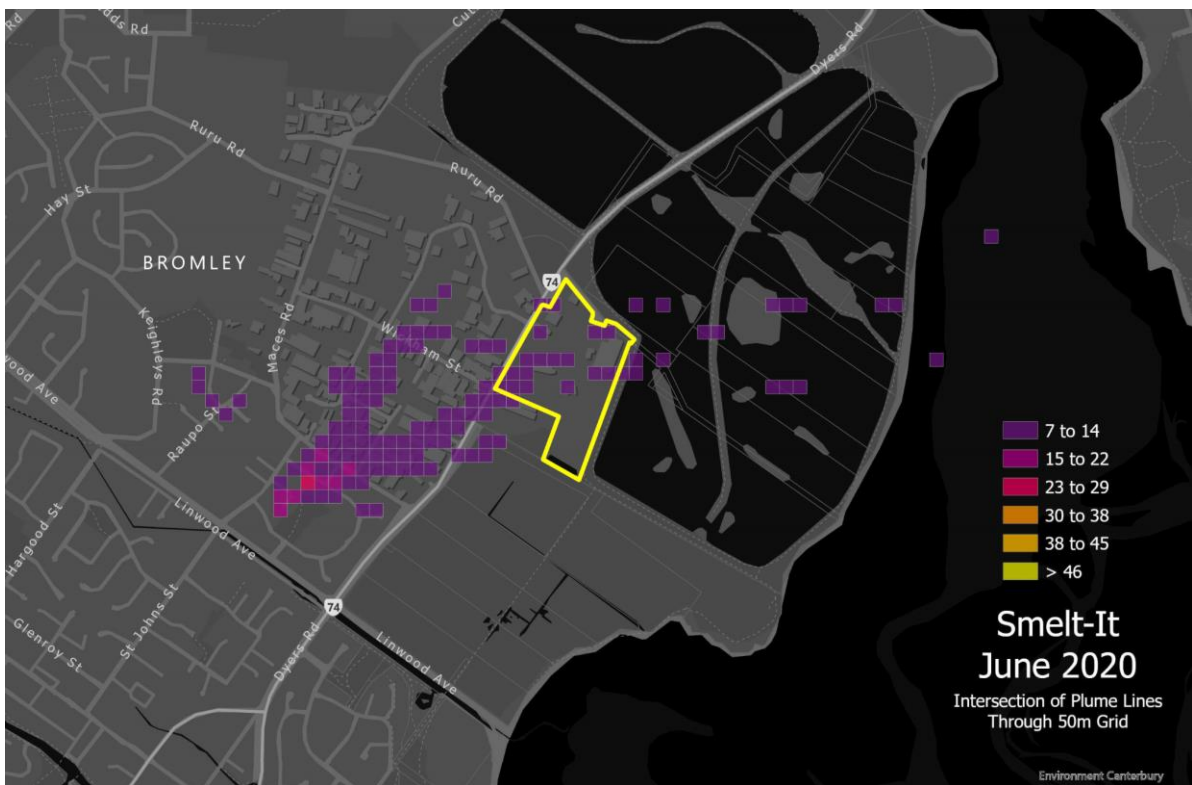
Plumes August 2020



Plumes July 2020



Plumes June 2020



Plumes May 2020



For comparison, the below image shows the total number of plumes for the Bromley Odour period and show five weeks of plumes in one image.

