

Annex C: Email correspondence

From: [REDACTED] (Defra) [mailto:[REDACTED]]
Sent: 22 July 2013 17:13
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Breach of ozone public information threshold

[REDACTED]

For information you might wish to advise your local networks although at the moment the breach only affects the Brighton area.

[REDACTED]

[REDACTED]

National and Local Air Quality

Atmosphere and Local Environment (ALE) Programme
Resource, Atmosphere and Sustainability (RAS)

Department for Environment, Food and Rural Affairs
Area 2C Nobel House, 17 Smith Square, London, SW1P 3JR

Telephone [REDACTED]

<http://www.defra.gov.uk/environment/quality/air/airquality/index.htm>

Interested in air quality? Automated Twitter feed @DefraUKAir.

From: [REDACTED] (Defra)
Sent: 22 July 2013 17:11
To: [REDACTED] (DEFRA); [REDACTED] (Defra)
Cc: [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra);
[REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra);
[REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra)
Subject: RE: Breach of ozone public information threshold

[REDACTED]

Just to let you know that we have breached the Public Information Alert Threshold for hourly ozone levels at Brighton. An automatic alert has gone on to the UK-Air website to advise of this. We have not issued a tweet yet because we do not have a breach anywhere else as yet and also we do not have any instance of high levels of ozone more generally. The maps are all showing moderate or low although it is possible that these might change to high later today. If that happened then a tweet would go out. It would be helpful if the press office could retweet that tweet to extend the coverage.

You should already have lines relating to this. As was said previously heatwaves can contribute to heightened levels of air pollution and especially elevated ozone levels so if we do cross the threshold later today this would not be surprising. The health advice for high levels of ozone is given on the Defra UK air website at <http://uk-air.defra.gov.uk/air-pollution/daq>

[REDACTED]



I have copied to you for info. Given the very hot weather today it is not surprising that have breached this public information level somewhere (as you know we expected it last week but did not get it).

Issuing a public information alert is a Directive requirement which requires Member States to publish alerts should maximum hourly levels of ozone be breached.

We had one similar to this in July last year I think.

Please ring me if you need to discuss.

Thanks

[REDACTED]

[REDACTED]

National and Local Air Quality

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Department for Environment, Food and Rural Affairs
Area 2C Nobel House, 17 Smith Square, London, SW1P 3JR

Telephone [REDACTED]

Interested in air quality? Automated Twitter feed @DefraUKAir.

Department for Environment, Food and Rural Affairs (Defra)

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Please see the below. You will want to be aware that we expect to breach the public information threshold for hourly ozone levels sometime this evening. If we do then an automated message will go up on our website and a tweet will be issued as well. I have asked our press office to retweet. If it happens we expect this alert to be in relation to London and the South East only rather than more widely. PHE might wish to alert their contacts/field officers as appropriate but I leave this to you (as I am not sure who else should be alerted in PHE).

Please ring me if you need to discuss.

█

█

National and Local Air Quality

Atmosphere and Local Environment (ALE) Programme
Resource, Atmosphere and Sustainability (RAS)

Department for Environment, Food and Rural Affairs
Area 2C Nobel House, 17 Smith Square, London, SW1P 3JR

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<http://www.defra.gov.uk/environment/quality/air/airquality/index.htm>

Interested in air quality? Automated Twitter feed @DefraUKAir.

Sorry for the delay in getting back to you. Our proposed response is below. Happy to chat through – there's a few complexities in here. In summary: the implications are limited, the alert is for information purposes and the public's actions should continue to be informed by the health advice and recommended actions in the DAQI. The lines to take are still fine.

Background: Defra provides information about air pollution levels, including ozone, using the Daily Air Quality Index (DAQI) <http://uk-air.defra.gov.uk/air-pollution/daqj>. The index is based on expert advice from the World Health Organization and the Committee on the Medical Effects of Air Pollutants. The index uses 8-hour averages of ozone levels, because this most closely represents the exposures likely to be harmful to human health. Health advice to the public is based on whether levels of pollution are low, moderate, high or very high, but it is possible that there may be peaks in ozone levels in this 8-hour period. The EU Air Quality Directive requires Member States to inform the public if certain 1 hour thresholds are exceeded, which signifies a peak in the levels being measured. Defra provides online pollution alerts for this purpose.

Yesterday's situation: Yesterday Brighton had "moderate" pollution based on the DAQI. In addition, the EU Air Quality Directive information threshold was exceeded for 1 hour, signalling a peak in ozone levels in the afternoon. In this situation, the public's actions should continue to be informed by the DAQI <http://uk-air.defra.gov.uk/air-pollution/daqj>

Science and Evidence Team
Atmosphere and Local Environment (ALE) Programme
Department for Environment, Food and Rural Affairs
Area 2C Nobel House, 17 Smith Square, London, SW1P 3JR

Tel: [REDACTED]

Defra air quality on twitter 

From: [REDACTED] (DEFRA)

Sent: 23 July 2013 12:04

To: [REDACTED] (Defra); [REDACTED] (Defra)

Cc: [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra);

[REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED]

(Defra); [REDACTED] (Defra)

Subject: RE: Breach of ozone public information threshold

Hi [REDACTED] and [REDACTED].

A journalist at the Argus paper in Brighton called to ask about the pollution warning at Brighton Preston Park yesterday at 4pm. He said the level was 182 (with a threshold of 180). Was this the same warning on ozone that is mentioned below?

Basically the journalist just wants some more details about what this warning means, what are the health implications, etc. If the warning is about ozone how does the 182 reading correspond to our health advice at <http://uk-air.defra.gov.uk/air-pollution/daqi?>

I have this line if needed (is it still correct?). But for the moment, he's only asked for background info on the implications of the warning.

A Defra spokesperson said:

"We want to keep improving air quality and reduce the impact it can have on people's health.

"Air pollution levels are currently moderate to low and anyone with lung or heart problems, who experiences symptoms, should consider reducing strenuous activity, particularly outdoors."

Many thanks,

██████

██████████ | Press Officer | Environmental Protection Desk

Department for Environment, Food and Rural Affairs

Direct line: ██████████ | Mobile: ██████████ | Out of hours: ██████████

Nobel House | 17 Smith Square | London SW1P 3JR

Difficult to call on the 8-hour mean, concentrations have gone up really quickly presumably with a bit of European air coming in.

It will need to persist late into the evening above 160 ug/m3 to trigger high – unlikely but not impossible. Thunderstorms forecast in the far south-east tomorrow now.

Latest hour has come down at 172 ug/m3.

██████████
From: ██████████ (Defra) [mailto:██████████]
Sent: 22 July 2013 17:29
To: ██████████ (Defra)
Cc: ██████████
Subject: RE: Brighton Preston Park - high ozone

Hi

Thanks for the email – got the notification from the website too. The only thing I wondered about was the link to health advice at the bottom. Clearly the DAQI may confuse things as could still be moderate when this alert goes off and this is nothing to do with the bandings. Wondered about changing the link to

Short-term health effects of air pollution <http://uk-air.defra.gov.uk/air-pollution/effects?view=short-term>

Do you think Brighton and Littlehampton is going to tip into High for 8 hour mean?

██████████
██████████
Science and Evidence Team
Atmosphere and Local Environment (ALE) Programme
Department for Environment, Food and Rural Affairs
Area 2C Nobel House, 17 Smith Square, London, SW1P 3JR

Tel: ██████████

Defra air quality on twitter 

From: ██████████
Sent: 22 July 2013 17:22
To: ██████████ (Defra); ██████████ (Defra)
Cc: ██████████
Subject: Brighton Preston Park - high ozone

Dear ██████████ and ██████████,

This afternoon around 4 pm, ozone reached 182 µg/m³ at Brighton Preston Park. We issued the alert which can be seen here <http://uk-air.defra.gov.uk/latest/alerts>

Could you let us know if you are happy with the text used for this alert.

Regards

[Redacted]

[Redacted]

Consultant
Ricardo-AEA

RICARDO-AEA

[Redacted]

Tel: [Redacted] | Web: www.ricardo-aea.com

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Hi [REDACTED],

Yes this was the one site which just crept into the High band but it did not reach the P.I.T. – maximum hour was only 168 ug/m3.

This was quite an unusual “flat-topped” peak at just over 160 ug/m3 - http://uk-air.defra.gov.uk/latest/graphs/HRL_weekly_m.png

[REDACTED]
From: [REDACTED] (Defra) [mailto:[REDACTED]]

Sent: 18 July 2013 12:08

To: [REDACTED]

Subject: Harlington O3 yesterday

I see this got up to high/7 yesterday at 163ug/m3 – did we not get any 180u/m3 hourly PIT exceedences?

[REDACTED]

[REDACTED]
Science and Evidence Team
Atmosphere and Local Environment (ALE) Programme
Department for Environment, Food and Rural Affairs
Area 2C Nobel House, 17 Smith Square, London, SW1P 3JR

Tel: [REDACTED]

Thanks – if you could just let [REDACTED] know.

Regards

[REDACTED]
[REDACTED] | Senior Press Officer | Environment Desk

Department for Environment, Food and Rural Affairs

Direct line: [REDACTED] | Mobile: [REDACTED] | Out of hours: [REDACTED]

Nobel House | 17 Smith Square | London SW1P 3JR

Dear [REDACTED],

I am happy with the information [REDACTED] provided yesterday (I was in meetings most of the time). I understand that ozone levels in the South East are lower today, but feel free to contact me if the situation changes over the following days.

We will discuss your more general questions below when [REDACTED] and [REDACTED] are back from annual leave.

Best wishes

[REDACTED]

- 1) Why was the 1 hour mean dropped from the DAQI? Is this based on health evidence which favours 8 hour?
- 2) Your views for improving communication of exceedences of these thresholds, in particular how to answer the question: what does this mean for health and what should the public do if an information or alert thresholds is exceeded?
- 3) In considering a future review of the EU Directive would you propose these 1 hour thresholds are replaced by 8 hour thresholds in line with the DAQI?

[REDACTED]
Group Leader, Air Pollution & Climate Change

Centre for Radiation, Chemical & Environmental Hazards

Public Health England

[REDACTED]
Tel: [REDACTED] Mobile: [REDACTED]

www.gov.uk/phe Follow us on Twitter @PHE_uk

From: [REDACTED]

Sent: 23 July 2013 14:55

To: [REDACTED] (Defra); [REDACTED]

Cc: [REDACTED] (Defra); [REDACTED] (Defra); [REDACTED]

Subject: RE: Defra press enquiry re ozone

Dear [REDACTED]

Thank you for sending this draft text through, and the enquiry (for [REDACTED] - see attached).

I think your draft text is pretty good. I wouldn't include the second phrase in yellow. I would suggest adding something to the first paragraph about the 8-hour average being the basis of health-based recommendations from WHO (air quality guidelines), COMEAP (DAQI) and within the EU Directive itself (target values). You might also want to include some more general info about the health effects of short-term exposure to elevated concentrations of ozone - even if only as background info for your press officer. Some text below taken from COMEAP report/website that might be useful for this purpose.

Hope this is helpful

We will try to get back to you on the other questions in due course. Do you have access to the CSAS minutes which [REDACTED] kept? - they might help wrt answering the first question.

[REDACTED]

[REDACTED]: do you have any thoughts/comments on the draft response below, or on my suggestions?

FYI, some text taken from:

COMEAP review of the AQI:

O₃ is an oxidising agent and acts as an irritant, producing inflammation of the respiratory tract.

At high concentrations O₃ irritates the eyes, nose and throat, causing coughing and chest discomfort whilst breathing. Exposure over several hours can lead to damage of the lining of the airways. This is followed by inflammation and narrowing of the airways and increased sensitivity to stimuli such as cold air and exercise. This is called 'airway hyper-responsiveness' (twitchy airways). There is a wide variation in individuals' sensitivity to the effects of O₃.

During High pollution episodes, high levels of O₃ may exacerbate asthma or trigger asthma attacks. Some non-asthmatic individuals might also experience discomfort when breathing, particularly if they are exercising vigorously outdoors.

COMEAP website

Exposure to high concentrations of ozone produces irritation of the eyes and narrowing of the airways

There is a wide variation in individuals' sensitivity to the effects of ozone. Those suffering from asthma are not necessarily more sensitive to ozone than other people but as they may already have some impairment of lung function, a further reduction caused by ozone may produce more significant effects than a similar reduction in those with normal lung function. Many air pollutants cause narrowing of the airways: this can be monitored by means of lung function tests.

Unlike the health effects of sulphur dioxide the effects of exposure to ozone do not appear immediately after exposure begins: they build up over several hours. Measurements of ozone concentrations are averaged over 8 hours, as this most closely represents the exposures likely to be harmful to human health.

During a pollution episode (a period of abnormally high air pollution) high levels of ozone may worsen asthma or trigger asthma attacks. Some non-asthmatic individuals might also

experience discomfort when breathing, particularly if they are exercising vigorously outdoors. The mechanism underlying this effect is not well understood: the effect is not seen with other gases that cause narrowing of the airways.

Epidemiological studies have also suggested that ozone contributes to cardiovascular disease probably through its pro-inflammatory effects on the lung.

From: [REDACTED] (Defra) [mailto:[REDACTED]]
Sent: 23 July 2013 14:20
To: [REDACTED]
Cc: [REDACTED] (Defra); [REDACTED] (Defra)
Subject: RE: Defra press enquiry re ozone

Hi [REDACTED]

Grateful if you could check text over, particularly with respect to the bits in yellow. We need to get back to our press office asap.

*Defra provides information about air pollution levels, including ozone, using the daily air quality index (DAQI) <http://uk-air.defra.gov.uk/air-pollution/daqj>. The index uses 8-hour averages of ozone levels, because the effects of ozone on health can build up over several hours. Health advice to the public is based on whether levels of pollution are low, moderate, high or very high, but it is possible that there may be peaks in ozone levels in this 8-hour period. The EU Air Quality Directive requires Member States to **inform** the public if certain 1 hour thresholds are exceeded, which signifies a peak in the levels being measured. Defra provides online pollution alerts for this purpose.*

Yesterday Brighton had "moderate" pollution based on the DAQI. In addition, the Air Quality Directive 1 hour information threshold was exceeded, signally a peak in ozone levels in the afternoon. There is no additional health advice provided with respect to the 1 hour threshold so the public's actions should continue to be informed by the DAQI <http://uk-air.defra.gov.uk/air-pollution/daqj>

Wider questions we have are:

- 1) Why was the 1 hour mean dropped from the DAQI? Is this based on health evidence which favours 8 hour?
- 2) Your views for improving communication of exceedences of these thresholds, in particular how to answer the question: what does this mean for health and what should the public do if an information or alert thresholds is exceeded?
- 3) In considering a future review of the EU Directive would you propose these 1 hour thresholds are replaced by 8 hour thresholds in line with the DAQI?

Views on these in coming weeks would be fantastic

Regards

[REDACTED]

[REDACTED]

Science and Evidence Team
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Tel: [REDACTED]



Defra air quality on twitter

From: [REDACTED]

Sent: 23 July 2013 13:40

To: [REDACTED]

Cc: [REDACTED]

Subject: Defra press enquiry re ozone

Importance: High

Dear [REDACTED]

I have just spoken to [REDACTED] and [REDACTED] at Defra. They are responding to a press enquiry regarding the ozone info threshold (based on hourly averages) having been reached yesterday afternoon, but the 8-hour DAQI reading being moderate.

They intend to send through some draft text for review shortly - they need to respond within a couple of hours. Please keep an eye out for this e-mail, which I think they will copy to you - I'll keep any eye out for it too.

Thanks

[REDACTED]

[REDACTED]

Air Pollution and Climate Change Group

Public Health England

[REDACTED]

[REDACTED]

www.gov.uk/phe

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