

Appendix 6B

Baseline Air Quality

Prepared for: Kronospan

December 2025

DNS5-4-023

1.0 BASELINE

1.1 Introduction

1.1.1 The Kronospan Facility is located on land adjacent to Holyhead Road, Chirk (the Site). The Kronospan Facility comprises a number of large industrial process buildings including air emissions stacks, storage areas for raw materials, warehouse buildings for manufactured products, offices and car parking. The main residential area of Chirk is located to the east of the Site with residential properties lining the majority of the eastern side of Holyhead Road. Chirk town centre is located approximately 500 m to the southeast of the Site. The wider area beyond the urban settlement of Chirk is dominated by agricultural fields and woodland. Chirk Castle and its grounds are located to the west of the Site, beyond the Llangollen Canal. This section includes a review of the baseline air quality and the definition of appropriate baseline concentrations to be used in this assessment.

1.1.2 The Kronospan Facility is currently operating and as such the baseline is the current operations of Site. Point source emissions from current operations are included in the dispersion model. Therefore, it is appropriate to also consider the background concentration – i.e. the contribution excluding the sources modelled. The following terms have been used:

- i) Baseline - including the contribution from the existing operations at the Site; and
- ii) Background – general concentrations excluding the on Site sources.

1.1.3 This review has focussed on the impact of those pollutants for which emissions will change as a result of this application, namely:

- i) Oxides of nitrogen (NO_x as nitrogen dioxide (NO₂);



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- ii) Sulphur dioxide (SO₂);
 - iii) Carbon monoxide (CO);
 - iv) Particulates (PM);
 - v) Hydrogen chloride (HCl);
 - vi) Volatile organic compounds (VOCs);
 - vii) Hydrogen fluoride (HF);
 - viii) Ammonia (NH₃);
 - ix) Mercury (Hg);
 - x) Cadmium (Cd) and thallium (Tl);
 - xi) Other group 3 heavy metals including arsenic (As), antimony (Sb), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), manganese (Mn), nickel (Ni) and vanadium (V); and
 - xii) Dioxins and furans and dioxin-like PCBs.

2.0 LOCAL AUTHORITY REVIEW AND ASSESSMENT

2.1 Air Quality Management Areas

2.1.1 In accordance with Section 82 of the Environment Act (1995) (Part IV), local authorities are required to undertake an ongoing exercise to review air quality within their area of jurisdiction. The Site is located within Wrexham County Borough Council (WCBC) area.

2.1.2 There are no Air Quality Management Areas (AQMA) within 5 km of the Site. The closest AQMAs to the Site are in the centre of Shrewsbury and Chester both located over 30 km away. Therefore, emissions from the Kronospan Facility within AQMAs will be negligible, and the effect in AQMAs has not been considered further.

2.2 Local authority monitoring

2.2.1 WCBC operate two continuous monitoring stations within Chirk:

- i) Chirk, an urban industrial site, set up 22 July 2020; and
- ii) Chirk Community Hospital, an urban background site, set up 29 November 2021.

2.2.2 The location of both sites is shown on **Figure 1** at the end of this Appendix. Both sites monitor for oxides of nitrogen, nitrogen dioxide, particulates (as PM₁₀, PM_{2.5} and PM₁), total VOCs (C₅ and above, i.e. VOCs with five or more carbon atoms), temperature, wind direction and wind speed.

2.2.3 The following tables presents a summary of the monitoring from these sites, noting that both sites include a contribution from the current operations on Site.

Table 2.1 – Summary of Automatic Monitoring at Chirk

Pollutant	Parameter	AQAL	2021	2022	2023	2024
NO _x	Annual mean (µg/m ³)	-	23.0	14.2	16.2	17.4
	Data capture (%)	-	90.0%	92.3%	80.5%	69.0%
NO ₂	Annual mean (µg/m ³)	40	18.2	11.6	13.8	16.3
	Maximum 1-hour (µg/m ³)	200	82.9	77.7	69.7	82.7
	99.8 th %ile of 1-hour (µg/m ³)	200	64.5	62.6	55.8	65.3
	Data capture (%)	-	89.7%	92.3%	80.5%	69.0%
PM ₁₀	Annual mean (µg/m ³)	40	8.3	11.4	10.5	17.9
	90 th %ile of daily means (µg/m ³)	50				
	Data capture (%)	-	86.5%	89.3%	89.9%	99.8%
PM _{2.5}	Annual mean (µg/m ³)	20	2.9	4.3	3.9	4.5
	Data capture (%)	-	86.5%	89.3%	89.9%	99.8%

Pollutant	Parameter	AQAL	2021	2022	2023	2024
Total VOC C5 and above	Annual mean ($\mu\text{g}/\text{m}^3$)	-	4.5	17.8	19.7	20.1
	Maximum 1-hour ($\mu\text{g}/\text{m}^3$)	-	478.1	6979.9	6002.1	4357.9
	99 th %ile of 1-hour ($\mu\text{g}/\text{m}^3$)	-	40.5	66.9	37.8	33.1
	Data capture (%)	-	88.8%	92.0%	79.5%	68.6%
	Adjusted annual mean ($\mu\text{g}/\text{m}^3$)	-	3.7	7.6	16.3	11.3
	Adjusted data capture (%)	-	87.9%	90.5%	79.0%	68.1%

Table 2.2 – Summary of Automatic Monitoring at Chirk Hospital

Pollutant	Parameter	AQAL	2021	2022	2023	2024
NO _x	Annual mean ($\mu\text{g}/\text{m}^3$)	-	-	15.4	20.2	14.6
	Data capture (%)	-	-	89.8%	99.8%	82.7%
NO ₂	Annual mean ($\mu\text{g}/\text{m}^3$)	40	-	13.3	18.6	11.3
	Maximum 1-hour ($\mu\text{g}/\text{m}^3$)	200	-	77.9	88.4	85.8
	99.8 th %ile of 1-hour ($\mu\text{g}/\text{m}^3$)	200	-	53.7	68.9	47.3
	Data capture (%)	-	-	89.8%	99.8%	82.7%
PM ₁₀	Annual mean ($\mu\text{g}/\text{m}^3$)	40	-	10.4	9.4	11.4
	90 th %ile of daily means ($\mu\text{g}/\text{m}^3$)	50	-	16	16	18
	Data capture (%)	-	-	89.6%	74.2%	99.8%
PM _{2.5}	Annual mean ($\mu\text{g}/\text{m}^3$)	20	-	5.4	4.7	5.0
	Data capture (%)	-	-	89.6%	74.2%	99.8%
Total VOC C5 and above	Annual mean ($\mu\text{g}/\text{m}^3$)	-	-	10.4	6.0	9.4
	Maximum 1-hour ($\mu\text{g}/\text{m}^3$)	-	-	148.9	79.5	48.0
	Data capture (%)	-	-	89.8%	99.8%	79.2%

2.2.4 This monitoring shows that baseline levels, including the current operation of the Kronospan Facility, are well below the AQALs.

- 2.2.5 The monitoring of total VOC (C5 and above) (which includes benzene CH₆) at Chirk indicates a very high maximum 1-hour concentrations in 2022 to 2024. The monitoring data is yet to be verified. However, a review of the raw data shows that the 99th percentile of 1-hour concentrations at Chirk is less than 1% of the maximum measured. A few high 1-hour concentrations are affecting the annual mean concentration. A review of the monitoring data and wind direction and speed has been carried out. This identifies that some of the very high peaks occur when winds are blowing away from the Kronospan Facility (i.e. away from the source of VOCs), and the same peaks are not captured in any of the other pollutants or at the monitoring from Chirk Hospital. This indicates instrument error. As such an adjusted annual mean concentration for the Chirk monitoring station has been calculated which excludes any values greater than 40.7 µg/m³ which is the 99th percentile of the hourly monitored data between 2021 and 2024. These monitoring sites were set up to quantify the impact of VOCs from the Kronospan facility in the local area. The Kronospan facility is the only significant source of these emissions. Specific AQALs are set for individual VOCs as such it is not possible to compare the monitored concentrations to an AQAL. This data has been presented for completeness and not used further in this assessment. WCBC undertakes non-automatic (diffusion tube) monitoring for nitrogen dioxide at three monitoring sites within Chirk. The locations of the monitoring are shown in **Figure 1** provided at the end of this Appendix.
- 2.2.6 A summary of monitoring data from these sites is provided in **Table 2.3**. Data has been taken from the North Wales Authorities Collaborative Project 2024 Air Quality Progress Report which is the most recent report published at the time of writing this assessment.

Table 2.3 – Summary of Non-Automatic Nitrogen Dioxide Monitoring

Site name	Site type	Mapped Bg (µg/m ³)	Annual mean concentration (µg/m ³)				
			2020	2021	2022	2023	2024
Ceriog School (10)	Suburban	7.2	10.0	10.7	9.2	12.2	-
Holyhead Rd (22)	Intermediate	7.4	13.3	13.3	13.5	15.7	-
Church Street (48)	Roadside	6.8	12.3	13.7	12.6	14.3	-

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- 2.2.7 Due to their proximity to the Site, all of these monitoring sites will include a contribution from the Kronospan Facility, and they demonstrate that baseline levels of nitrogen dioxide are relatively low in the local area.
- 2.2.8 All non-automatic monitoring sites have recorded nitrogen dioxide to be higher than the mapped background data for their locations which is expected as they are roadside sites and include a contribution from the Kronospan Facility. However, as shown, the concentrations remain low and are well within the AQAL.



3.0 NATIONAL MODELLING – MAPPED BACKGROUND DATA

- 3.1.1 The Department for Environment Food and Rural Affairs (Defra) provides modelled background concentrations of pollutants across the UK on a 1 km by 1 km grid under the Modelling of Ambient Air Quality (MAAQ) contract. This model is based on known pollution sources and background measurements and provides a source of background concentrations in lieu of suitable monitoring data. Mapped background concentrations have been downloaded for the grid squares containing the Site and immediate surroundings. In addition, mapped atmospheric concentrations of ammonia are available from the Air Pollution Information System (APIS) throughout the UK.
- 3.1.2 The mapped background data is calibrated against monitoring data. The most recently available 2023 mapped background concentrations are based on 2023 meteorological data and are calibrated against monitoring undertaken in 2023.
- 3.1.3 Concentrations will vary over the modelling domain area. Therefore, the maximum mapped background concentration data within 3 km of the Site have been downloaded along with the concentrations for the grid squares containing the Site. A summary is presented in the following table.

Table 3.1 – Mapped Background Data

Pollutant	Annual mean concentration ($\mu\text{g}/\text{m}^3$)		Dataset
	At Site	Max within 3 km of Site	
NO ₂	7.4	8.1	Defra 2023 Dataset
PM ₁₀	8.2	9.6	Defra 2023 Dataset
PM _{2.5}	5.0	5.5	Defra 2023 Dataset
SO ₂	0.9	1.5	Defra 2023 Dataset
CO	212.2	212.2	Defra 2010 Dataset
Benzene (CH ₄)	0.5	0.5	Defra 2023 Dataset
NH ₃	1.8	2.2	APIS 2020 – 2022 average
Notes: CO mapping has not been updated since 2010			

- 3.1.4 As the contribution from the Kronospan Facility is being modelled, the background concentration has been taken as the maximum mapped background concentration within 3 km of the Site as presented in **Table 3.1**. While this also includes a contribution from the Kronospan Facility, it is only as an average concentration for the grid square.

4.0 NATIONAL MONITORING NETWORKS

4.1 Automatic Urban and Rural Network

4.1.1 The UK Automatic Urban and Rural Network (AURN) is a country-wide network of air quality monitoring stations operated on behalf of the Defra. This includes automatic monitoring of oxides of nitrogen, nitrogen dioxide, sulphur dioxide, ozone (O₃), carbon monoxide and PM.

4.1.2 The closest AURN monitoring station to the Site is in Wrexham, an urban traffic station, located over 12 km to the north of the Site. Due to the distance and siting it is not likely that concentrations monitored at this monitoring station would be representative of conditions in Chirk and there are local monitoring stations in Chirk as detailed in **Section 2.2**. As such monitoring from the AURN has not been considered further in this assessment.

4.2 Other National Monitoring Networks Data

4.2.1 Neither the Defra mapped background dataset, AURN, or LAQM include monitoring of other pollutants released from the Kronospan Facility, and which are affected by this application, such as hydrogen chloride, hydrogen fluoride, and metals. As such reference has been made to national monitoring to determine a suitable background concentration for these pollutants.

Hydrogen Chloride

4.2.2 Hydrogen chloride was measured until the end of 2015 on behalf of Defra as part of the UK Eutrophying and Acidifying Atmospheric Pollutants (UKEAP) project. This consolidates the previous Acid Deposition Monitoring Network (ADMN), and National Ammonia Monitoring Network (NAMN). Monitoring of hydrogen chloride ceased at the end of 2015 and none of the historic sites were located within 10 km of the Site. Prior to the cessation of the monitoring concentrations were fairly constant.

4.2.3 The maximum annual average monitored within the UK between 2011 and 2015 was 0.76 µg/m³. In lieu of any recent representative monitoring this has been used as the background concentration for this assessment as a conservative estimate.



Hydrogen Fluoride

- 4.2.4 Baseline concentrations of hydrogen fluoride are neither measured locally nor nationally, since these are not generally of concern in terms of local air quality. However, the EPAQS report 'Guidelines for halogens and hydrogen halides in ambient air for protecting human health against acute irritancy effects' contains some estimates of baseline levels, reporting that measured concentrations have been in the range of 0.036 µg/m₃ to 2.35 µg/m³.
- 4.2.5 In lieu of any local monitoring, the maximum measured baseline hydrogen fluoride concentration has been used as the background concentration for the purpose of this assessment as a conservative estimate.

Ammonia

- 4.2.6 Ammonia is also measured as part of the UKEAP project at rural background locations. There are no UKEAP monitoring locations within 10 km of the Site. The nearest monitoring site is at Llynclys Common, 14 km to the south. In lieu of any local UKEAP monitoring, the maximum mapped background value from APIS within 3 km of the Site as set out in Table 3.1 (2.2 µg/m³) has been used for the purpose of this assessment when considering the impact with reference to the AQALs for the protection of human health, and the maximum background concentration across each designated site as taken from APIS has been used when evaluating the impact at ecological receptors if needed.

Metals

- 4.2.7 Metals are measured as part of the Rural Metals and UK Urban/Industrial Networks (previously the Lead, Multi-Element and Industrial Metals Networks). There are no sites identified within 10 km of the Site. In lieu of any local monitoring, a review of monitoring from all rural sites across the UK has been carried out. This data is presented in **Table 4.1**. The use of rural sites is appropriate as the Kronospan Facility is the only significant source of these identified in the local area and these are included in the dispersion model. This is the most recent data published at the time of writing this assessment.



Table 4.1 – Annual Mean Metals Concentrations – Maximum at Rural Background Sites

Substance	AQAL	Annual Mean Concentration ($\mu\text{g}/\text{m}^3$)					Max (as % of AQAL)
		2019	2020	2021	2022	2023	
Cadmium	5	0.15	0.13	0.13	0.11	0.09	3.0%
Mercury	-	-	-	-	-	-	-
Antimony	5,000	-	-	-	-	-	-
Arsenic	6	0.81	0.76	0.81	0.67	0.66	13.5%
Chromium	-	1.30	0.66	0.61	0.75	0.82	-
Cobalt	-	0.06	0.05	0.06	0.05	0.05	-
Copper	-	4.70	3.50	3.40	3.30	2.90	-
Lead	250	5.70	5.00	5.40	4.60	3.70	2.3%
Manganese	150	3.70	3.40	3.50	3.70	2.90	2.5%
Nickel	20	0.74	0.53	0.68	0.81	0.56	4.1%
Vanadium	-	0.96	1.00	1.20	1.20	1.00	-

4.2.8 The maximum monitored chromium concentration of $1.30 \mu\text{g}/\text{m}^3$ is considered to be an outlier. The next highest monitored concentration is $0.82 \mu\text{g}/\text{m}^3$ which is 63% of the maximum. For the purpose of this assessment the second highest chromium concentration has been used ($0.82 \mu\text{g}/\text{m}^3$).

4.2.9 In addition to the suite of metals monitored at rural background monitoring sites there would be releases of thallium, mercury and antimony from the Kronospan Facility. With reference to these pollutants:

- i) Thallium is not routinely monitored as part of the metals network. This assessment has considered the total impact of cadmium and thallium and has used the cadmium background concentration and AQAL.
- ii) Monitoring of mercury ceased in August 2018 and from 2016 this was only carried out at two sites across the UK - London Westminster, which is an urban background site, and Runcorn Weston Point, which is an urban industrial site. The maximum monitored concentration between 2015 and 2018 at the urban background site was $2.8 \mu\text{g}/\text{m}^3$, and at the urban industrial site was $19 \mu\text{g}/\text{m}^3$. In lieu of any monitoring from a rural site the concentration from the urban background site has been used. The urban industrial site is highly influenced by local industrial sources and is not representative of conditions close to the Site.

- iii) Monitoring of antimony across the UK ceased at the end of 2013. The maximum monitored at any background site in 2013 was 1.30 ng/m³ at Detling. This assessment has used this value as the background concentration.

Dioxins, Furans and Polychlorinated Biphenyl (PCBs)

- 4.2.10 Dioxins, furans and PCBs are monitored on a quarterly basis at a number of urban and rural stations in the UK as part of the Toxic Organic Micro Pollutants (TOMPs) network. There are no national monitoring locations within 10 km of the Site. The closest site is located in Manchester.
- 4.2.11 A summary of dioxin and furan and PCB concentrations from all monitoring sites across the UK is presented in the following tables. Note that monitoring data for dioxins and furans is only available up to the end of 2016 from the UK-Air website. For PCBs, data is only available up to the end of 2018 from the UK-Air website.

Table 4.2 – Dioxin and Furans Monitoring

Site	Annual Mean Concentration (fg/m ³)				
	2012	2013	2014	2015	2016
Auchencorth Moss	0.13	0.86	0.01	0.01	0.13
Hazelrigg	8.75	2.02	2.61	5.27	4.59
High Muffles	4.32	0.6	1.07	0.54	2.73
London Nobel House	15.42	3.47	2.89	4.34	21.27
Manchester Law Courts	32.99	10.19	16.52	5.94	12.23
Weybourne	9.3	2.34	1.61	1.42	16.32

Table 4.3 – PCB Monitoring

Site	Annual Mean Concentration (pg/m ³)				
	2014	2015	2016	2017	2018
Auchencorth Moss	23.23	24.27	25.32	19.09	12.31
Hazelrigg	25.84	41.68	52.58	33.15	22.22
High Muffles	26.11	33.43	37.76	31.63	8.86
London Nobel House	107.49	121.39	110.46	121.87	46.63
Manchester Law Courts	128.93	97.99	92.6	97.27	40.10
Weybourne	17.00	20.95	38.61	32.26	11.23

4.2.12 This analysis shows that the concentrations vary significantly between sites and years. The maximum monitored concentration from the past five years of available monitoring data has been used as the background concentration within this assessment. These values are 32.99 fg/TEQ/m³ for dioxins and furans and 128.93 pg/m³ for PCBs.



5.0 SUMMARY OF BASELINE CONCENTRATION USED IN ASSESSMENT

- 5.1.1 In summary, the analysis has shown that there is some local monitoring of nitrogen dioxide, PM, and VOCs monitoring in the local area. This monitoring includes a contribution from the existing operations on Site.
- 5.1.2 For some pollutants there is no local monitoring. In these instances, the maximum concentration from the mapped background datasets or national monitoring networks has been used as the baseline concentration.

5.2 Air Quality – Human Health

- 5.2.1 The assessment methodology for annual mean impacts on air quality is based on the contribution from the Proposed Development in relation to a future baseline. The Predicted Environmental Concentration (PEC) (the contribution from the Proposed Development plus background) will be calculated by adding the contribution from the Kronospan Facility to the background concentration presented in **Table 5.1**. Where the annual mean contribution from the Proposed Development is less than 0.5% of the long term AQAL, the magnitude of change is described as negligible irrespective of the total concentration. Where the contribution from the Proposed Development exceeds 0.5% of the long term AQAL consideration will be given to the choice of background concentration.

Table 5.1 – Summary of Background Concentrations

Substance	Annual mean concentration	Units	Justification
Nitrogen dioxide	8.1	µg/m ³	Maximum mapped background concentration within 3 km of the Site (2023 Defra dataset)
Sulphur dioxide	1.5	µg/m ³	Maximum mapped background concentration within 3 km of the Site (2023 Defra dataset)
Particulate matter (as PM ₁₀)	9.6	µg/m ³	Maximum mapped background concentration within 3 km of the Site (2023 Defra dataset)
Particulate matter (as PM _{2.5})	5.5	µg/m ³	Maximum mapped background concentration within 3 km of the Site (2023 Defra dataset)
Carbon monoxide	212.2	µg/m ³	Maximum mapped background concentration within 3 km of the Site (2010 Defra dataset)
Hydrogen chloride	0.76	µg/m ³	Maximum monitored concentration across the UK 2011 to 2015
Hydrogen fluoride	2.35	µg/m ³	Maximum measured concentration from EPAQS report

Substance	Annual mean concentration	Units	Justification
Ammonia	2.2	µg/m³	Maximum mapped background concentration within 3 km of the Site (2020 – 2022 average – APIS))
Benzene	0.4	µg/m³	Maximum mapped background concentration within 3 km of the Site (2023 Defra dataset)
Mercury	2.8	ng/m³	Maximum monitored annual mean concentration from an urban background site from 2015-2018
Cadmium	0.15	ng/m³	Maximum UK monitored concentration across the UK between 2019 and 2023 from a rural background site, chromium VI assumed to be 20% of total chromium in line with EA guidance
Arsenic	0.81	ng/m³	
Cobalt	0.06	ng/m³	
Copper	4.70	ng/m³	
Chromium	0.82	ng/m³	
Chromium VI	0.26	ng/m³	
Lead	5.70	ng/m³	
Manganese	3.70	ng/m³	
Nickel	0.81	ng/m³	
Vanadium	1.20	ng/m³	
Antimony	1.30	ng/m³	Detling 2013
Dioxins and furans	32.99	fg/m³	Maximum UK monitored concentration between 2012 and 2016
Polychlorinated biphenyl (PCBs)	128.93	pg/m³	Maximum UK monitored concentration between 2014 and 2018

5.3 Air Quality – Ecological Sites

5.3.1 The APIS database sets out the background concentrations on a grid across the UK. Atmospheric concentrations of oxides of nitrogen, ammonia, acid and nitrogen deposition are provided on a 1 km x 1 km grid. Data is provided for the maximum across the ecological site. This data is the 2020 to 2022 average as presented on APIS.

Table 5.2 – APIS Data for Ecological Sites

ID	Site	Maximum concentration (µg/m³)		
		Oxides of nitrogen	Sulphur dioxide	Ammonia
E1	River Dee and Bala Lake SAC, SSSI	10.7	1.2	2.3
E2	Johnstown Newt Sites SAC	10.9	1.8	2.1
E3	Berwyn and South Clwyd Mountains SAC	3.9	0.6	1
E4	Berwyn SPA	3.9	0.6	1
E5	Chirk Castle SSSI	18.4	1.1	1.8
E6	Nant-y-Belan & Prynella Woods	11.9	1.5	2.3
E7	Barracks Field	12.6	1.3	2

ID	Site	Maximum concentration (µg/m³)		
		Oxides of nitrogen	Sulphur dioxide	Ammonia
E8	Ceod-Y-Canal Wood	18.4	1.1	1.8
E9	Pentre Wood	6.7	0.8	1.6
E10	Various Ancient Woodlands	12.6	1.5	2.1

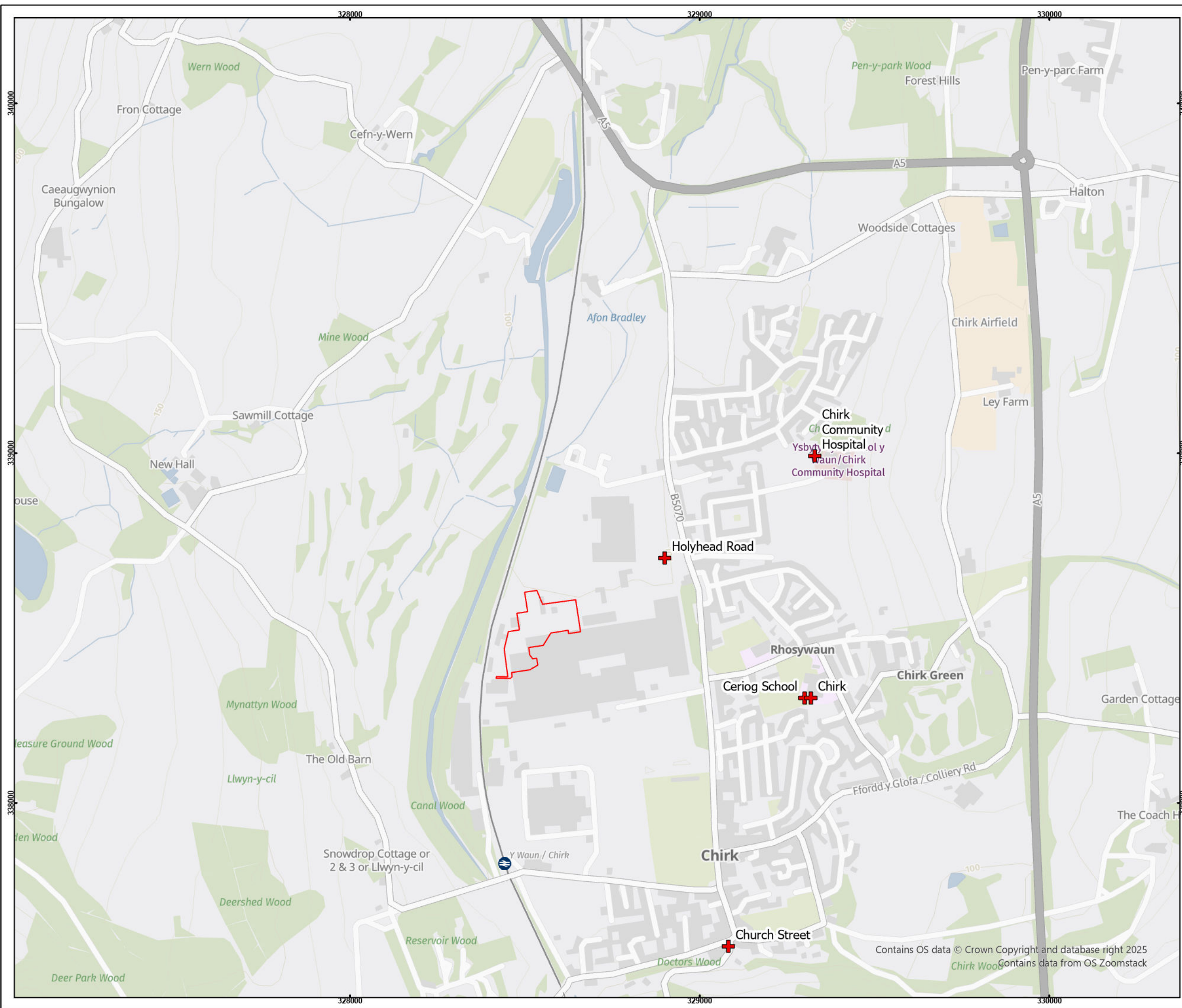
5.3.2 The background data presented in APIS shows that maximum concentrations of oxides of nitrogen and sulphur dioxide are below the annual mean Critical Level at all sites. However, background concentrations of ammonia exceed the Critical Level for lichens and bryophytes.

Table 5.3 – APIS Data for Ecological Sites

ID	Site	N deposition (kgN/ha/yr)		Acid deposition (N+S) (keq/ha/yr)	
		Grassland	Woodland	Grassland	Woodland
E1	River Dee and Bala Lake SAC, SSSI	19.3	34.1	1.5	2.6
E2	Johnstown Newt Sites SAC	18.7	33.2	1.4	2.5
E3	Berwyn and South Clwyd Mountains SAC	17.2	27.9	1.3	2.1
E4	Berwyn SPA	17.2	27.9	1.3	2.1
E5	Chirk Castle SSSI	18.1	30.3	1.4	2.4
E6	Nant-y-Belan & Prynella Woods	19.3	34	1.5	2.6
E7	Barracks Field	18.5	32.1	1.4	2.4
E8	Ceod-Y-Canal Wood	18.1	31.2	1.4	2.4
E9	Pentre Wood	17.9	30.6	1.3	2.3
E10	Various Ancient Woodlands	-	-	-	-
<p><i>Note:</i> The background concentration has been determined for each ancient woodland where required in the assessment.</p>					

5.3.3 The values presented in **Table 5.2** and **Table 5.3** are grid square averaged values provided as a rolling 3-year mean and derived from a mixture of interpolation from measured data and modelled data as set out in APIS. The APIS website explains that the use of a 3-year mean has been demonstrated to be a suitable time period to smooth out some of the inter-annual variations in deposition which occur due to the natural variability in annual weather patterns.





Legend

- Monitoring Sites
- CHP Site Boundary

Client:	Axis
Site:	Kronospan - Chirk
Project:	CHP
Title:	Appendix 6B - Figure 1 - Monitoring Sites

Drawn by: RSF	Date: 15/12/2025
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