

A black and white photograph of an industrial facility, likely a water treatment plant. The foreground shows a metal walkway with a grid pattern, leading towards a series of large, white, curved pipes that curve upwards and then horizontally. The pipes are supported by a metal framework. The background is slightly blurred, showing more of the industrial structure under a bright sky.

**Clyde
Shanks**

Chapter 10

Landscape and Visual

10. Landscape and Visual Impact

Introduction

- 10.1 Stantec (formerly Barton Willmore) has been appointed to provide a landscape and visual addendum to the Environmental Statement taking account of an updated air quality assessment and air quality chapter 14 prepared by AtkinsRéalis, in relation to the Visual Impact Assessment of a residual waste management facility (RWMF) and associated development at Hightown Quarry in Ballyutoag (the “proposed development”).
- 10.2 The updated Air Quality assessment followed a specific request from NIEA IPRI in a consultation response issued on 19 April 2024.
- 10.3 The Air Quality Assessment (AQA) models plume emissions using detailed dispersion modelling. The proposed development comprises co-located Mechanical Biological Treatment and Energy from Waste facilities (MBT / EfW), including the principal unit operations which make up the installation.
- 10.4 This Landscape and Visual Impact Assessment (LVIA) Environmental Assessment (ES) Addendum considers consequential changes in visual effects resulting from the updated AQA. In addition, a section of the objection letter from Gerry Crossan to Minister John O’Dowd MLA of the Department of Infrastructure, in June 2024, relating to landscape and visual effects, is addressed.
- 10.5 This LVIA-ES Addendum has been prepared by Stantec UK and has been prepared and overseen by chartered landscape architects with experience in the assessment of landscape and visual effects, as required by the 2017 EIA Regulations (as amended). Stantec is a registered practice of the UK Landscape Institute (member number 897) and an Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark Registrant. The author, Claire McHarrie CMLI, holds an honours degree and post graduate diploma in Landscape Architecture from Leeds Metropolitan University and has thirty years’ experience in landscape consulting including landscape and visual impact assessment for EIA projects across Great Britain and Ireland covering industrial, employment infrastructure and residential schemes.

Policy Context

- 10.6 There have been no changes to planning policy relating to landscape and visual issues since the last Addendum in 2019.

Background

- 10.7 Barton Willmore LLP prepared the original ES chapter for the Hightown Quarry Application in 2014, to record the landscape and visual effects, together with a Design Statement entitled Design Evolution: Landscape and Visual Mitigation by Design (the ‘Design Statement’), which was submitted to demonstrate the design response to the landscape and visual mitigation requirements. Barton Willmore LLP subsequently prepared an EIA Addendum, in September

2014, and gave evidence at a Public Inquiry hearing in 2016. A further Addendum was prepared in 2018 (submitted in March 2019) to update the baseline context including planning policy, contextual changes within the Study Area and to reassess the scheme considering design changes.

- 10.8 A further LVIA addendum was prepared in 2023 by Stantec UK Ltd, with the same project team as at Barton Willmore LLP. This provided an update based upon a review of the baseline and consideration of the assessed landscape and visual effects. This was accompanied by an updated set of photographic information including Site Appraisal and Site Context Photographs, taken, and presented in accordance with the Landscape Institute Technical Guidance Note 06/19.
- 10.9 Starting with the original application in 2014, landscape and visual concerns have informed the development of the proposals through an iterative process of assessment of effects using industry standard, Department of the Environment agreed methodologies and scope. When the original application was the subject of a notice of opinion to refuse the decision did not mention landscape or visual effects contributing to the Reasons for Refusal. Following the Planning Appeals Commission (PAC) hearing in 2016, the PAC report recommended that planning permission be granted, the commissioner noting “the visual impact of the proposal would be acceptable in the landscape (in the particular circumstances)” (paragraph 156).

Review of LVIA ES Chapter

- 10.10 The AtkinsRéalis AQA Update for the Hightown MBT / EfW of March 2025 was prepared to apply updated modelling software, recent meteorological data (from 2019-2023) and effects of the local windfarm on EfW emission dispersion and potential for visual plume. The windfarm is committed development and has been assessed as part of the revised modelling.
- 10.11 Plume emissions are calculated using an Atmospheric Dispersion Modelling System (ADMS) - a tool used to model the dispersion of pollutants in the atmosphere. This is commonly used in Europe and in the UK contains built-in meteorological processing developed by the UK Meteorological Office. The 2014 AQA utilised ADMS v4.2 by Cambridge Environmental Research Consultants (CERC) and the 2024 AQA carried out the modelling with ADMS v6. The update also considers more recent meteorological dataset (from 2019-2023).
- 10.12 This LVIA ES addendum considered the findings of the AQA Addendum 2025 relating to plume emissions and potential visibility as set out in paragraphs 14.95-14.98 and detailed in Appendix B.3 Plume Visibility.
- 10.13 The updated plume visibility assessment concludes at paragraph 14.110:

“The updated ADMS plume visibility output was for a plume arising from the normal operation of the EfW that is visible for approximately 50 to 60% of the time and that will, on average, be 55 to 60 m in length. This represents a more frequently visible plume compared to the 2014 ES finding but still almost fully within the footprint of the site.”

Considerations made in original LVIA and previous addenda

10.14 The following is an overview of the previous Landscape and Visual Impact Assessments (LVIAs) made by Barton Willmore LLP and Stantec UK Ltd of plume visibility.

LVIA ES Chapter 2014

10.15 The original 2014 LVIA ES Chapter 10 (Paras 10.329-333) noted that the visibility of plumes from the Energy from Waste (EfW) and Mechanical Biological Treatment (MBT) exhaust gases would be influenced by weather conditions. The nature of plume visibility is described as follows:

“Plumes would appear white due to water vapor condensing as exhaust gases cool. In calm, cold conditions, rising vertically, while in windy conditions, trailing horizontally. The plume’s visibility would vary with wind direction and sunlight, appearing white with the sun behind and grey with the sun in front”.

10.16 Based on the assessment of likely plume visibility provided in the 2014 AQ ES Chapter 14, the plume was understood to be visible for 20% of the time for the EfW, averaging 55-75m in length, and 10-15% for the MBT, averaging 17-20m¹. As a result of this and the relatively limited likely visibility and extent of plumes, it was considered that **“the intermittent changes in view resulting from the plumes would not result in significant adverse effects on receptors”**.

Landscape and Visual (L&V) response to Hearing evidence (2016)

10.17 Para 3.6 of the L&V response to Hearing evidence (2016) noted:

“Visible plume (paragraph 8.3): ...The plumes will be visible only for very limited times in daylight hours and will not therefore make any material difference to the visibility of the proposed development, given that the flue already comprises a tall element, extending above the skyline.”

10.18 Para 3.36 notes:

“The plume is not shown in the photomontages as a result of the considerations in ES Chapter 10 paragraphs 10.329-10.333....when visible, for a number of reasons, plumes are variable in appearance.....it is unrealistic to attempt to show plumes in verifiable photomontages as they will inevitably not show an accurate image and cannot therefore be relied upon, especially when plumes are visible for a limited amount of time.”

10.19 In the subsequent Commissioner’s report of the Hearing Commissioner Speirs noted the following in paragraph 151 of the PAC Report 2017:

“I acknowledge that the flue, at 95m, would rise well above the rest of the facility and be more visible from a wider number of viewpoints than the buildings; however, this is a single, narrow structure, which must be considered in the

¹ Chapter 14, 2014. Paragraphs 14.250-251.

context of the numerous tall vertical features present or approved in the nearby landscape, including pylons, masts, and wind turbines. I acknowledge that a plume, emanating from the flue, would be visible at certain times but this would be seen against the sky and clouds and I am not persuaded that it would unduly draw attention or that its visual impact would be unacceptable.”

Landscape and Visual **Additional** Information November 2016

- 10.20 An assessment of cumulative effects resulting from consented windfarm applications were provided in this report, illustrated by photomontages, and no further consideration of plume visibility was given.

LVIA **Addendum** March 2019

- 10.21 An LVIA addendum prepared in 2019 updated the baseline and considered changes to the highways design. The addendum notes that:

“the conclusions of the submitted original ES chapter and subsequent landscape and visual submissions remain broadly valid, the only changes since being as a result of the increasing influence of infrastructure and urbanisation in the landscape surrounding the application site. This does not affect the significance of effects on features, character or views in relation to the proposed development alone and the submitted original ES Chapter 10 remains an assessment of the scenario of maximum significance of effects of the proposed development.”

LVIA **Addendum** 2023

- 10.22 In 2023 the findings of the LVIA were reassessed in the light of a newly updated baseline assessment and the granting of full planning permission (LA03/022/0649/F) for the erection of replacement Coated Roadstone plant.
- 10.23 The assessment concluded that the likely significant effects would be unchanged from 2019 given the unchanged nature of the proposals and the overall integrity of the baseline landscape and visual conditions.

Summary of Results of the 2025 Air Quality Report

- 10.24 The updated assessment was carried out using the latest versions of air dispersion modelling software and a recent meteorological dataset (2019 to 2023). ADMS v6 included improvements to how the model calculates the visibility of stack releases with a high-water content. A comparison of the results indicates the following in relation to plume visibility:

- Frequency: The updated study finds the plume to be visible approximately 48-58%² of the time, compared to 20%³ in the 2014 assessment.

² Air Quality Addendum, 2025. Page 52 section B.3.3 Results

³ Air Quality Chapter 14. 2014. Paragraph 14.250

- Length: The average visible plume length is now predicted as 55-60 metres², whereas it was 55-75 metres³ in the 2014 assessment.

10.25 The following table sets out findings taken from the 2014 assessment and extrapolated from the 2024 AQA, to provide a finer grain of detail on plume length and frequency of visibility modelled with ADMSv4 and v6:

Sample of results from 2014 and 2023

Year	Visible Plume Frequency %	Mean length (m)	Average Maximum length (m)	Less than 50m frequency %	Less than 100m frequency %	Greater than 100m frequency %
<i>ADMS v4.2 (2014)</i>						
2008	20.9%	74.7	300	8%	14.8%	5.9%
2009	20.1%	74.7	276	8.4%	14.4%	5.7%
2010	17%	57.5	269	9.6%	14.4%	2.6%
2011	20.2%	68.5	267	7.9%	15.4%	4.8%
2012	21.1%	69.6	228	9.3%	15.3%	5.8%
Average 2008-2012	19.86%	69.0	268	8.6%	14.9%	5%
<i>ADMS v6 (2023)</i>						
				<i>% - expressed as per 2014 for direct comparison</i>		
2019	57.1%	56.5	415.6	34.1%	47.2%	9.9
2020	58.2%	59.6	513.7	32.4%	47.7%	10.5
2021	52.6%	56.0	513.7	32.2%	44.3%	8.3
2022	48.7%	55.5	573.3	28.6%	41.1%	7.7
2023	52.7%	60.1	379.3	29.7%	42.3%	10.4
Average 2019-2023	53.9%	57.5m	479.1	31.44%	44.5%	9.34
Increased 34% Reduced 11.5m Increased 211m Increased 22.8% Increased 29.6% Increased 4.4%						
Difference between averages						

Sources: Air Quality Chapter 14, 2014 (Appendix 14.8 Plume Visibility Para A.1.23) Air Quality Addendum, 2025 (Appendix B.3.3 Table B-4)

10.26 The table below indicates the descriptors applied to the percentages given in the table above in the range from constantly visible (100%) to never visible (0%).

Descriptions applied to percentage visibility

Frequency	Description
0%	Never
1-20%	Almost never
21-40%	Rarely
41-60%	Half of the time
61-80%	Often
81-99%	Almost constantly
100%	Constantly

10.27 Figure B-3 of the AQ Addendum 2025 (replicated below) provides detail on the breakdown of visible plume length for the year 2020, calculated with ADMS v6. This year was selected having the highest frequency of visible plume and shows that of the 8620 hours of valid meteorological data used, predicted plume length is between 0 and 10m in length for 4500 hours (52% of the time). As noted in Table B-4 of the AQ addendum, the total number of hours of visible plumes in 2020 was 5017 (i.e. 58% of the time). In other words, visible plume length will be 10m or less for approximately 52% of the time. Section B.3.3 concludes (emphasis ours):

“A histogram showing the distribution of plume length is shown in Figure B-3 again for the year 2020, which gave the highest frequency of visible plume. This shows that for over 4,500 hours of the year plumes are less than 10 m long. Of the 55.7% of visible plumes that are up to 50m long, one third of these are between 1 and 10 m, so barely extending beyond the stack itself.

*In summary, there will **typically be no plume for around 50% of the time and when visible, it will be typically less than 60 m long**, well within the footprint of the site. It will only appear at this length if the plume is observed from a perpendicular viewpoint. A grounding visible plume is not estimated to occur.”*

Figure B-2 - Plume visibility results, ADMS v6 with 2020 meteorological data

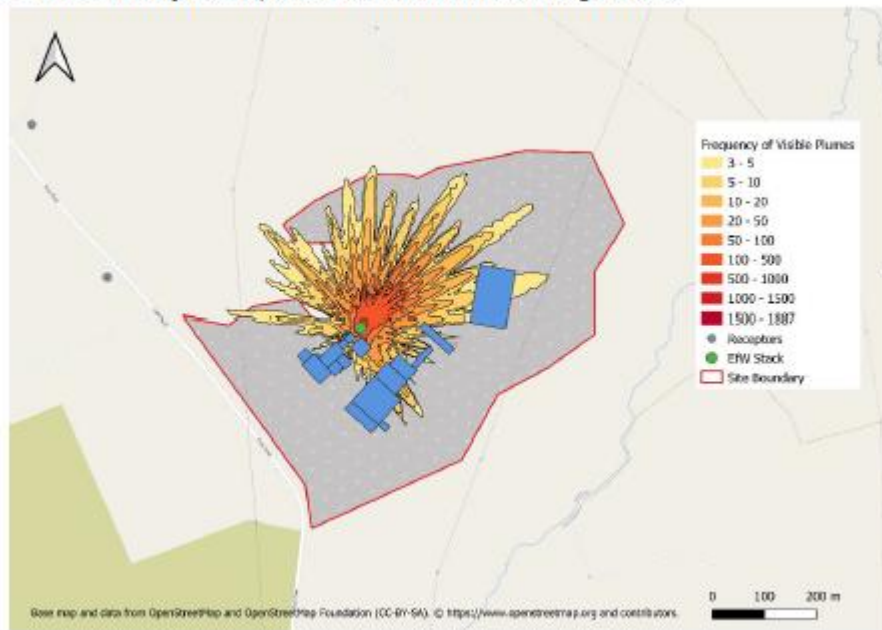
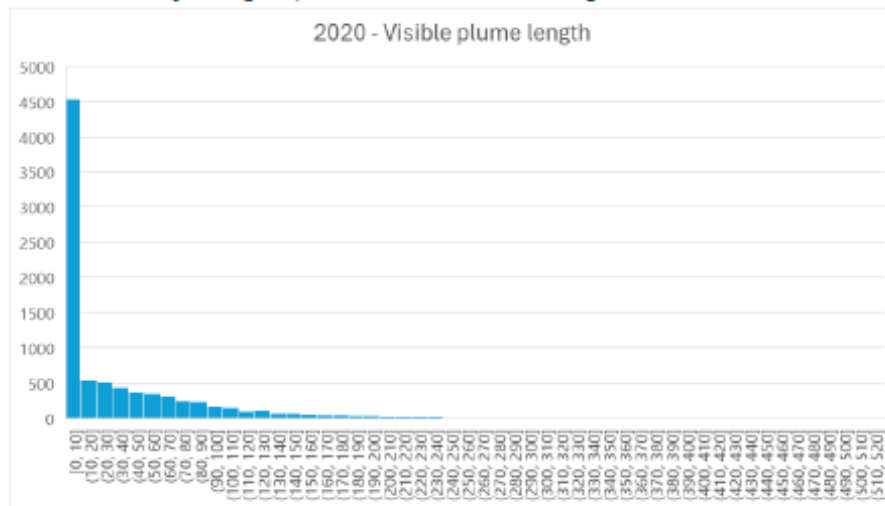


Figure B-3 - Plume visibility histogram, ADMS v6 – 2020 meteorological data



10.28 Whilst the 2025 AQA findings indicate an increase in the overall frequency and maximum length of the visible plume compared to the 2014 assessment, the finer grain of detail shows that for 19% of that time the visible plume from the EFW plant will be less than 10m in length. The results show that using the updated modelling and meteorological data the prediction is for a greater proportion of the visible plume hours to be within the shorter range (as per the emphasis above).

10.29 Figure B-2 of the AQ Addendum 2024 (replicated above) shows the prevailing direction of Plume trails modelled for 2020 indicating that the predominant direction is to the northeast and east from the flue.

Visual Impact Assessment Review

10.30 As noted in paragraphs 10.24-10.29 above, and set out in the original ES chapter, the understanding of the temporary and variable visibility of the plume, from its description in Chapter 14 (2014), meant that it was not considered to have a bearing on the visual effects assessed for the proposed development. 20% visibility with 55-75 average plume length (maximum average plume length 268m) as stated above was deemed to result in a relatively limited likely visibility and extent of plumes. It was considered that “the intermittent changes in view resulting from the plumes would not result in significant adverse effects on receptors”.

10.31 The new data relating to plume visibility from the EFW plant can be summarised as follows: The frequency of plume visibility increases to 48-58% (broadly half the time) with a reduced average mean plume length of 55-60m. The plume length however will be 10m or less for approximately a third of time when the plume is visible.

10.32 The visual impact re-assessment takes account of the nature of plume visibility, as set out in Paragraph 10.330 of the 2014 ES:

“The colour of the plume will appear to vary, being white when viewed with the sun behind the viewer, and grey when the sun is in front of the viewer. The plume will also be more prominent when viewed against a clear blue sky, compared to a cloudy sky, and when there is low level cloud the top of the flue may be within this and the plume will be obscured by cloud.”

10.33 Using photomontages prepared for the 2014 application, four representative viewpoints have been re-assessed, assuming the greatest potential for visible plume length depending on the angle of the view and assumptions from the data shown on Figure B-2 of the AQA. These findings are set out in Table 10.1 below. The following classifications of magnitude of visual effect, as set out in paragraph 10.40 of the 2014 ES, are applied in the discussion.

10.34 The results are drawn from a combination of the degree of change to the view resulting from the proposed development with consideration of the extent of the area over which the changes would be visible, the period of exposure to the view and reversibility. Magnitude of change has been classified as High, Medium, Low, Very Low or Neutral, as follows:

- **High:** high degree of change to existing view (e.g. loss of characteristic features) and/or high degree of exposure to view (e.g. near-distance or open views);
- **Medium:** medium degree of change to existing view (e.g. partial loss of characteristic features) and/or medium degree of exposure to view (e.g. middle-distance or partial views);
- **Low:** low degree of change to existing view (e.g. limited loss of characteristic features) and/or low degree of exposure to view (e.g. long-distance, interrupted or glimpsed views);
- **Very Low:** barely perceptible change to existing view and/or very brief exposure to view; and

- **Neutral:** no change discernible in existing view.

10.35 The significance of visual effect is determined by the interaction of the sensitivity of receptor and magnitude of effect, as indicatively illustrated in Table 10.1. Table 10.2 defines significance of visual effects as follows:

- **Major:** Where the proposed changes would be sufficient to substantially alter a nationally important view, or view of high scenic quality.
- **Major/Moderate:** Where the proposed changes to views would be noticeably out of scale with the existing view and/or substantially alter a locally important view, or view of scenic quality.
- **Moderate:** Where the proposed changes to views would be out of scale with the existing view or noticeably alter a view.
- **Moderate/Minor:** Where the proposed changes to views would be noticeable and at slight variance with the existing view.
- **Minor:** Where proposed changes to views would be intermittent and at slight variance with the existing view.
- **Negligible:** Where proposed changes would have an indiscernible effect on views / visual amenity.
- **Neutral:** No effect

Table 10.1 Description of visual effects illustrated by photomontage views 2014 (ES Paras 10.291-10.301) and update commentary on plume visibility

2014 description of proposed development in the view	2024 commentary on 2014 assessment of effects
Photomontage 1 shows the view from Boghill Road approximately 1.1km from the EfW flue, looking south. In this view, the upper parts of the EfW building and flue are visible above the skyline. However, the perception of massing is broken up by the articulation of the built forms and the broad-scale patterns of colouration on the upper parts of the building which also associate with the higher-level setting of the sky and expanses of McIlwhan's hillside. Against the setting of the quarry face, the proposed built forms cannot be readily perceived as a result of their finer grain of colouration. The EfW flue is seen in the context of pylons to both the left- and right-hand sides of the view. The larger grain colouration on the upper part of the EfW frontage facing this viewpoint also associates closely with the quarry horizon, appearing to extend the landform profile across the built form,	The significance of effect for people living in this location was judged to be significant adverse (moderate-major at Y1 and Y20). As per Paragraph 10.57 this means: "<i>Where the proposed changes to views would be noticeably out of scale with the existing view and/or substantially alter a locally important view, or view of scenic quality.</i>" The effect resulted from introduction of the building massing in the view, partly encroaching above the skyline, having a medium magnitude of visual effect on receptors of high sensitivity. Visible plume, extending in a prevailing northeasterly direction, would appear as a linear or billowing feature in the sky extending to the left from the EfW flue, extending to the extent of the Proposed Development/quarry

thereby further anchoring the building into its setting. The MBT flue also extends above the horizon, although it appears in the context of numerous significantly more prominent pylons and communication masts to the left-hand side of the view and its colouration minimises its prominence.	Site and no further than a point above Squires Hill on the horizon. This would increase the magnitude of visual impact from the development in those conditions in which the plume extends beyond the extents of the Site, but would not increase the overall significance of effect as defined above.
Photomontage 2 shows the view from the junction of Boghill Road with Hyde Park Road, on the boundary of the application site and approximately 1.6km from the EfW flue, looking south-westwards. In this view, the built forms, with the exception of the flues, do not appear above the horizon and appear to recede into the backdrop of the quarry faces, notably to the left of the EfW building, as a result of the fine grain of colouration used. Vegetation on the near extent of the quarry perimeter also serves to soften views of the lower-level built forms, helping anchor them into the landscape. The upper parts of the EfW are set against the backdrop of Mcllwhan's and the broader scale of colour panelling associates well with the hillside and hedgerows. The EfW flue is seen in the context of pylons and does not appear significantly out of scale with them. In the foreground, the extensive replacement of hedgerows with trees and roadside wildflower grassland verges can be seen.	At year 1 the magnitude of effect will be medium based upon this assessment, on receptors of high sensitivity, resulting in a moderate-major adverse significance of effect. With the growth of trees in the foreground, these effects would reduce to minor-moderate adverse by Year 20. Visible plume extending in a north-westerly direction, (ie perpendicular to the viewer – which is not the prevailing wind direction) would appear as a linear or billowing feature in the sky extending to the right from the EfW flue, visually extending in the sky no further than a point above the northern extent of Mcllwhan's Hill on the horizon. This would increase the magnitude of visual impact from the development in those conditions in which the plume extends beyond the extents of the Site but would not increase the overall significance of effect as defined above from this location. The prevailing north easterly wind direction will result in the plume being less visible from this location, due to the angle of the view.
Photomontage 4 shows the view from Flush Road, in the vicinity of residential properties approximately 860m from the quarry area of the application site, looking south-eastwards. In this view, the EfW building and flue are visible above the skyline, although the perception of massing is broken up by the articulation of the built forms and the broad scale patterns of colouration which also associate with the higher-level setting of the sky. Other, lower-level buildings cannot be readily perceived as a result of their finer grain of colouration which appears to recede into the quarry backdrop below the horizon. The EfW flue is seen in the context of pylons and does not appear significantly out of scale with them, notably those seen to the right of the EfW building. The colouration of the EfW flue also breaks up and lightens its perceived form as it rises into the sky. The larger grain colouration on the upper part of the EfW frontage facing this viewpoint also associates closely with the quarry horizon, appearing to extend the landform profile	The significance of effect for residents at this location was judged to be Moderate-Major adverse. The effect resulted from introduction of the building massing in the view, partly encroaching above the skyline, having a medium magnitude of visual effect on receptors of high sensitivity. Visible plume extending in a northeasterly direction, with an average length of 55-60m, visible for up to 50% of the time, would appear as a linear or billowing feature in the sky above the hillside to the left of the EfW flue, visually extending above extent of the Proposed Development/quarry Site. This would not increase the magnitude nor the significance of predicted visual effect from this location.

across the built form, thereby further anchoring the building into its setting.	
Photomontage 5 shows the view from Flush Road in the vicinity of Squires Hill and the A52, approximately 950m from the quarry area of the application site, looking northwards. This view is representative of the nearest available views from the Area of High Landscape Value. In this view, only the flue and small elements of the roof of the EfW can be perceived above the horizon of the quarry. The smaller elements associate readily with the pale-coloured built forms in the middle ground of the view. The flue colouration assists the built form in receding into the backdrop of distant agricultural landscape and sky and the strong vertical form of the flue is broken up by the differences in colouration, which also associate with the horizontal pattern of the backdrop. The flue is seen in the context of two lines of pylons with which it appears to be of equivalent scale.	The significance of effect for residents at his location was judged to be Moderate adverse, ie <i>Where the proposed changes to views would be out of scale with the existing view or noticeably alter a view</i>. Resulting from a Low magnitude of effect on visual receptors of High sensitivity. An average plume length of 55-60m, visible for up to 50% of the time, blowing in a northeastern direction, would be seen extending to the right of the EfW but no further than the extent of the Proposed Development/quarry Site. This would not increase the magnitude nor the significance of predicted visual effect from this location.
Photomontage 6 shows the view from the western flanks of Cave Hill, approximately 2.7km to the east of the quarry area of the application site, looking north-westwards. This view is also representative of those from the Area of High Landscape Value. In this view, the upper part of the EfW can just be perceived above the landform of the quarry and is seen against the backdrop of distant landscape, with which the large-scale panels of colouration associate appropriately, as well as reducing the perceived massing of the built form. The EfW flue can be perceived against the context of Lough Neagh and the elevated landscape beyond, although it is of similar prominence to pylons visible against the backdrop of McIlwhan's to the left and substantially less prominent than the communication masts visible on the hilltops of Collinward to the right and Squires Hill, Divis and Black Mountain to the left. The colouration of the EfW flue also breaks up and lightens its perceived form as it rises into the sky.	The significance of effect for recreational users of the Cavehill Trail was judged to be Minor/moderate adverse, at worst. As per Paragraph 10.57 this means: <i>"Where the proposed changes to views would be noticeable and at slight variance with the existing view."</i> The effect resulted from introduction of upperpart of the building and the flue against the backdrop of views to Lough Neagh, having a very low magnitude of visual effect on receptors of high sensitivity. An average plume length of 55-60m, visible for up to 50% of the time, blowing in a northeastern direction, would be seen extending to the left of the EfW but no further than the extent of the Proposed Development/quarry Site. This would not increase the magnitude nor the significance of predicted visual effect from this location.

10.36 The increase in magnitude of visual effect due to the plume is marginal for the reasons set out in Paragraph 10.330 of the ES and given that the majority of the change in the view will be due to the introduced built forms. The resultant change to the significance of effect settles on the upper side of the range of effects previously predicted.

Conclusion

- 10.37 On days where conditions do give rise to the creation of a visible plume, the plume would extend the visibility of the proposed development for visual receptors with close range views as represented above. The visible nature of any plume is in any event variable depending on the time of year, cloud cover, temperature, wind speed and direction, and the degree of saturation of the surrounding air.
- 10.38 On the days when visible plume is evident, there would be a slight increase in the levels of visual change for the short duration that the largest plumes are visible. However, as the plume would cause such a temporary change to the visibility of the proposed development, it is not considered that the presence of the visible plume would lead to an increase in magnitude nor the significance of any of the visual effects identified during the visual assessment.

Response to Gerry Crossan Objection

10.39 A letter from Gerry Crossan to Minister John O'Dowd MLA of the Department of Infrastructure, in June 2024, presented an objection to proposed Hightown waste incinerator (Planning Ref.: T/2014/0114/F). Mr Crossan, writing as a supporter of the community concern group No-Arc21, refers to visual impact in his letter as follows:

"Visual impact and need; the Planning Appeals Commission (PAC) has previously ruled that the visual impact of the proposed incinerator would be "unduly prominent" and contrary to policies CTY13 and 14 of PPS21 Paragraph 153, Appeal Ref: 2015 / C004 dated 8 March 2017).Were the need for the facility is so outdated, the unacceptable visual impact of the proposal cannot be set aside as it was in the balancing exercise undertaken by the Commissioner in 2015 / C004 (Paragraph 156)....."

10.40 Paragraph 136 of the PAC 2017 report by Commissioner A Spiers, notes the following with regards to visual effects and the No-Arc21 objection (our emphasis):

".... I accept that the proposal would have a visual impact when viewed both from the local area, and from further afield. I acknowledge that the visual impact would be most perceptible from properties with existing views of Hightown Quarry. In my opinion, the visual impact would not be unacceptable (see subsequent analysis in this report)."

10.41 Paragraphs 143 to 152 give a detailed account of the Commissioner's appreciation of the landscape and visual evidence presented, noting satisfaction with the veracity of the visualisations and their usefulness in understanding the visual effects on site, and with the efforts that have been made to visually integrate the development into its setting through design.

10.42 At paragraph 153 Commissioner Spiers comments that he considered proposals would be "unduly prominent" in close range views. For context the paragraph reads in full:

"To my mind, the most critical views of the quarry site are from the roads closer thereto. I believe that the photomontages prepared for the ES and subsequent submissions provide an accurate impression of the visual impact of the existing quarry and the likely impact of the proposal. Seen from the Upper Hightown and Hydepark Roads, over distances of around 1.2 km or more, I consider that the complex of buildings would, on balance, be acceptably integrated into the countryside due to its enclosure within the quarry, the existence of adjacent uplands, and the careful use of coloured cladding in the design. Seen from closer vantage points on Boghill and Flush Roads, and notwithstanding the aforementioned features, considerably more of the proposal would be seen, with the bulky outline of the EfW building being particularly stark on the skyline. Due to the large scale and mass of the EfW building, I consider that the proposal would be unduly prominent when seen from the closest critical viewpoints, contrary to PPS21 policies CTY13 and 14."

10.43 Paragraph 156 however concludes (our emphasis) that:

“In the circumstances, I consider that the prominence of the proposal in the landscape is outweighed by the above factors. It is my view that the provisions of PPS21 policies CTY13 and CTY14 should not be judged fatal to the proposal. Similarly, there is no conflict with PPS 11 policy WM1, in that the visual impact of the proposal would be acceptable in the landscape (in the particular circumstances) and the development would not have an unacceptable visual impact on any area designated for its landscape quality.”

10.44 The following factors of relevance to visual effects were listed in paragraph 156:

- *“The existing quarry has a significant visual impact and is seen as a substantial 'scar' in the landscape;*
- *There are existing tall vertical structures throughout the area, which have an impact on rural character. The five wind turbines approved at Ballutoag, subsequent to the subject application being submitted, will significantly add to this impact;*
- *The most critical views of the site, i.e. those where the proposal would have the greatest visual impact, are limited to the local road network, particularly parts of Boghill and Flush Roads. Tree planting undertaken as part of the road improvement element of the development, would, in time, help reduce the visibility of the facility from the road network.”*

10.45 The objection raised by Mr Crossan is based upon a question over need and the planning balance which should now be attributed to the Commissioner's assessment in the PAC report. The conclusions of the LVIA still stand as they did in 2014, which has been reassessed against updated baselines in the intervening years as set out in Section 1.

10.46 The LVIA findings identify and demonstrate the extent of significant adverse effects upon the most local views of the proposed development which the Commissioner notes as being “unduly prominent”. It is clear however that both the LVIA and the Commissioner's assessment take into account the existing and consented site uses, cumulative effects of consented wind farm developments, and the wider integration of the development through an appropriate design response, to conclude that on balance the landscape and visual effects are acceptable.