Adaptative Management Plan Report 1 July – 31 July 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 are to occur on 7 July, 4 August and 8 September 2020. This second report covers the reporting period from 1 July to 31 July 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 second month reporting period, we note a decrease in reported odours from EcoDrop and an increase in reported odours from Living Earth.

There were no substantiated odours from other sources during this reporting period.

We have not provided a comparison between data collected during the pilot but will show each month's data for monthly comparisons during the AMP period.

Summary of findings:

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 for July. Phone calls accounted for about 10% of odour reports with no reports via Snap Send Solve in July. This is detailed further in the report.

Location of sites where odour was detected or substantiated:

	May 2020 (NONCs)	June 2020 (NONCs)	July 2020 (AMP)	July 2020 (AMP substantiated)
Living Earth	2	6	10	7
EcoDrop	1	2	1	0

Most detection or substantiation instances where odour was detected beyond the property boundary, were from Living Earth. An explanation on this new reporting method is provided under 4. Assessments by warranted officers in Bromley.

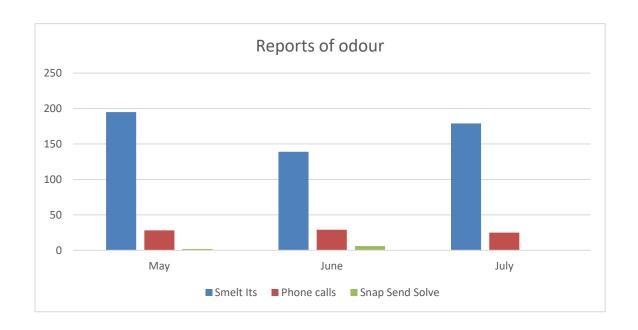
Highest amenity impact odour type

July saw a rise in report of compost odours from Smelt It submitters while rubbish, meaty-rancid and faecal-sickening all reduced.

*We will be conducting more investigation into the reports at the higher end of the amenity scale this coming month.

1. Summary of reports of odour:

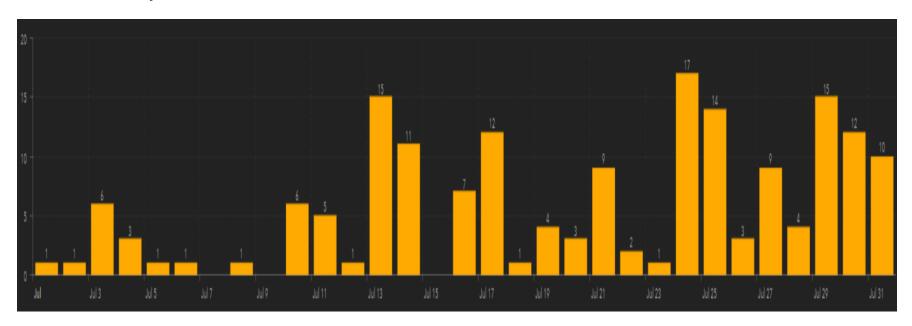
	May 2020	June 2020	July 2020
0 11 11	405	400	470
Smelt Its	195	139	179
Phone calls	28	29	25
Snap Send Solve	2	6	0
Total	225	174	204



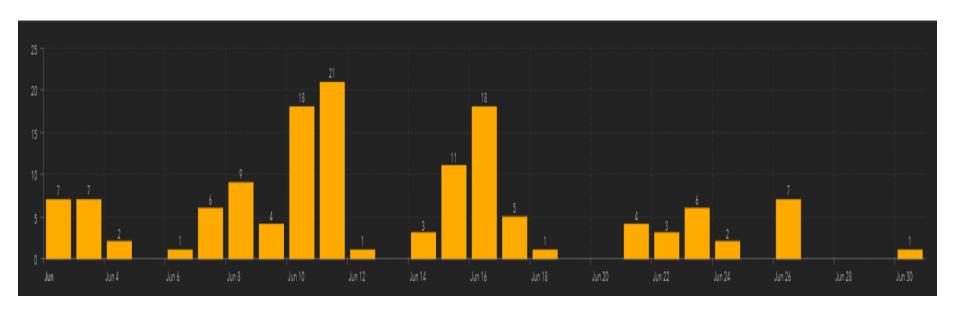
2. Smelt it reports per day

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

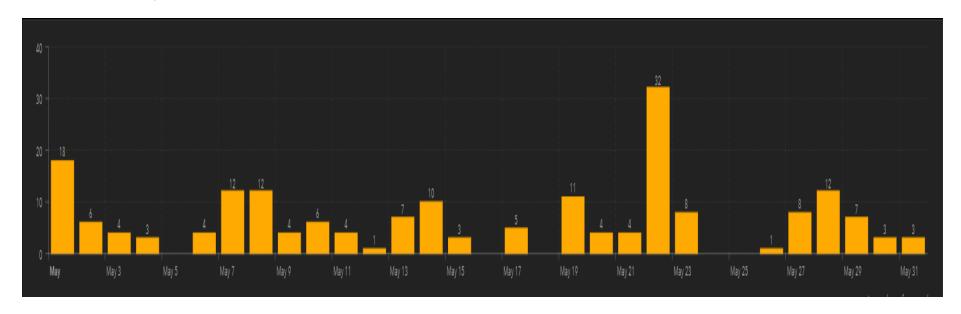
179 Smelt Its in July 2020



139 Smelt Its in June 2020



195 Smelt Its in May 2020



3. Total Pollution Events (PEs)

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

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

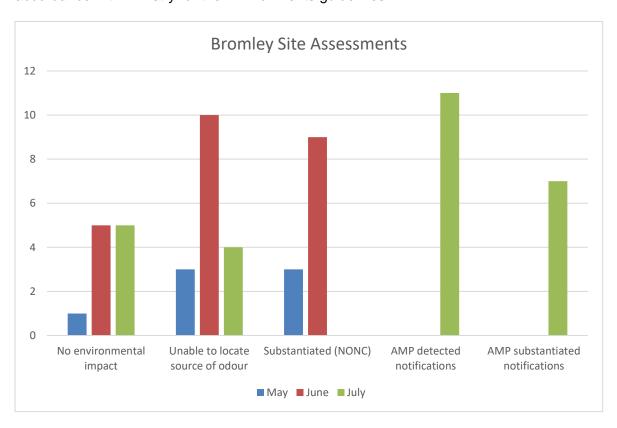
^{*}Unable to locate source of odour: Staff detected an odour but could substantiate the odour source.

^{*}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 Environments guidelines.

*AMP notifications: Due to a request from Waste Management in June 2020, circumstances where a Notice of Non-Compliance would have been issued are reported as AMP (Adaptive Management Plan) notifications as of 1 July 2020.

An AMP detected notification is issued if, in the warranted officers 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):

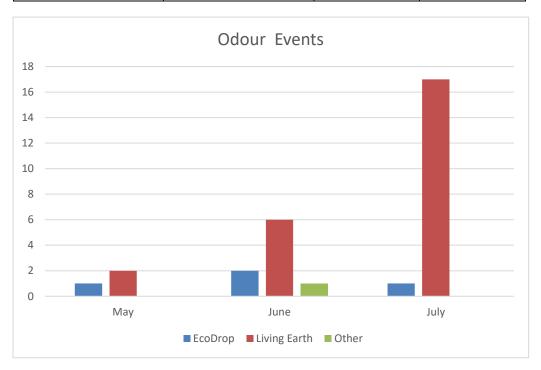
The IOA report has been attached to the email containing this report (because of its size).

In summary, odour assessments were carried out on 5 days (21, 22, 23, 24 and 27 July). There was no one occasion where the three monitoring sources (Community reports, warranted officers and IOA) triangulated in July, however there were instances of corroboration between two of the three (i.e. between community and officers, and between community and IOA).

The main odour types reported by the IOA were rubbish and compost. These results again support the reports from the community and direct observations by warranted officers.

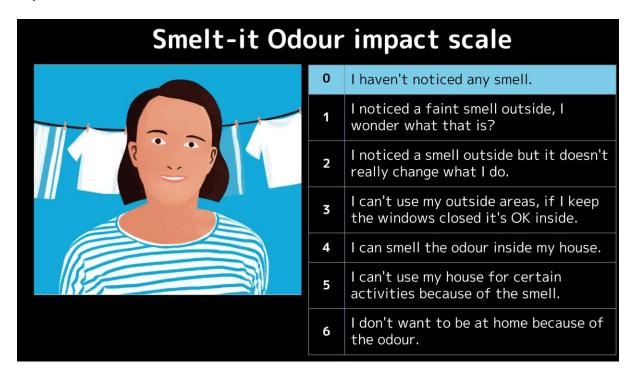
6. Summary of when a Notice of Non-Compliance notice or AMP notification was issued:

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

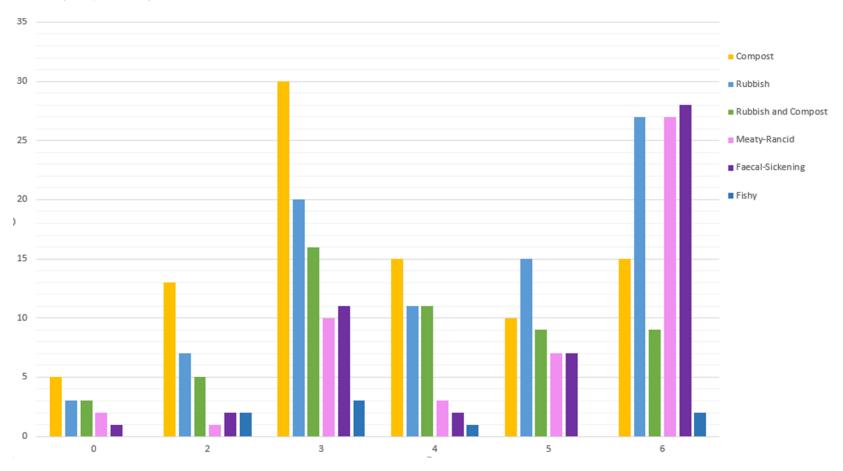


7. Amenity Impact

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:

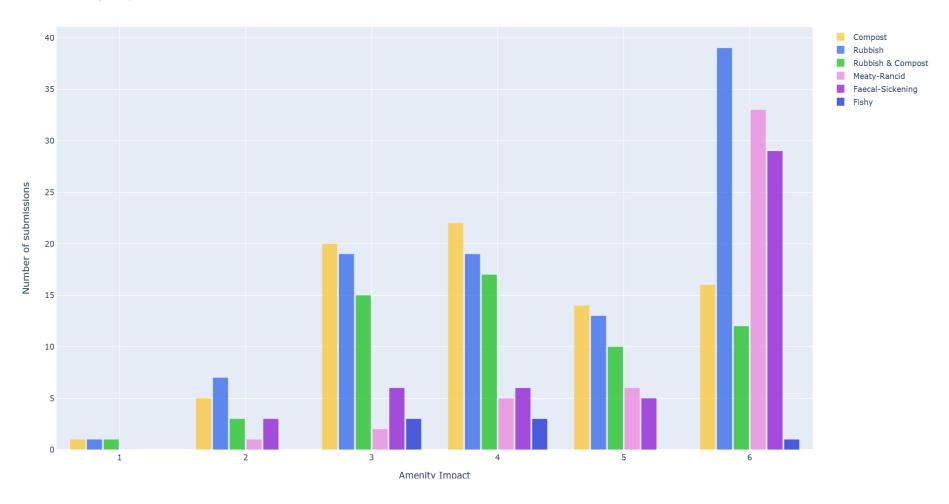


Amenity Impact July 2020

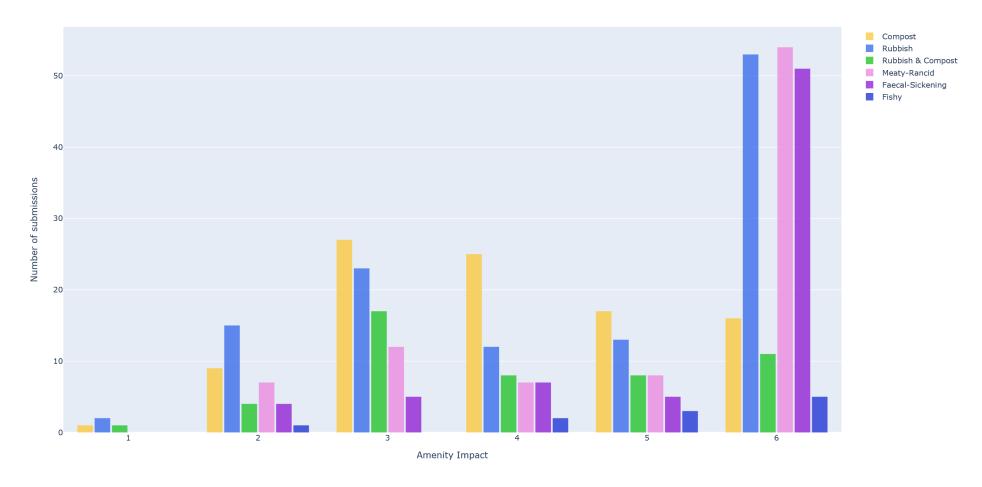


Main points are that reports of compost has increased in July compared to June while reports of rubbish, meaty-rancid and faecal-sickening has decreased. Amenity impact 3 is where the submitters states they cannot use their outside areas.

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, generates 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 7 or more plumes intersect a 50m area for the images in May and June. The July image depicts all plumes.

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 5 weeks of plumes in one image.

