

OLD FOUNDRY ROAD

AIR QUALITY

May 2023

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Introduction

Introduction

The matter of air quality at the application location has been a topic of long term discussions, assessments and information exchanges between the applicant and NPTCBC at the time of the previous residential proposal.

More latterly, discussions have focussed on interventions at the nearby Wall Colmonoy facility, the source of localised air quality issues.

In a recent exchange of emails between Chris Davies and Paul Markey of Bluefield Land (extract over and full message included herein), it was considered that an industrial as opposed to residential proposal would remove the issue of air quality being a material factor and that in principle an industrial scheme would be acceptable.

In this document, we provide a compendium of the relevant technical submissions on the topic of air quality, with a view to re-opening the dialogue on the matter, but from the baseline we hope that the industrial proposal is acceptable in principle in terms of air quality.

Introduction

From: Chris Davies <c.j.davies@npt.gov.uk>

Sent: 27 October 2021 11:50

To: Paul Markey <paul@bluefieldland.co.uk>

Cc: Ceri Morris <c.morris1@npt.gov.uk>; Steve Ball <s.ball@npt.gov.uk>

Subject: RE: Old Foundry Road, Pontardawe

Paul,

At this time the new flood maps are not in place, based on my understanding, we would consider any development against the existing TAN15 info.

However, NRW may take a differing view when consulted. It is their view that would be material in the decision making process.

I would strongly recommend that your consultant discuss with NRW a pre-app to ascertain their views on the proposed uses, and displacement of flood water issue.

In principle, from a land use view the uses would appear to accord with surrounding uses, and as discussed previously, remove the issue with regard air quality.

Assessment Compendium

Damian Barry

From: Paul Markey <paul@bluefieldland.co.uk>
Sent: 27 October 2021 11:58
To: Damian Barry
Subject: FW: Old Foundry Road, Pontardawe

CAUTION: This email originated from outside of RPS.

Hi Damian

Please see below from Chris Davies.

Looks like he'll support us in Principle and so will economic development.

Kind Regards

Paul Markey
Managing Director

Tel no. 07817 211289
www.bluefieldland.co.uk



Atlantic Eco Park, Newton Road, Rumney, Cardiff, CF3 2EJ



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Please consider the environment before you print this email.

From: Chris Davies <c.j.davies@npt.gov.uk>
Sent: 27 October 2021 11:50
To: Paul Markey <paul@bluefieldland.co.uk>
Cc: Ceri Morris <c.morris1@npt.gov.uk>; Steve Ball <s.ball@npt.gov.uk>
Subject: RE: Old Foundry Road, Pontardawe

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However, NRW may take a differing view when consulted. It is their view that would be material in the decision making process.

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In principle, from a land use view the uses would appear to accord with surrounding uses, and as discussed previously, remove the issue with regard air quality.

Chris Davies

From: Paul Markey <paul@bluefieldland.co.uk>

Sent: 27 October 2021 10:59

To: Chris Davies <c.j.davies@npt.gov.uk>

Subject: FW: Old Foundry Road, Pontardawe

Hi Chris

Further to my email below I have spoken with Adil Pirmohamed in the economic department.

Adil has explained that there is a lack of space available for sale or rent in the light industrial market sector and he would welcome us developing the site for that use. He has put me in touch with local surveyors and the Development Bank of Wales to ensure any scheme put forward would be financially viable.

My concern is the flood zones as mentioned below.

For us to progress this further all I would ask is whether you could indicate 'in principle' support for a development of this nature?

Obviously there are major hurdles for us to get over but if we could get know that we are going down the right path as far as your team are concerned then that would give us confidence to look for solutions around the flooding challenges.

Kind Regards

Paul Markey

Managing Director

Tel no. 07817 211289

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From: Paul Markey
Sent: 22 October 2021 15:15
To: Chris Davies <c.j.davies@npt.gov.uk>
Subject: RE: Old Foundry Road, Pontardawe

Chris

Thanks for your note below.

It looks like Coastal will withdraw from the project so we will be looking at switching our focus to light industrial units for owner/occupiers on the site.

The new flood maps put the whole of Alloy Ind Estate in Flood Zone 3 though.

I have asked JBA to comment on this but was just wondering what your gut feeling is about whether we would be able to satisfy the criteria set out for less vulnerable uses?

Kind Regards

Paul Markey
Managing Director

Tel no. 07817 211289
www.bluefieldland.co.uk



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From: Chris Davies <c.j.davies@npt.gov.uk>
Sent: 20 October 2021 09:57
To: Paul Markey <paul@bluefieldland.co.uk>; Ceri Morris <c.morris1@npt.gov.uk>; Calvin Davies <c.davies13@npt.gov.uk>
Cc: Damian Barry <Damian.Barry@rpsgroup.com>; James Griffiths <jamesg@coastalha.co.uk>
Subject: RE: Old Foundry Road, Pontardawe

Dear All,

Further to the meeting Monday.

We agreed that we would clarify the position in relation to the funding granted to WC and what this work entailed, has it been done, and when it was expected to show actual results regarding air quality. Also we agreed to ascertain the position with the noise.

It appears from discussion with Environmental Health that the money granted to WC was for the upgrade of the furnaces to achieve new EU standards. . Air quality was not the prime reason.

Over the next few months, but by the end of the year, Environmental Health believe that there will be more clarity on the air quality issue. However, this will clearly take some time, and further funding by WC themselves potentially. As such we may have more clarity by the end of the year but at this time we cannot say when or what works would be carried out, and the timescale for the implementation. Also as discussed, there would need to be 12 months monitoring showing a downward trend in levels to provide you any confidence in even submitting an application.

In relation to Noise, the officer leading on that issue is on leave, but we will reply as soon as they have returned and have had time to update us.

For clarity, we advised that you would not need to submit a new pre-application to us, we can still discuss the proposals under the previous submission. We did not offer comment on the need for PAC which is an altogether different matter and would need to be considered based on timescales since the original submission and any changes to the scheme.

It rust this clarifies the current position, and we will provide any further updates when we are made aware of them.

Chris Davies

From: Paul Markey <paul@bluefieldland.co.uk>

Sent: 18 October 2021 15:26

To: Ceri Morris <c.morris1@npt.gov.uk>; Chris Davies <c.j.davies@npt.gov.uk>

Cc: Damian Barry <Damian.Barry@rpsgroup.com>; James Griffiths <jamesg@coastalha.co.uk>

Subject: Old Foundry Road, Pontardawe

Dear Ceri and Chris

Thank you for your time earlier.

For everyone's benefit I thought I'd jot a couple of notes down.

The main question from Bluefield and Coastal was what works had been carried out at Wall Colmonoy and what are the likely timescales that they are hoping to see improvements on the air quality.

- ☐ Ceri and Chris will check with Calvin Davies on this matter and revert back to us
- ☐ Coastal confirmed that the grant monies they have allocated for the site runs out in March 2022 and they have no other outlets within NPT for it
- ☐ If timescales aren't too far apart then the grant can be shifted into next year but Coastal would be reluctant to do so without confirmation
- ☐ With regards to the application we can use the initial submission as a basis and we would not be required to go through PAC. New information could be subject to further fees but a new application would not be required.

I hope the above is a reflection of what we discussed. If I've missed anything then please let me know.

Kind Regards

Paul Markey

Managing Director

Tel no. 07817 211289

www.bluefieldland.co.uk



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Os hoffech ddefnyddio'r Gymraeg wrth ddelio â'r Cyngor os gwelwch yn dda cliciwch [yma](#)

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Wall Colmonoy site

Preamble

In an assessment of a risk from a process, a standard source-pathway receptor model is developed to enable identifying best method for managing the risk. Method of risk management include removal/control of the source, removal of the pathways to sever the connections between source and receptors or removal of the receptors.

In advising that this planning application will be rejected based on air quality issues, it seems that the authority has elected the latter (removal of receptor). This would have been a legitimate option if the proposed development was the only receptor. As the authority is aware, this is not the case as according to DEFRA ^(1,2), an area of, at least 4 km² is affected by an impacted air quality with the concentration of Nickel being regularly and significantly above the target value although at varying degrees.

A report by Defra ⁽¹⁾ states that this exceedance situation is an area of exceedance of 1 km² and is located in the Swansea valley in the north of the Swansea Urban Area agglomeration zone. The resident population associated with this exceedance situation is 2,102. This exceedance situation is adjacent to and shares common sources with the exceedance situation for South Wales. In South Wales, DEFRA ⁽²⁾ states that this exceedance situation is an area of exceedance of 3 km² and is located in South Wales (non- agglomeration zone code UK0041). The resident population associated with this exceedance situation is 2962.

Exceedances within these zone were identified on the basis of measurement data, with model results on a 1 km x 1 km grid resolution providing supplementary information. Fine scale modelling on a 20 m x 20 m grid resolution located around an identified industrial source provided a more detailed local assessment.

On page 38 of DEFRA report¹ Figure A1 shows a comparison between measured and modelled Ni concentrations. Modelled concentrations are the sum of contributions from the local point source model and the national background model. The figure shows good correlation

On the same page of the DEFRA report¹ Figure A2 shows the modelled annual mean Ni concentration resulting from the local industrial point source in Pontardawe in 2016. This figure shows the shape and extent of the plume from common source affecting the above two zones, the Wall Colmonoy site.

The Ni concentrations in Pontardawe were strongly influenced by the terrain in the area, as can be seen in Figure A2. The Swansea Valley runs south-west to north-east through the village of Pontardawe, where the point source is located. Figure A2 shows that the distribution of the Ni concentrations in the vicinity of Pontardawe corresponded with the local topography. This is believed to be due to channelling of the local wind flow by the Swansea Valley. Because of this topography, impact on our site at Holly Street, seems to be less than that at the nearest monitoring station at Pontardawe Tawe Terrance, despite its nearer location to the Wall Colomnoy site, due to its location being at the edge of the plume as can be seen from Figure A2. We have asked for a copy of this air dispersion modelling to ascertain the pattern of the concentration in the immediate locality but still awaiting for the report.

It is apparent from the above that this issue of air quality has wider implication than the proposed development with a significant areas of Swansea and south wales being impacted by the failing of one of the permitted activities to achieve what is expected in their permit conditions. Significant information and data are published by NPT council and DEFA demonstrating that the cause of the breach of the air quality target value is not the inability of available technology (BAT), to achieve a good standard of emission that secures the air quality in the area, rather it is caused by regular failing in the maintenance of the abatement systems as will be demonstrated by information provided by NPT and NPL.

The above two reports give a more detailed source apportionment for the industry sector and shows that the main source associated with these exceedance situations are industrial emissions attributed to stack emissions from Wall Colmonoy. The emissions from Wall Colmonoy are regulated by the Neath Port Talbot County Borough Council

Under the EU Directive 2004/107/EC1, the target value (TV) for nickel (Ni) is an annual mean concentration of 20 ng/m³ of ambient air or lower. The Directive requires that Member States shall report on measures in place to address the exceedance of the TV and that all reasonable measures that do not entail disproportionate cost should be taken to ensure this target is not exceeded.

The DEFRA reports ^(1,2) reported that to improve the air quality in the locality, the Welsh Government brought together the regulators and local industrial operators with emissions of Ni to air in pursuit of this aim. Regular meetings have enabled:

- the Welsh Government to communicate to the industrial regulators and operators the extent of the issue and the seriousness with which it is taken;
- the regulators to demonstrate that the operators are applying all cost-effective measures, and in particular are applying best available techniques as required by Council Directive 2010/75/EU (IED);
- the operators to cooperate and share best practice in managing their operations; and
- the development of the latest evidence in understanding the predominant sources

Air Quality in the Area and Sources

Every year, the NPT county Borough council publish an air quality progress report in fulfilment of part IV of the environment act 1995 for local air quality management. These reports provide a good insight into local air quality issues, their causes and actions for improvements. In the next few paragraphs below, we considered the information provided in the last few years (2015-to date).

The monitoring station at Tawe was set up in September 2009, which is approximately 270 metres from Wall Colmonoy's Part B permitted site in Pontardawe. This monitoring station was set up in order to further investigate the potential for nickel emissions from this site, which uses approximately 500 tonnes of the metal each year to manufacture a variety of hard-wearing products. This is the closest monitoring station to the proposed development at Holly Street

The 2015⁴ data was published in July 2016 and stated that Nickel concentrations comply with the EU Target at all locations in Neath, Port Talbot and Pontardawe, except Tawe Terrace. Nickel levels decreased substantially at Tawe Terrace during 2015.

The average concentration of nickel in 2015 was 22.1 ng/m³ which is 110% of the Air Quality Objective. This is a significant improvement upon the figure recorded in 2014 (43.4 ng/m³). The report⁴ states that this is likely to have been due to the improvements that were made at the Wall Colmonoy plant during 2014 and since. Tawe Terrace is the only site which currently exceeds the E.U. Target.

For the following year, 2016, the NPT county Borough council air quality progress report published July 2017⁽⁵⁾ states that Nickel concentrations comply with the EU Target at all locations in Neath, Port Talbot and Pontardawe, with the exception of Tawe Terrace and Pontardawe Leisure Centre. Nickel levels at Tawe Terrace went back up to levels previously encountered in 2014. Levels of nickel at Tawe Terrace (47.4 ng/m³) increased substantially compared to the 2015 value (22.1 ng/m³) and were similar to the 2014 figure (43.4 ng/m³). This is a disappointing result given

the improvements to abatement systems that have taken place in recent years. Investigations suggest that faults and maintenance problems are probably to blame and this will be the focus for regulation of the plant in 2017 (our underlining).

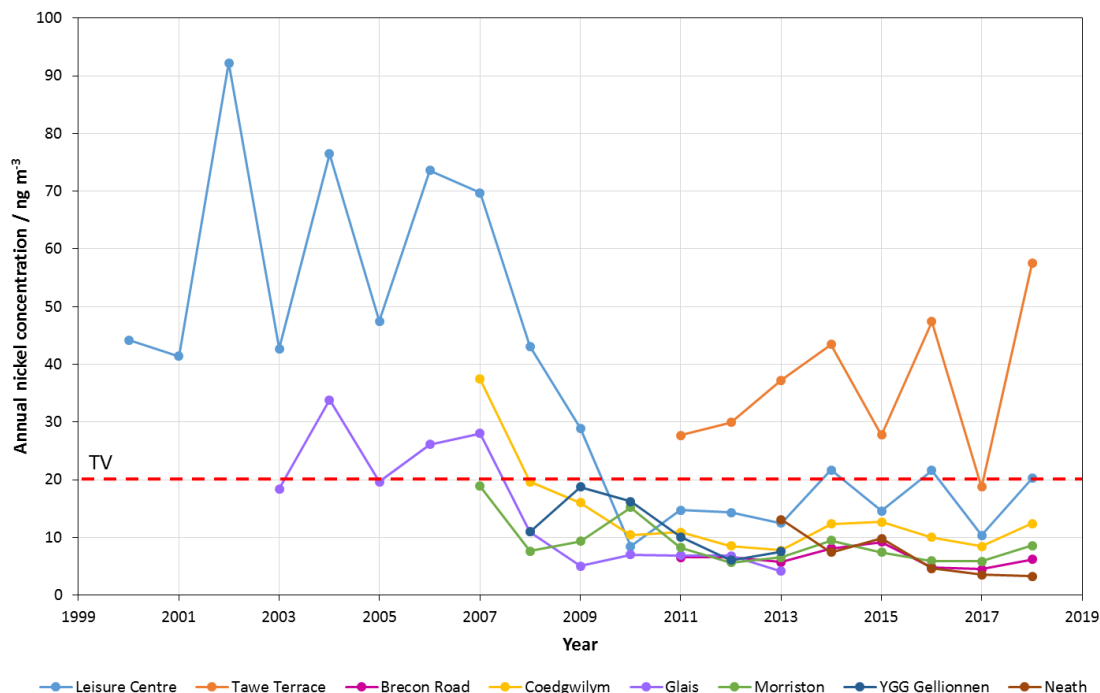
In the following year, 2017, The NPT county Borough council air quality progress report published July 2018⁽⁶⁾ states that Nickel concentrations comply with the EU Target at all locations in Neath, Port Talbot and Pontardawe. This is the first occasion that nickel levels at Tawe have complied with the EU Target and is a consequence of effective regulation and operation of the Wall Colmonoy site. The average concentration of nickel in 2017 was 18.3 ng/m³ which is 92% of the Target value. This is an improvement upon the figure recorded in 2016 (47.4 ng/m³) and the first time the Target has been complied with at this site.

However in the following year, 2018, the NPT county Borough council air quality progress report published September 2019⁽⁷⁾ states that 2018 was a poor year, but the long-term trend is towards reducing concentrations and that the main source of raised nickel levels in Pontardawe is the Wall Colmonoy works, which is regulated by the Council. It states that The Council will continue to focus on regulation of Wall Colmonoy in Pontardawe in order to attempt to drive nickel levels below the EU Target as was the case in 2017. It states that Nickel concentrations exceeded the EU Target of 20 ng/m³ at Tawe Terrace and Pontardawe Leisure Centre. The report⁷ states that these non-compliances are considered to be linked to problems with specific abatement plant at the Wall Colmonoy plant, which were subsequently resolved.

The average concentration of nickel in 2018 was 56.7 ng/m³ which is 280% of the Target value. This is a substantial deterioration on the figure recorded in 2017 (18.3 ng/m³) which was the first time the Target was been complied with at this site. As states above, this poor result was considered to be linked to problems with abatement plant in the Wall Colmonoy plan.

Below is a graph showing the pattern of Nickel concentration at different locations in the area including Tawe Terrace. While a general trend of reduction is apparent at all locations, a very different unstable pattern is apparent at the Tawe Terrace and is reflected in the pattern albeit to a lesser degree in the data collected from the leisure centre which is also believed to be affected by emission from the Wall Colmonoy site.

Nickel trends 2000 – 2018



In addition to the above reports, further work was carried out by National Physical Laboratory (NPL report)³ under instruction from Neath Port Talbot County Borough Council to determine the concentration of heavy metals in the PM10 fraction of ambient air (PM10 being particulate matter of aerodynamic diameter less than 10 µm) at the Pontardawe Leisure Centre monitoring site.

The investigation results showed that, at the leisure centre monitoring station, during 2018 the annual average was 20.2 ng m³, in exceedance of the Target Value (TV) (20 ng m³). In total there were twelve weekly nickel concentrations observed above the Fourth Air Quality Daughter Directive target value (TV) of 20 ng m³ for nickel, including the maximum weekly concentration of 170 ng m³ with the three most extreme events occurring at the end of May, end of June/start of July and mid/late October.

The report³ states that Information received from Wall Colmonoy (emission data supplied by wall Colmonoy April 2019) confirmed a number of issues with abatement that are likely to have contributed to these exceedances.

Overall during 2018, 23 % of nickel measurements were over the directive TV; 9 % were above the UAT (but less than the TV); 26 % were between the UAT and LAT; 42 % were below the LAT (The Upper and Lower Assessment Thresholds) of the EU Air Quality Directives

The report³ states that considering the concentrations of nickel in ambient air measured at the Leisure Centre site in the context of concentrations measured at other local monitoring sites and wind analysis data, it seems likely that emissions from the Wall Colmonoy plant contribute a significantly greater proportion of nickel levels measured at the Leisure Centre site than the Vale nickel refinery at Clydach. Information received from Wall Colmonoy confirmed there were issues with abatement that coincided with exceedances of the target value throughout 2018.

The reports goes on to state that in 2009 an air quality site was installed at Tawe Terrace to measure concentrations in the vicinity of the Wall Colmonoy works. The concentrations measured at Tawe Terrace in 2009 - 2018 were greater than those measured at the Pontardawe Leisure Centre. The estimated nickel emissions from Wall Colmonoy are based on the results of stack emissions tests, normally performed annually. In 2018, stack emissions testing for

all processes was performed in October, resulting in estimated annual emissions of 0.216 tonnes (216 kg). For comparison, the estimated emissions based on the annual stack emissions test in 2017 were 0.0977 tonnes (97.7 kg).

Stack emissions testing to monitor specific processes at Wall Colmonoy was performed in June and September 2018. The June tests monitored output from the Dalamatic baghouse filters, wet extraction systems and the central vacuum system. The results showed a reduction in emissions from the Dalamatic filters, but an increase from the wet extraction and central vacuum systems in comparison to 2017 levels. The test in September showed a significant reduction in emissions from the central vacuum system following a filter change in mid-July. By October, emissions from the wet extract system were much higher than those found at the test in June.

The report³ states that in addition to the Leisure Centre site, there are a number of other metals monitoring sites in the Tawe Valley. These sites are operated under the UK Heavy Metals Monitoring Network, and include Morriston Groundhog, Coedgwilym Cemetery, Tawe Terrace and Brecon Road. The highest nickel concentration of 57.5 ng m³ was observed at Tawe Terrace. The Leisure Centre experienced the second highest concentration (20.2 ng m³), followed by Coedgwilym Cemetery (12.4 ng m⁻³). Viewed in conjunction with the wind rose, it can be seen that these three sites are all nominally upwind of Wall Colmonoy, but for some periods of the year (~ 30 %) they are downwind. The concentrations are decreasing with distance from that source indicating that Wall Colmonoy is the likely source of these elevated concentrations. Emissions from the Vale refinery appear to have limited impact on measured concentrations at Tawe Terrace and the Leisure Centre despite the Vale refinery being nominally upwind of these sites. Brecon Road is nominally downwind of Wall Colmonoy, but at an elevated position compared to the Tawe Terrace and Leisure Centre sites. This may result in this site not encountering the emission plume.

From the above presented information (specifically the underlined sections), it is clear that the issues of emission from the Wall Colmonoy site is the results of poor management of the abatement systems, a matter that is under the control of the operator. It is apparent that each of the reported abatement system is able to achieve a low emission, should it been managed properly. This is different from a situation when the emission cannot be reduced even when BAT is applied.

Emission from the Wall Colmonoy Site

In 2018 DEFRA published two report^(1,2) on measures for 2016 regarding exceedance of the target value for Nickel in Swansea Urban area agglomeration zone (UK0027) and south wales (UK0041). These documents report the exceedance situation for 2016 reflecting the more recent assessment and updating the 2013, 2014 and 2015 report on measures

The first report⁽¹⁾ states that reported annual emissions for the Wall Colmonoy site increased from 24.23 kg yr-1 in 2015 to 95.37 kg yr-1 in 2016. Estimates of annual stack emissions are based on an annual stack test result, which is a snapshot of emissions and is dependent on the relative Ni content of the specific products that are being made or processed and the operation of the emission abatement equipment at the time of the emissions test.

DEFRA report⁽²⁾ states that the reported stack emissions for the Wall Colmonoy site increased in 2016 compared to recent previous years and a corresponding increase in the measured annual mean concentrations of Ni at Pontardawe Tawe Terrace was seen between 2015 and 2016.

The reports states that Significant work was undertaken by the regulator and site operator to understand and rectify the increase in emissions at the Wall Colmonoy site during 2016 and details of this action are provided in the Report on Measures for Swansea.

An action tracker was used to identify, prioritise and track possible improvements with further effort being put into maintenance activities. Stack test results showed raised nickel levels from one item of plant (a wet extractor system),

which was subject to maintenance, including: the pump was changed, metal particulate was cleaned out of the ducting that lead to the unit, the inspection frequency increased on this equipment and a new inspection window was installed. Improvements to this unit are likely to have made the biggest impact on ambient emissions.

The list of required and completed measures shows that most of the improvements were completed before end of 2015 with few completed in 2016 excluding two measures scheduled for later completion in 2018. These include two monitoring related measures, one for improvement of Workplace monitoring and another for ambient (external) monitoring, both to be completed in 2018 to help identify hotspots and use of results to identify and prioritise future improvements. Therefore apart from these two monitoring measures, which although may help identifying future improvements, they don't have any actual immediate effect on improving the emission there were no other proposed immediate measures. However as stated above, there was a significant increase in emission in 2016 (95.37 kg yr⁻¹).

The latter increase was described ⁽¹⁾ as not representative of emissions throughout 2016. It was identified that reported Ni emissions were based on stack tests undertaken while there was a failure in abatement equipment at the site and that this abatement failure is likely to have lasted for a few months during 2016. For the remainder of the year the Ni emissions rate would be expected to be lower than the reported emissions rate.

In 2017 the measured annual mean concentration of Ni at the Pontardawe Tawe Terrace site was 19 ng m³ i.e. below the Ni TV of 20 ng m³. According to these reports, this demonstrates that the action taken at the Wall Colmonoy site had a significant impact on Ni concentrations in the area and shows that when the abatement systems are operating correctly compliance with the Ni TV can be achieved.

Again, the same conclusion is made. If the abatement system was operated correctly, compliance with Ni TV can be achieved. However, further significant emissions were reported in 2018. It is clear that the failure is not associated with BAT not being adequate in reducing the emission and improving the air quality, it is the results of poor management, which contravene the conditions of the site's environmental permit. Further information on problems associated with the monitoring, contrary to the requirements of the permit were reported in the laboratory reports ⁽⁸⁻¹²⁾ where sampling points were not compliant with the appropriate British or equivalent standards (see appendix A for further information)

The site permit states the following:

Offences

Regulation 32 of the EPR Regulations defines the offences that may arise as a result of non-compliance with the regulations or this permit. You are advised to be familiar with this regulation since a person guilty of an offence could be fined up to £20,000 and/or be subject to imprisonment.

Enforcement

If the conditions attached to this Permit are not adhered to, then an enforcement notice may be served upon the operator. This notice will specify the contraventions and the steps to be taken to remedy the situation. It is an offence not to comply with such an Enforcement Notice.

There is a clear evidence that there have been more than one exceedance of the emission limits and that failure in achieving an acceptable level of emission is the results of poor management, contrary to the requirements of the permit environmental management system

Revocation

The enforcing Local Authority may revoke the Permit at any time. This will particularly be considered if fees are not paid or enforcement notices are not complied with.

Suspension

The Regulator has a duty to serve a suspension notice if it is considered that there is an imminent risk of serious pollution to the environment, whether or not there has been a breach of the Permit.

Table 1 below provides concentration and flow emission data sourced from annual reports ⁽⁸⁻¹²⁾ submitted by Wall Colmonoy to NPT council. The approximate annual emissions were estimated from calculation using the concentration and flow rates provided by Wall Colmonoy and assuming 260 days/year of emission with 7.5 operational hours/day. This may not be accurate representations, if the emissions time is not reflective of the site operational hours for the different processes from which the emission is released. However the estimated values are used here for illustrative purpose to show the temporal variation in the emission for each abatement system. In any case, although the estimated emission don't align with the values reported in DEFRA report ^(1,2) for the years 2015 and 2016 they are very close to the reported values in the NPL report ⁽³⁾ for the years 2017 and 2018.

As can be seen, the monitoring data shows variation in the emission and that in the year 2017, the emission was significantly lower than that in other years for each of the abatement systems indicating that the lower emissions are achievable with current abatement system but with better management which is unlikely to result in disproportionate costs to ensure that concentrations do not exceed the TV value.

Table 1

	2015 emission 19 –30/11/15			2016 10 –14/10/16; 25 – 26/10/16; 14/11/16			2017 23 –31/10/2017			2018 17–25/09/2018 & 24/10/2018			2019 30/07/2019		
source	Conc. mg/m ³	Flow m ³ /h	Emission kg/year	Conc. mg/m ³	Flow m ³ /h	Emission kg/year	Conc. mg/m ³	Flow m ³ /h	Emission kg/year	Conc. mg/m ³	Flow m ³ /h	Emission kg/year	Conc. mg/m ³	Flow m ³ /s	Emission mg/hour
A1034	0.02	6394.5	0.25	0.4	6372.5	4.97	0.04	6090.4	0.48	0.44	6024.2	5.17			
A1038	0.03	6287.5	0.37	16.48	6264.3	201.31	0.13	6308.9	1.60	0.04	5825.4	0.45			
A1041	<0.01	5296.1	0.10	4.45	4329.2	37.57	0.77	5604.8	8.42	<0.01	5927.8	0.12			
A1042	<0.01	6399.8	0.12	1.72	6403.2	21.48	0.04	5790.6	0.45	0.17	3353.1	1.11			
A1090	0.04	24039.7	1.88	0.15	19476.4	5.70	1.21	24492.8	57.79	0.39	22312.8	16.97			
A1251	0.11	4577.1	0.98	0.09	NR		NR	NR		0.27	4398.7	2.32			
A1273	0.02	17676.4	0.69	0.01	17715.4	0.35	0.01	17983.9	0.35	0.02	14498.9	0.57			
A1398	0.03	1041.8	0.06	0.16	1045.2	0.33	0.04	1065.5	0.08	0.01	1420.5	0.03			
A1433			0.00			0.00			0.00			0.00			
A1562	1.131	5118.2	11.29	4.392	5822.5	49.87	0.083	5520.1	0.89	18.2	5004.6	177.65	0.465	5067	4.29
A1574	0.04	6784.8	0.53	0.01	6162.7	0.12	0.06	6643.9	0.78	0.01	6734.9	0.13			
A1576	1.91	7129.9	26.56	0.01	7163.2	0.14	0.03	7234.6	0.42	0.02	7035.4	0.27			
A1583	0.4	791.4	0.62	1.6	1286.1	4.01	3.54	1366.9	9.44	0.31	1910.7	1.16			
A1586	0.01	41661.2	0.81	0.1	32667.5	6.37	0.01	30026.1	0.59	0.17	33623.3	11.15			

A1587	<0.01	22290.7	0.43	0.12	14222.9	3.33	0.01	10967.9	0.21	0.05	10984.6	1.07			
total emission	44.69			335.53			81.50			218.16					

The lab reports provided the above data stated that “All processes were confirmed as operational prior to any monitoring being undertaken. During the sampling regime all processes ran continuously with no unusual occurrences and no incidents reported by the operators. At least one batch was sampled during each test”. Further details on abatements systems and issues associated with their monitoring are provided in Appendix A.

As can be seen from the results presented in table 1 above, the fettling cut off saw (A1576) was the main contributor to the emission in 2015 followed by the atomising wet extraction (A1562) followed by atomising dry extraction (A1090). It is anticipated that this was the reason for the additional monitoring of A1576 carried out On 6/5/2016, earlier than the usual monitoring time carried out in October/November 2016.

In 2016, J3 Sprayweld (A1038) was the major contributor followed by atomising wet extraction (A1562) (followed by HVOF (A1041) , followed by HVOF (A1042) followed by the powder room (A1586), followed by the atomising dry extraction (A1090) followed by the central vacuum system (A1583) followed by fettling general (A1587), all emitting significantly greater that their emission in 2015.

The latter increase was however described ⁽¹⁾ as not representative of emissions throughout 2016. It was identified that reported Ni emissions were based on stack tests undertaken while there was a failure in abatement equipment at the site and that this abatement failure is likely to have lasted for a few months during 2016. For the remainder of the year the Ni emissions rate would be expected to be lower than the reported emissions rate.

Please note the lab note that “During the sampling regime all processes ran continuously with no unusual occurrences and no incidents reported by the operators “. It is difficult to understand why abatement failure would affect all these sources simultaneously (during one monitoring round).

In 2017, the major contributor was the atomising dry extraction A1090 followed by the central vacuum system (A1583) followed by HVOF (A1041) and J3 Sprayweld (A1038)

In 2018, the major contributor was the atomising wet extraction (A1562) followed by the atomising dry extraction A1090 followed by A1034 powder room (A1586)

From the above results, it can be clearly seen that emissions from abatement systems vary significantly across the years and that the highest emissions were from sources that can actually achieve significantly lower values as demonstrated in their performance in other years.

Considering the ability of these abatement systems o achieve significantly lower emissions, it is not clear why these points are still permitted the higher emission rate of 15 mg/Nm³ as BAT when they clearly can achieve lower concentration as demonstrated in some of their monitoring rounds at a time when they were reported in their monitoring reports to be to be fully operational.

Table 2 below shows the range of emission concentration each of the abatement systems has achieved from 2015 to date and their difference between the lower and higher concentration as a multiplier (the number of times the higher concentration is greater than the lowest). The highest one, coloured in reds, are the major contributor to the highest emissions and reported to have management /maintenance issues. The last column also shows the emission concentrations from the same abatement systems in 2017 when the air quality TV was achieved. It can be seen that they were not even at the lowest emission values and therefore is definitely possible to achieve. Further information on emission are provided in Appendix A

Table 2

source	Source description	Abatement system	min conc.	max conc.	multipliers	2017 emission
			mg/m ³	mg/m ³		mg/m ³

A1034	Nicrospray	Cartridge filter systems	0.02	0.44	22	0.04
A1038	J3 Sprayweld	Cartridge filter systems	0.03	16.48	549	0.13
A1041	HVOF	Cartridge filter systems	<0.01	4.45	445	0.77
A1042	HVOF	Cartridge filter systems	<0.01	1.72	172	0.04
A1090	atomising dry extraction	Dalmatic' dry bagless filtration system	0.04	1.21	30	1.21
A1251	Wire Spray Room		0.09	0.27	3	NR
A1273	Aqualine	Scrubber	0.01	0.02	2	0.01
A1398	Wax room	No abatement	0.01	0.16	16	0.04
A1433	laboratory					
A1562	Atomising wet	Scrubber	0.083	18.204	219	0.083
A1574	Rosler	filtration system	0.01	0.06	6	0.06
A1576	fettling cut off saw	filtration system	0.01	1.91	191	0.03
A1583	Central vac system	Nederman abatement	0.31	3.54	11	3.54
A1586	Powder Room	filtration system	0.01	0.17	17	0.01
A1587	Fettling	filtration system	<0.01	0.12	12	0.01

Putting Emission into Context

According to Neath Port Talbot council website (<https://www.npt.gov.uk/1503?pid=37>) this site is regulated against guidance note PG6/35 which was last updated in 2013. The emission limits set out in this document in Table 4.1, achievable using the BAT described in the document set a limit for Ni at 15mg/Nm³ (273 K, 101.3kPa and no correction for water vapour).

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/582717/metal-powder-and-other-thermal-spraying-processes-process-guidance-note-6-35-13 .pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/582717/metal-powder-and-other-thermal-spraying-processes-process-guidance-note-6-35-13.pdf)

The above guidance was said to be based on the state of knowledge and understanding, at the time of writing, of what constitute BAT for this sector. The note may be amended from time to time to keep up with developments in BAT, including improvements in techniques, changes to the economic parameters, and new understanding of environmental impacts and risks.

It states that "Reasonable steps will be taken to keep the guidance up-to-date to ensure that those who need to know about changes to the guidance are informed of any published revisions. However, because there can be rapid changes to matters referred to in the guidance – for example to legislation – it should not be assumed that the most recent version of this note reflects the very latest legal requirements; these requirements apply"

To our knowledge, since its last publication in 2013, there has been no update to the guidance and hence no changes to what has been considered than as BAT or to the emission limits.

This Guidance note PG6/35¹³ states that “In general terms, what are BAT for one installation in a sector are likely to be BAT for a comparable installation. Consistency is important where circumstances are the same. However, in each case it is, in practice, for regulators (subject to appeal) to decide what are BAT for each individual installation, taking into account variable factors such as the configuration, size and other individual characteristics of the installation, as well as the locality (e.g. proximity to particularly sensitive receptors”

The limit is applies to all sources of which the contribution of the metals and their oxides, where present should not be exceed the prescribed value of 15 mg/m³ for nickel.

Considering that the permit lists a large number of emission points and requires their annual monitoring for Nickel, it can be assumed that each of these processes and their exit points are emitting the metal. However their monitoring data show significantly lower concentration than 15mg/m³ and therefore clearly demonstrate that this limit is not based on BAT achievable limits.

Under paragraph 5.4 of this guidance “Higher hazard metals”, it states that “Near a few plants in the UK, levels of nickel in the air have been higher than the nickel air target value which comes into effect at the end of 2012. Plants with a higher annual throughput (100s of tonnes of nickel) may well need more efficient abatement than plant with a lower throughput of perhaps 10s of tonnes of nickel”.

It also stats the following;

- For smaller emissions, wet abatement will reduce emissions by perhaps 90%.
- For larger emissions, dry filters can provide a high level of reduction for particles at 0.5 micrometres and above.
- HEPA filters can provide further abatement, if needed

Various reports states that the Wall Colmonoy site uses approximately 500 tonnes of the metal each year to manufacture a variety of hard-wearing products

It is clear that the list of improvement measures requested and achieved in 2016 didn't seem to include changes or upgrade to a more effective filters such as the HEPA filter even for sources that have been identified to be major sources of emissions from the site, one of which is the atomising wet extraction which uses wet abatement.

The guidance¹³ states that “In areas where air quality standards or objectives are being breached or are in serious risk of breach and it is clear from the detailed review and assessment work under Local Air Quality Management that the permitted process itself is a significant contributor to the problem, it may be necessary to impose tighter emission limits”.

There is a provision in the guidance to exclude permitted process that is only responsible to a very small extent for an air quality problem, when the authority should not unduly penalise the operator of the process by requiring disproportionate emissions reductions”.

Also it excludes a standard that are not an EC Directive requirement, in which case then industry is not expected to go beyond BAT to meet it. Decisions should be taken in the context of a local authority's Local Air Quality Management action plan.

The Nickel target value is a requirement of an EC directive and is responsible for a significant extent of air quality problem as will be discussed below.

The guidance makes a specific reference to nickel stating that “The nickel air quality target value (20ng/m³ calendar year average) should be met by 31.12. 2012. All necessary measures not entailing disproportionate costs must be taken to ensure that concentrations do not exceed this value.

The guidance states that HEPA filters can provide greater control at small particle sizes but at a cost for energy to drive the greater pressure loss across the finer filter”. Based on emission data pattern, the current abatement systems should be able to achieve the TV for Nickel in the locality as was demonstrated in 2017. However, consideration should be given to the use of HEPA filters, being the current recommended BAT in the guidance. The emission from the site was associated with small particle sizes and therefore if HEPA filter are the most effective solution

Written by:

AH

Dr Ahlim Hashm MCWIM

Appendix A

The lab report also provide the following information on abatement systems

Emission point	System-2015, 2018*	
A1398	No abatement	
A1090	Dalmatic' dry bagless filtration system	
A1034, A1038, A1041, A1042**	Cartridge filter systems	
A1587, A1576, A1574, A1586	filtration system	
A1273, A1562	Scrubber	
A1583	Nederman abatement	

*All abatement operating during monitoring. Also there was no mentioning of an abatement system for A1251 (wire spray room)

** include wire spray A1251 in 2015, 2016

Further the lab report states the following:

All stacks have only a single traverse from which to sample. This is a deviation from documented in-house methods ANC/S/6 & ANC/S/9. Sampling from a single traverse is a deviation from BS EN 15259 & BS EN 13284-1. As a consequence, the sample locations were non-compliant for flow measurements, particulates and particulate phase based measurements. The number of sampling points along the available traverse was increased as a consequence of this (where possible). It should be noted that the Wax Room (A1398), Aqualine (A1273) & Atomising Dry Extraction (A1090) ducts are horizontal in nature.

Powder Room (A1586)/ Rosler (A1574) / Fettling General (A1587): These exhausts do not have suitable ducting from which to sample, rather an open face. As such, the monitoring equipment was placed centrally at a single point, with the sampling nozzle facing into the open vent of the abatement during 'isokinetic' sampling (effectively a single point grab sample). Also, the ratio for velocities on Fettling General (A1587) was greater than 3:1. This is a deviation from documented in-house methods ANC/S/6 & ANC/S/9. These sample positions are not in compliance with Environment Agency & MCERTs requirements and as such we would recommend the installation of suitable ducting for next year's monitoring regime.

Nicro Spray (A1034): A nozzle <6mmdiameter had to be used. This is a deviation from documented in-house methods ANC/S/6 & ANC/S/9.

Wire Spray room (A1251): These stacks required a nozzle <6mm in diameter. This is a deviation from documented in house methods ANC/S/6 & ANC/S/9.

Atomising Wet Extraction (A1562): Only points 3, 4 & 5 along the traverse had swirl <15°, as such, these were the only points along the traverse that was sampled (Only points 3 and 4 in the 2015, 2016 and 2017 monitoring) .

A1038, A1041 (and A1042 in 2015, 2016 and 2017): These stacks required a nozzle <6mm in diameter. This is a deviation from documented in-house methods ANC/S/6 & ANC/S/9. Also, points 1 & 2 along the traverse (A1041 & A1042) had swirl >15°. As a consequence, these points were not sampled in 2015, 2016 and 2017. This is a deviation from documented in-house methods ANC/S/6 & ANC/S/9.

In the 2016 monitoring, during monitoring of the wire spray exhaust, only welding activities occurred. In the 2016 and 2017 monitoring, CW LEV 2 (A1398) :The measured velocity was below the minimum requirement of 5m/s and as such does not conform to the procedural requirements of the standard.

Appendix B

Air quality standard

The air quality standard of 20ng/m³ is a target value provided by European Directive 2004/107/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 December 2004 adopted in Wales through their air quality standard regulations (2010).

The target values are based on BAT. See

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02004L0107-20150918&from=EN>

It states that

“ Scientific evidence shows that arsenic, cadmium, nickel and some polycyclic aromatic hydrocarbons are human genotoxic carcinogens and that there is no identifiable threshold below which these substances do not pose a risk to human health. Impact on human health and the environment occurs via concentrations in ambient air and via deposition. With a view to cost-effectiveness, ambient air concentrations of arsenic, cadmium, nickel and polycyclic aromatic hydrocarbons, which would not pose a significant risk to human health, cannot be achieved in specific areas.

With the aim of minimising harmful effects on human health, paying particular attention to sensitive populations, and the environment as a whole, of airborne arsenic, cadmium and nickel and polycyclic aromatic hydrocarbons, target values should be set, to be attained as far as possible.

With the aim of minimising harmful effects on human health, paying particular attention to sensitive populations, and the environment as a whole, of airborne arsenic, cadmium and nickel and polycyclic aromatic hydrocarbons, target values should be set, to be attained as far as possible..

The target values would not require any measures entailing disproportionate costs. Regarding industrial installations, they would not involve measures beyond the application of best available techniques (BAT) as required by Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control and in particular would not lead to the closure of installations. However, they would require Member States to take all cost-effective abatement measures in the relevant sectors.

References

1. DEFRA. Report on measures for 2016 exceedance of the Target Value for Nickel in Swansea Urban Area agglomeration zone (UK0027) . December 2018
2. DEFRA. Report on measures for 2016 exceedance of the Target Value for Nickel in South Wales non-agglomeration zone (UK0041). December 2018
3. NPL REPORT ENV (RES) 001 MEASUREMENT OF HEAVY METALS IN PM10 AT PONTARDAWE LEISURE CENTRE IN 2018. REPORT FOR NEATH PORT TALBOT COUNTY BOROUGH COUNCIL. NPLML – COMMERCIAL. APRIL 2019
4. Neath Port Talbot County Borough Council 2016 Air Quality Progress Report. In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management Date (July, 2016).
5. Neath Port Talbot County Borough Council 2017 Air Quality Progress Report. In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management Date (July, 2017)
6. Neath Port Talbot County Borough Council 2018 Air Quality Progress Report. In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management. Date (July, 2018)
7. Neath Port Talbot County Borough Council, 2019 Air Quality Progress Report. In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management. Date (September, 2019)
8. 771108- Wall Colmonoy Annual Stack Report November 2015
9. 81062- Wall Colmonoy Annual Stack Report November 2016
10. Wall Colmonoy Annual Stack Report November 2017
11. 89070- Wall Colmonoy Annual Stack Report October 2018
12. 93102- Wall Colmonoy Annual Stack Report July 2019
13. Process Guidance Note 6/35(13) Statutory guidance for metal powder and other thermal spraying processes Revised: July 2013

Additional Information

I have extracted this section from reference 7 above. Reason for providing it is for us to understand the possible justification on which the council rejection was based. Policy EN8 might be the one.

The text in the paragraph 5.3.42 below EN8 box states that “Pollution of all types can cause significant damage to human health, biodiversity, quality of life and residential amenity and Policy EN8 is intended to ensure that developments will not exacerbate existing problems, cause new problems or result in more people being routinely exposed to unacceptable pollution levels of any type”.

It seems that not only development that contribute to causing damage or exacerbate the problem are rejected but also development that results in more people being exposed!. However I don't think this policy is applicable for our case as an alternative solution in the form of better and tighter regulation of the problem site is the only way forward to protect other affected people.

LDP (2011-2026) Extract

Environmental Protection

5.3.38 Strategic Policy SP16 Environmental Protection

Policy SP16 Environmental Protection

Air, water and ground quality and the environment generally will be protected and where feasible improved through the following measures:

1. Ensuring that proposals have no significant adverse effects on water, ground or air quality and do not significantly increase pollution levels;
2. Giving preference to the development of brownfield sites over greenfield sites where appropriate and deliverable;
3. Ensuring that developments do not increase the number of people exposed to significant levels of pollution.

LDP Objectives: OB 2, OB 16 and OB 17

5.3.39 The quality of the environment and the basic natural needs that it provides for are of great importance for human health and well-being, with the potential to affect quality of life in fundamental ways. The legacy of past activities in the area, mainly relating to heavy industry, coupled with present day industry, transport and development pressures all have impacts on the environment which need to be taken into account and addressed where possible. Air quality, ground contamination and stability and the quality of water resources can all affect and be affected by development proposals in the Plan, together with levels of light pollution

and noise levels. The Plan strategy is to protect and improve the environment as far as possible, and Policy SP16 sets out the approach that will be taken.

5.3.40 In relation to environmental pollution, there is a wide range of control and permitting systems and regimes which developments and operations have to comply with that are separate from the Town and Country Planning system. These requirements cannot be duplicated in the Plan or in planning control, but have been taken into account in the development of Plan proposals and policies and will need to be reflected in planning decisions.

5.3.41 Policy EN8 Pollution and Land Stability

Policy EN8 Pollution and Land Stability

Proposals which would be likely to have an unacceptable adverse effect on health, biodiversity and/or local amenity or would expose people to unacceptable risk due to the following will not be permitted:

- Air pollution;
- Noise pollution;
- Light pollution;
- Contamination;
- Land instability;
- Water (including groundwater) pollution.

Proposals which would create new problems or exacerbate existing problems detailed above will not be acceptable unless mitigation measures are included to reduce the risk of harm to public health, biodiversity and/or local amenity to an acceptable level.

5.3.42 Pollution of all types can cause significant damage to human health, biodiversity, quality of life and residential amenity and Policy EN8 is intended to ensure that developments will not exacerbate existing problems, cause new problems or result in more people being routinely exposed to unacceptable pollution levels of any type. The policy refers to unacceptable effects or risk, and the interpretation of this will depend on the type of pollution being considered and likely effects.

5.3.43 In relation to air quality, objectives are set for a range of pollutants⁽²³⁾ and Neath Port Talbot's air quality is measured against these objectives at a range of sites across the County Borough. This monitoring has identified areas of concern in some central urban areas, with exceedances in the Margam / Taibach area leading to the declaration of an Air Quality Management Area (AQMA) in 2001.

5.3.44 Development proposals that could potentially result in or contribute to breaches of any air quality objective will be required to show (through modelling exercises or other appropriate technical information, including taking into account cumulative impacts) that this will not occur. While the provisions would apply throughout the County Borough, developments in the vicinity of the AQMA that would result in additional direct emissions to the atmosphere or could have indirect effects such as through generating significant additional traffic are an example of such a proposal. If this requirement cannot be met, either with or without mitigation measures, the proposal will not be acceptable under the terms of the policy.

5.3.45 In the central Port Talbot area in particular, operations during the construction phase of developments have the potential to result in exceedances of air quality objectives relating to particulates. This may depend on local weather or atmospheric conditions and the type of operations being undertaken. Policy EN9 sets out specific requirements for development in the central Port Talbot area and further information on this topic will be provided in Supplementary Planning Guidance.

5.3.46 In relation to noise, potentially noisy proposals should not be located close to sensitive uses (such as hospitals, schools and housing) and new noise-sensitive developments should not be located near to existing noisy uses (including industry and existing or proposed transport infrastructure) unless it can be shown that adverse effects can be dealt with through mitigation measures incorporated into the design. Where noise levels are likely to be a significant issue, developers may be required to provide information to show that no nuisance is likely to be caused through increased noise levels at sensitive locations if the development proceeds. Policy EN10 sets out policy relating to designated Quiet Areas.

5.3.47 Light pollution can be an issue where it has potential adverse effects on the natural or historic environment, on people's health and amenity or on wildlife and habitats. These concerns will need to be balanced against the need to enhance safety and security and to enable sport, recreation and other activities to take place. Where lighting proposals have the potential to cause adverse effects, mitigation measures will be required to ensure that their impact is minimised.

5.3.48 Some of the Plan's brownfield allocations and proposals incorporate land that is contaminated due to past industrial uses. In many cases remediation measures have been or are being undertaken as part of the development process. In other cases, where contamination is likely or is found to be present, information will be required to show the level and type of contamination present, and proposals for remediation and mitigation to show that no adverse effects will be caused at any stage of development within or outside the site. In addition, developments and operations involving scrub clearance and soil removal off-site can have implications for the spread of invasive species, some of which (such as Japanese Knotweed and Himalayan

Balsam) are subject to the Natural Resources Wales' licence control measures as part of the Environmental Protection Act (1990).

5.3.49 In cases where there is evidence that a site may be unstable, or that development may cause stability issues, developers may be required to undertake specialist investigation or assessment to show that the development can proceed safely and without having adverse effects. However, in such cases the responsibility and subsequent liability for the safe development and secure occupancy of the site rests with the developer and/or landowner.

5.3.50 Developments will be expected to minimise any adverse effects on water quality, and additional information may be required in cases where there may be issues relating to existing poor water quality or a development has the potential to cause pollution. Developments will be required to ensure that no pollution is caused through drainage.

5.3.51 Policy EN9 Developments in the Central Port Talbot Area

Policy EN9 Developments in the Central Port Talbot Area

Developments in the central Port Talbot area that could result in breaches of air quality objectives during their construction phase, will be required to be undertaken in accordance with a Construction Management Plan submitted as part of the planning process and agreed by the Council.

5.3.52 The construction of major developments in the central Port Talbot Area, including (but not limited to) those within the Harbourside SRA, may potentially result in breaches of air quality objectives in the surrounding area (including within the Margam/Taibach AQMA). The main risk relates to an increase in atmospheric particulates resulting from construction activities. Any such developments will consequently be required to submit a Construction Management Plan detailing measures to be taken to avoid this possibility. The Construction Management Plan should identify the construction operations that could cause air quality impacts and measures to prevent such impacts arising. These may include measures to minimise as far as possible the generation of dust, the modification or phasing of the more polluting activities and the suspension of any polluting activities at times of particular air pollution risk. Further details concerning these requirements will be set out in Supplementary Planning Guidance.

13 November 2019

Our Ref: S19.109

Your Ref: Q2019/0028

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Dear Chris

**REQUEST FOR PRE-APPLICATION MEETING AND FEEDBACK
RESIDENTIAL DEVELOPMENT AND ASSOCIATED INFRASTRUCTURE WORKS, LAND AT HOLLY
STREET, PONTARDAWE, SA8 4ET**

I refer to the above mentioned site and our ongoing dialogue in relation to our initial pre-application submission (your ref: Q2019/0028) dated the 11th February 2019 and your subsequent response dated the 29th May 2019.

Subsequent to the issue of the Local Planning Authority's (LPAs) response on the 29th May, the Council's Air Quality Section provided further information, which advised that they had been working with the nearby company, Wall Colmonoy, over the last few years to try to ensure progress with reducing emissions arising from their operation. Notably, they advised that the average concentration of nickel as measured at Tawe Terrace so far this year is 28 ng/m³, which compares with the EU Target of 20 ng/m³.

Having regard to the above, the LPA advised that the proposed site for residential development would essentially bring sensitive receptors closer than those at Tawe Terrace, requiring the monitoring station to be relocated. This in turn would make achieving 20 ng/m³ more difficult which would result in a detrimental impacts upon that existing employer, and also the health and wellbeing of residents within the proposed development.

We have been advised that from internal discussions with the Air Quality Section, that this is an ongoing issue with no obvious short term solution to addressing the problems at the Wall Colmonoy site. As a result of the above the landowners (Bluefield Land Ltd) commissioned a further report undertaken by WSP which formed the basis of our last meeting with yourself and your colleague Martin Hooper which took place at your office on the 7th October 2019.

It was noted at the meeting that Martin advised that Wall Colmonoy had in fact undertaken improvement works to the plant/processes, which had resulted in significant improvements in terms of emissions with the target values being met in 2017. However, there had been in a significant deterioration in 2018 despite these improvements.

It was disappointing at the meeting to note the LPA's position as regards any future planning application submission, in that given the issues associated with the levels of pollution generated by Wall Colmonoy, the LPA would not support any application for new residential development on the site.

The site has benefited in the past from planning permission for residential development (LPA Ref: P2007/0215), as well as now being residential allocation within the current adopted LDP (H1/LB/32).

As you will appreciate Bluefield Land Ltd have owned the site for some time and as such must look to seek to realise the potential development value of the site. At this juncture landowners have a build contract in place with a local RSL to deliver an affordable housing scheme on the site which is to meet an identified need.

Given the above, the landowners have sought further specialist technical advice from Dr Ahlim Hashm (Technical Director) Dauson Environmental Group. I attach copy of Dr Hashm's latest report, which was commissioned to look at in the detail the operation of the Wall Colmonoy site in the context of the emissions data available and the various technical improvements which have been implemented to date.

I would request that you pass the report to your colleague Martin Hooper for further review and comment. It is clear that from 2016 – 2018 the reported annual emissions for the Wall Colmonoy have fluctuated significantly with adherence to the required standards in 2017 but exceedances in other years to varying degrees. According to these reports, this demonstrates that the action taken at the Wall Colmonoy site had a significant impact on Ni concentrations in the area and shows that when the abatement systems are operating correctly compliance with the Ni TV can be achieved.

However, further significant emissions were reported in 2018 which indicates that the failure is not associated with of best available technology (BAT) not being adequate in reducing the emission and improving the air quality, it is the results of poor management.

There is a clear evidence from a detailed review of the available information that there have been more than one exceedance of the emission limits and that failure in achieving an acceptable level of emission is the results of poor management, contrary to the requirements of the permit environmental management system.

Whilst the Council may be working closely with Wall Colmonoy to address issues, it is clear that the company need to take a more responsible approach to management and maintenance and that the Council should be mindful of their statutory duty be seeking to enforce the terms and conditions as set out in their environmental permit.

As part of a review of the issue surrounding air quality, we have undertaken an examination of the LPA's on-line planning resource system to ascertain how this issue has impacted on decision making in the wider context.

It is noted that two application sites are of interest which have been recently approved within the area as defined in the published air quality reports as being within the plume where levels are records as being >20ng/m3.

Those applications of relevance are listed below for information and have been approved post 2016 when reported annual emissions for the Wall Colmonoy fluctuated significantly in exceedance of the parameter set out in their permit;

- P2019/5234 (Cwmtawe Community School) – Installation of temporary buildings for a period of 24 months for use as school classrooms and facilities – Approved August 2019;
- P2015/1133 (Land to rear of 11 Ynysderw Road) – Two-storey detached dwelling (outline) – Approved May 2016;
- P2019/0034 (Land to rear of 11 Ynysderw Road) – Detached two-storey dwelling (Reserved Matters) – Approved February 2019.

Clearly, given the issues being raised in relation to air quality by the LPA, in respect of our current development proposal we are surprised to note that given the location of these sites that no issues in terms of air quality were raised by the LPA in relation to those applications.

Regardless of scale of development (both uses are seen as being vulnerable in terms of end user) the fundamental issue remains valid and should have been examined in respect of these applications. If as you contend with our current development, this should have resulted in those application's being denied planning permission. It seems there is an inconsistency in the approach being adopted by the LPA in this matter which seem to have no justification.

In addition, I would advise that the applicants are being pressed by your colleagues in the Council's Development Plan Section to move the site towards a site start. It seems to us there has been a clear disconnect and breakdown of communication within the Council in terms of the general air quality issue in this area. It remains to be clarified as to why the LPA have allocated this site when the concerns over air quality have been relevant for many years.

As such given the content of the attached report, I have been asked to request a further meeting with the LPA and the Council's Air Quality Section to discuss the matter further prior to the landowners considering what further avenue they may need to pursue in order to seek to progress the development of the site for residential use.

I look forward to hearing from you and if you require any further information in advance of the meeting please do not hesitate to contact me.

Yours faithfully,



Richard Bowen
Director - Asbri Planning Ltd

Wall Colmonoy, Alloy Industrial Estate, Pontardawe, Swansea SA8 4HL

Technical Note prepared by Dr Ahlim Hashm, Dauson Environmental Group, 6 August 2020

Introduction

- 1.1 In April 2020 RPS, on behalf of Dauson Environmental Group and Bluefield Land Ltd, issued two requests to Neath Port Talbot County Borough Council ("the Council") under the Environmental Information Regulations. The first, issued to the Air Quality team, requested the following:
- (1) All information provided to the Council by Wall Colmonoy about:
 - (a) its maintenance plan under Condition 29 of its permit;
 - (b) its records of maintenance; and
 - (c) any reported non-conformities with the environmental management system required to be maintained under condition 36 of its permit;
 - (2) Confirmation of the level of risk applied to the installations at Wall Colmonoy;
 - (3) Any other notes or reports of site visits and/or investigations of Wall Colmonoy's compliance with its environmental permit; and
 - (4) Any information or correspondence received from or sent to Wall Colmonoy regarding its environmental permit, including compliance with the permit.
- 1.2 The second, issued to the Pollution Control team, requested the following in relation to the Neath Port Talbot Air Quality Monitoring Report 2019:
- (1) Any notes or reports which informed the conclusion on page i) of the Report that the average concentration of nickel in 2018 of 56.7 ng/m³ at the Tawe Terrace monitoring station was *"linked to problems with abatement plant in the Wall Colmonoy plan, which have since been addressed"*; and
 - (2) Any notes or reports setting out how the Council proposes to meet the objective on page ii) of the Report *"to focus on regulation of Wall Colmonoy in Pontardawe in order to attempt to drive nickel levels below the EU Target as was the case in 2017."*
- 1.3 The information was provided via email and hard copies in May 2020. It has been fully reviewed by Dauson Environmental Group and has informed the commentary below. In addition, a detailed report has been prepared that reviews the information provided by the Council about its regulation of the Wall Colmonoy site. This Technical Note summarises this fuller report.

Air Quality Overview

- 1.4 There is a well-documented air quality issue in Pontardawe, related to elevated levels of nickel in the local area caused by emissions from the Wall Colmonoy site ("WC").
- 1.5 Scientific evidence shows that nickel is a human genotoxic carcinogen and that there is no identifiable threshold below which this substance does not pose a risk to human health. Impact on human health and the environment occurs via concentrations in ambient air and via deposition. In addition it can cause irritation in the nose and sinuses as well as allergic responses and can lead

to the loss of the sense of smell. Long-term exposure to elevated nickel compounds in the air may lead to respiratory diseases and cancers.

- 1.6 Under EU Directive 2004/107/EC1 the target value for nickel is an annual mean concentration of 20ng/m³ of ambient air or lower. The Directive requires that Member States report on measures in place to address any exceedance of the target value and that all reasonable measures that do not entail disproportionate cost should be taken to ensure the target is not exceeded.
- 1.7 Every year the Council publishes an Air Quality Progress Report in fulfilment of Part IV of the Environment Act 1995 for local air quality management. These reports provide a good insight into local air quality issues, their causes and actions for improvements. A monitoring station at Tawe Terrace was set up in September 2009, which is approximately 270m from the WC site in order to further investigate the nickel emissions from the plant.
- 1.8 Available data from this monitoring station from the year 2011 to date, shows that the target value was exceeded every year except in 2017 when the concentration was just slightly below it at a concentration of 19ng/m³. The highest concentration of 56.7ng/m³ was found in 2018 – **280%** of the target value.
- 1.9 The area impacted by operations at WC goes beyond the boundary of the affordable housing development proposed by Bluefield Land Ltd (“Bluefield”). According to DEFRA reports published in 2016 and 2018, a local area of at least 4 km² has been affected by the nickel concentration in the air being regularly and significantly above the target value, **affecting more than 5,000 residents**.
- 1.10 The WC site is regulated by the Council through an environmental permit based on Process Guidance Note 6/35 which was last updated in 2013 (“PGN 6/35”). The emission limits for nickel, achievable using the best available technology (“BAT”) is set at 15mg/m³ in PGN 6/35.
- 1.11 PGN 6/35 is said to be based on the state of knowledge and understanding, at the time of writing, of what constitutes BAT for this sector. At paragraph 1.4 it states that:

“In general terms, what are BAT for one installation in a sector are likely to be BAT for a comparable installation. Consistency is important where circumstances are the same. However, in each case it is, in practice, for regulators (subject to appeal) to decide what are BAT for each individual installation, taking into account variable factors such as the configuration, size and other individual characteristics of the installation, as well as the locality (e.g. proximity to particularly sensitive receptors)”
- 1.12 It is our view that the site operations are not BAT compliant as required by the permit with its operations regularly failing to comply with a number of the permit conditions and requirements.
- 1.13 It is our view that the permitted emission limit of 15mg/m³ is too high for achieving the air target value of 20ng/m³. There is clear evidence in the information provided to us by the Council that **significantly lower emission concentrations can be achieved** from each of the sixteen emission sources from on the site.
- 1.14 We are of the opinion that non-continuous emission monitoring is inadequate to ascertain the actual emission from the site throughout the year. There is clear evidence in the information provided to

us by the Council that the emissions vary from one day to another, from one month to another and indeed from one monitoring round to the next, depending on the kind of operations taking place at the time of monitoring and the conditions of the abatement systems and their ability to improve the quality of emissions.

- 1.15 The Council has carried out a number of site visits and inspections as required by DEFRA/Welsh Government guidance. According to the guidance, high risk sites require two "full" inspections a year, during which the local authority officer must examine full compliance with all authorisation conditions and look at any process or other relevant changes. In addition, there must be at least one "check" inspection to follow up any areas of concern or other matters arising from the full inspection. From the data we received, it seems that there were at least four visits in 2016, seven visits in both 2017 and 2018, six visits in 2019 and one visit up to May 2020. This is a clear indicator of regularly arising concerns.
- 1.16 As noted above, the records of these site inspections and visits were received from the Council in May 2020 and we have thoroughly reviewed all the documents provided. The review revealed that although the Council has been able to communicate the extent of the issue with WC, it has not been able to ensure that BAT is being employed by WC. It is clear from the notes that WC did not employ BAT and nor was best practice used in managing operations or developing the latest evidence in understanding the predominant sources. Yet, **the Council did not take any serious action to ensure WC complied with its permit requirements** through the various options available to it including suspension of the site operations until an adequate level of control and management was achieved, or by the issuing of enforcement notices.

The Issues

- 1.17 Despite regular serious issues and failings identified by both the Council and WC as likely contributors to high emissions from the site resulting in an impact on the ambient air quality, only on very few occasions did the Council warn that it may take action against WC for these failings, and on only one occasion (very recently in respect of an alleged breach of condition 21 of the environmental permit) has the Council issued an enforcement notice.
- 1.18 Careful consideration of the site visits notes and correspondence shows what we consider to be a long list of breaches of a number of the permit conditions including maintenance (Conditions 29 and 30), training (Conditions 33 and 34), environmental management being the root cause of the problems (Condition 39), housekeeping (Condition 45) and BAT related issues (Condition 43). More detail is outlined below.

Maintenance

- 1.19 Issues related to failings in maintenance appear regularly in the notes. A clear example of this occurred in March 2017. Although the Council asked WC to provide an appropriate planned/preventative maintenance system as a condition of the permit in a meeting in March 2017, it was not until January 2019 that WC promised to deliver such a system, and not until late July 2019 when it started training staff members on its use. Later notes from February 2020 suggest the system was still under development.
- 1.20 References are regularly made to avoidable incidents such as a blockage of a pipe inlet that was not cleared, failing to change a filter at an appropriate time, failing to replace a collapsed section of a duct, etc., being a likely cause of serious increase in emission. Many such similar incidents

remained unresolved and when corrected, there would be no guarantee that the employed action would prevent a re-occurrence in the future.

- 1.21 A clear example of this is the request from the Council to WC at the start of February 2018 to change the central vacuum system filter, which was identified as a major contributor to a very high emission level. This was not done until the end of July 2018, nearly six months after the request and nine months on from first observing the high emission in October 2017.
- 1.22 Despite all the maintenance issues, the only time the Council seemed to be planning to take enforcement action in respect of these issues was in April 2018 when it warned WC that it was intending to treat it as a breach of condition in the forthcoming Risk Assessment, with penalty points to be imposed.

Training

- 1.23 Another regularly featured issue in the notes provided is the competence and knowledge of WC staff and their sub-contractors, which are directly related to the training condition of the permit. The notes seem to confirm that only about five members of staff were aware of the criticality of the plant they were operating in terms of the nickel emission and their impact on the air quality but not others, who were involved in the process.
- 1.24 There are several examples of staff or subcontractors failing to follow basic procedures such as leaving a panel open after cleaning, extract duct covers not being re-fitted correctly after cleaning, someone not connecting up a dust barrel under an abatement system after changes were undertaken etc - all incidents that resulted in avoidable negative impacts on the emission, in breach of the permit conditions, with no action taken to prevent such breaches in the future.

BAT

- 1.25 According to Condition 43 of the permit, BAT shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation.
- 1.26 We have previously queried whether the Council has evidence that the WC site is using BAT in its operational and abatement systems. The Council has confirmed that it is but no evidence to the same has been provided in response to the recent requests for information, or otherwise. Contrary to this confirmation, the Council has expressed its view in the notes that at least some of the abatement systems are not BAT, namely the wet extraction, the Dalamatic and central vacuum systems.
- 1.27 Problems with the wet extraction system were reported in the February 2016 notes which are the earliest notes we received from the Council and continued in the last notes from February 2020. A request for a BAT assessment to select an appropriate alarm for the system was reported in the March 2017 notes. However, there is no evidence that such an assessment was carried out with various unsuccessful amendments and improvements attempted and failed. The last comment from the Council on this issue, in the February 2020 meeting note, was a question on whether the system is BAT. The notes show the selection of any proposed improvement measure to be random and haphazard, with a trial and error approach, with each solution taking a significantly long time to consider, approve, purchase and test, with no guarantee it would work.
- 1.28 It is our view, having reviewed all of the information provided by the Council, that the performance of many of the systems at WC cannot be considered BAT. These include, in addition to the wet

extraction system/wet arrestor, the central vacuum system and the Dalamatic, which were described by the Council, as having “*something sub-optimal about their performance*”.

- 1.29 It also seems from the notes that the site had released unpermitted emissions without a variation to the permit. The permit was varied in 2016, seemingly to include additional emission points that were operational before the permit being varied to include these emission points. This is notwithstanding the serious breach of the emission limits that caused a significant pollution problem in the years 2016 and 2018.

Corrective Action Required

- 1.30 The elevated levels of nickel in the local area caused by emissions from the WC site pose a potentially serious health risk. It seems, however, from the reviewed notes and monitoring data, that achieving lower emission and preventing impact is possible with better operational management, as was demonstrated in 2017.
- 1.31 As the relevant regulator of the operations at WC, it is the Council's responsibility to ensure that these operational management standards are maintained, and otherwise to work with the operators of the WC site to improve performance of the site using BAT. If the Council were to perform these functions and ensure the achievement of these standards and improvements, then the lower emissions achieved in 2017 are capable of being met again, **without WC having to incur any significant costs – it has been proven that the existing systems *can* achieve the target value.**
- 1.32 To achieve this, there is a need first to develop a better understanding of the emissions from the site and the most significant sources. This can be achieved by a combination of better monitoring and air dispersion assessment. The former seems to be underway already as the Council has requested continuous monitoring to be conducted, which is a BAT requirement. The continuous monitoring will clearly show the variation in the emissions and its potential causes. The air dispersion assessment will show how the emission is transmitted in the atmosphere and the factors controlling it, such as the emission velocities, height and direction of the stacks and the effect of buildings and the local topography. **The assessment can, and should be, carried out as soon as possible on the maximum allowed emission from the site to identify the major contributor to the elevated ambient nickel. The resulting data should then be compared with the actual emissions from the assessed sources, using actual monitoring data. It will then be possible for WC and the Council to prioritise the system(s) that requires improvement and progress it to a BAT assessment, if needed. The exercise might show the need for simple, cheap and effective measures.**
- 1.33 Once such an understanding is established, a process to identify the major contributors to the impact and available options to improve the performance can be undertaken using BAT. The permit then needs to be varied, with appropriate emission limits identified from the above process and to include appropriate enforcement mechanisms to ensure better continuous management of the site operations. None of these steps are likely to require excessive costs for the operators of the WC site.

IN THE MATTER OF LAND AT OLD FOUNDRY ROAD, PONTARDAWE

OPINION

1. Bluefield Land Ltd (“Bluefield”) wishes to build 36 affordable residential housing units on land allocated for housing at Old Foundry Road, Pontardawe (“the site”). To this end, on 19 December 2019, Bluefield submitted an application for planning permission (“the 2019 application”) to Neath Port Talbot County Borough Council (“the Council”).
2. Given that the 2019 application was both (i) in accordance with the site allocation, and (ii) that it was for much needed affordable housing, it could reasonably be expected that the application would have been favourably received by the Council. That did not prove to be the case. Instead, at a meeting on 4 March 2020 between Bluefield and the Council, officers indicated that they were minded to recommend refusal of the 2019 application due, *inter alia*, to future residents being exposed to an unacceptable risk of air pollution, and in particular excessive levels of nickel.
3. In 2019, average ambient air nickel levels near to the site, at the Tawe Terrace monitoring station, were 28ng/m³, which is above the relevant target of 20ng/m³. As the Council has acknowledged in its air quality assessments, these excessive levels of nickel arise from operations at Wall Colmonoy (“WC”), which is near to the site. Crucially, however, a review of the Council’s monitoring of the operations at WC in a Note from Dauson Environmental Group (“the DEG Note”) dated 6 August 2020 has confirmed both that:
 - (1) Better monitoring and regulation of WC by the Council would dramatically improve emissions and very likely resolve the existing air quality issues; and
 - (2) There is no good reason to conclude that improvements to WC (which the Council can lawfully require the operators of WC to implement) will be unreasonably expensive or difficult to implement, i.e. the improvements can and should mean that WC will continue to operate but without causing

harmful pollution to *existing* nearby residents, schools and businesses, or to future residents. This includes because WC was able to operate in a way that met relevant pollution levels in 2017; plainly, if WC has achieved this before it can do so again.

4. It follows, in my view, that the Council's air quality objections can be lawfully overcome, and the present objection on air pollution grounds can be addressed simply by the Council properly exercising its duties to maintain pollution levels in its area to acceptable levels. If the Council continues to fail to properly exercise its duties, then legal proceedings can be brought challenging the Council's failures, which as confirmed in the DEG Note affect not just the proposals at the site, but also the health of existing residents, schools and businesses in Pontardawe.
5. The reasons for my above views are as follows.
6. First, when determining whether to allow housing on the site, the Council is lawfully entitled to rely on the fact of the permitting regime and the Council's responsibilities to improve air quality in its area, when determining whether there will be unacceptable risks of air pollution. The courts have long recognised that it is lawful for a local planning authority to rely on other consenting regimes when determining whether a proposal for development should be granted planning permission.
7. In *Gateshead Metropolitan Borough Council v Secretary of State for the Environment* [1995] Env LR 37, the Court of Appeal dismissed an appeal by a local planning authority against a decision to grant outline planning permission for a clinical waste incinerator, taken on the basis that the Inspectorate of Pollution, in granting pollution control authorisation under the terms of the Environmental Protection Act 1990, would determine emission limits. The court held that the Secretary of State was justified in proceeding on the basis that areas of concern about pollution from the consented incinerator could be addressed by the separate permitting regime. See, also, *R. v Bolton Metropolitan Council Ex p. Kirkman* [1998] J.P.L. 787.

8. The position is exactly the same here. That is, the Council is lawfully entitled to rely upon it properly exercising its own environmental permitting functions to control the emissions of nickel coming from WC.
9. Second, however, it is apparent from the DEG Note that the Council is failing to properly exercise its responsibilities to regulate WC's operations and improve air quality in its area, but that if it did so, air quality would be improved without materially impacting upon WC being able to continue to viably operate. In other words, the Council's indication that it was minded to refuse Bluefield planning permission due to air pollution risks relies upon the Council continuing to fail to properly perform its own environmental permitting and air quality functions. But for this continued failure, the most likely position is that the air pollution issues raised by the Council are capable of being remedied.
10. Third, should the Council continue to fail to properly perform its environmental permitting and air quality functions, then as I say above, legal proceedings can be brought challenging the Council's failures. Two principal routes of challenge are available, namely (i) in respect of the Council's failures to bring appropriate enforcement action under regulation 36 of the Environmental Permitting (England and Wales) Regulations 2016 ("the Permitting Regulations"), and (ii) in respect of the Council's failures under relevant air quality legislation and policy.
11. These potential challenges have to be considered in the context of the Council's own Local Air Quality Strategy, "*Air Wise - clean air for everyone*" ("the AQ Strategy"). In the Foreword to the AQ Strategy, it provides that (emphasis added):

"This Council believes that air quality is of paramount importance. We all have a right to breath clean air and the Council will do all it can to keep our air clean.

...

The Council is proud of its relationship with industry and welcomes clean industry. It encourages those cutting edge companies who provide quality jobs and works tirelessly with those industries to ensure their productivity does not impact on the health of local residents."
12. The AQ Strategy goes on to provide that the proposed measure, in respect of nickel, is (emphasis added):

- “ • Pollution monitoring and sharing of information to raise awareness
- **Effective regulation by NPTCBC & NRW**”

13. So far as effective regulation is concerned, one of the Council’s powers is the ability to bring enforcement proceedings for breach of a condition of an environmental permit condition. This is provided for by regulation 36 of the Permitting Regulations, which provides as follows:

“(1) If the regulator considers that an operator has contravened, is contravening, or is likely to contravene an environmental permit condition, the regulator may serve a notice on the operator.”

14. There are parallels with similar powers available to local authorities to enforce breaches of planning control. The Court have held that decisions not to bring enforcement action for breaches of planning control are amenable to challenge by judicial review: see, for example, *R. (on the application of Community Against Dean Super Quarry Ltd) v Cornwall Council* [2017] Env. L.R. 26.
15. In my view, because the circumstances relating to breaches of environmental permits raise the prospect of risk to human health, and given the clear commitments by the Council in its AQ Strategy to undertaking effective regulation, the discretion available to the Council to undertake effective enforcement action in this matter will be more carefully scrutinised by the Courts, compared to situations involving pure planning enforcement. It follows in my view that proceedings could be issued in this matter challenging the Council’s failure to better enforce the environmental permit that is in place in respect of WC.
16. In providing this advice, I note that on 3 March 2020 the Council issued the operator of WCS with an enforcement notice under regulation 36 of the Permitting Regulations. This alleged a breach of condition 21 of the environmental permit granted in respect of the WCS site, which requires that the furnaces, casings, ductwork and the atomising and pouring parts of the installation shall be maintained as gas tight as practicable. The enforcement notice indicates that the cause of the breach is a “Gap in ductwork between Tower 4 and Dalmatic filter system”.

As made clear by the DEG Note, however, this notice does not go nearly far enough to remedy the historic problems of exceedances at the WC site.

17. The Council's failure to better regulate the emissions from the WC site also render it liable to challenge on the basis of failures to comply with relevant air quality legislation and policies. The issues that would arise under such a challenge are similar to those that would exist for failure to properly regulate WC under the Permitting Regulations. The key difference is that the Council has obligations to seek to meet the relevant air quality objective for nickel (20ng/m³, per the Air Quality Wales (Regulations) 2010, which transpose the requirements in EU Directive 2004/107/EC1), which has been regularly exceeded in Pontardawe.
18. Relatedly, and as set out also in the guidance issued by the Welsh Ministers under s. 88 of the Environment Act 1995 (*"Local air quality management in Wales"*), the Council has relevant duties under the Well-being of Future Generations (Wales) Act 2015 (*"the WFG Act"*). The Council is liable to be challenged on the basis that it is also failing to properly consider its responsibility to carry out sustainable development and achieve relevant well-being goals (including ensuring a healthier Wales) by not properly regulating the activities at WC and so exposing present residents to unhealthy levels of nickel.
19. The actions available to the Council are not in this regard confined to simply enforcing breaches of conditions of the WC environmental permit, but extend to reviewing that permit to see if tighter controls can be reasonably imposed using best available techniques, which properly allow the operations at WC to continue, but without exposing local residents to unlawful levels of pollution.
20. Fourth, there is an issue about lack of consistency in the Council's minded-to refuse approach with the 2019 application, compared to other applications for development in the area. In particular, I am instructed that the Council has recently approved two applications for planning permission for development within the area affected by exceedances of nickel in the ambient air. These are an application for installation of temporary buildings for a period of 24 months for use as school classrooms and facilities for Cwmtawe Community School (approved August

2019), and an application for reserved matters for a two-storey detached dwelling (approved February 2019; outline permission granted May 2016).

21. If the air quality issues in Pontardawe are sufficient to lead to the indicated refusal of the 2019 application, then they are certainly sufficient to stop any other development, including of course allowing the expansion of a school and so exposing more children to unacceptable levels of nickel pollution. It is, frankly, remarkable that the Council has seen fit to authorise the expansion of a school in circumstances in which it is not doing all it can to keep the local air clean, as it says it would do in its AQ Strategy. This is all the more so when the steps requiring to be taken are not complicated, and when there is every reason to suppose that the measures it can require to be undertaken at WC will be simple, cheap and effective (as the DEG Note sets out).
22. In summary, and as I set out above, the Council's air quality objections can in my view be lawfully overcome, and the present objection on air pollution grounds can be addressed simply by the Council properly exercising its duties to maintain pollution levels in its area to acceptable levels. The Council can in other words lawfully grant planning permission to allow housing to be developed on the site, in reliance upon it performing its own environmental permitting functions.
23. If the Council maintains its present stance, then it will be necessary to carefully scrutinise the Council's reasons for doing so, in order to determine whether in substance this is because the Council is relying upon its own failures to maintain acceptable levels of air quality in order to refuse planning permission for a development that will otherwise provide much needed affordable homes on a site allocated for development. If this proves to be the reason, then as I say above legal proceedings can be issued seeking orders requiring the Council to properly exercise its legal duties.

7 August 2020

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