



**Rapid Health Impact
Assessment:**
Beddington Energy
Recovery Facility,
Sutton

June 2023



Experts in air quality
management & assessment



Document Control

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1 Introduction

- 1.1 This report describes the potential health impacts associated with the proposed variation in operations of the existing Beddington Energy Recovery Facility (ERF) and Waste Transfer Station (WTS) on Beddington Lane, Croydon, in the London Borough of Sutton (LBS). Viridor operates the ERF and WTS. The facility is regulated by the Environment Agency (EA) under the environmental permitting regime. Viridor have submitted an application to the EA to vary the ERF's existing permit to (among other things) increase its processing capacity to 382,286 tonnes of waste per annum¹.
- 1.2 This Rapid Health Impact Assessment (RHIA) sets out the national, regional and local policy context in Section 2. The assessment approach is outlined in Section 3. Details of previous assessments relevant to this HIA are set out in Section 4 and the relevant baseline conditions are discussed in Section 5. The assessment has utilised the Healthy Urban Development Unit (HUDU) Planning for Health Rapid HIA Tool (NHS London Healthy Urban Development Unit, 2019), as set out in Section 6, and the Healthy Urban Planning Checklist (NHS London Healthy Urban Development Unit, 2017), as set out in Section 7.

¹ The original permit was for 302,500 tonnes per annum, but a variation was granted on 9 December 2020 to allow for the processing of up to 347,422 tonnes per annum.

2 Policy Context

National Planning Policy

2.1 The National Planning Policy Framework (NPPF) (2021) sets out planning policy for England. Section 8 considers ‘Promoting healthy and safe communities’. Within this, Paragraph 92 states that the purpose of the planning system is to contribute to achievement of “*healthy, inclusive and safe places which:*

- a) *promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;*
- b) *are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of attractive, well-designed, clear and legible pedestrian and cycle routes, and high quality public space, which encourage the active and continual use of public areas; and*
- c) *enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.”*

2.2 In addition, Paragraph 185 states:

“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.”

London-Specific Policy

2.3 The London Plan (GLA, 2021) sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years. Policy GG3 for ‘Creating a healthy city’ states:

“To improve Londoners’ health and reduce health inequalities, those involved in planning and development must:

- *A ensure that the wider determinants of health are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all Londoners and reducing health inequalities*

- *B promote more active and healthy lives for all Londoners and enable them to make healthy choices*
- *C use the Healthy Streets Approach to prioritise health in all planning decisions*
- *D assess the potential impacts of development proposals and Development Plans on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts, and help reduce health inequalities, for example through the use of Health Impact Assessments*
- *E plan for appropriate health and care infrastructure to address the needs of London's changing and growing population*
- *F seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution*
- *G plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports*
- *H ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold*
- *I seek to create a healthy food environment, increasing the availability of healthy food and restricting unhealthy options."*

Local Policies

2.4 The Sutton Local Plan 2016-2031 was adopted in February 2018 (London Borough of Sutton, 2018). Within the Plan, Policy 21 for 'Health and Well-being' states:

"a The council will support the provision of new or improved healthcare facilities in the borough, in line with Sutton's Clinical Commissioning Group and NHS England requirements.

B In particular, the council will support new health facilities/improvements at the following locations in the borough:

- *Robin Hood Lane, Sutton (Site Allocation STC30).*
- *Wrythe Green Lane, Carshalton.*
- *Felnex, London Road, Hackbridge (Site Allocation S1).*
- *Henderson Hospital, Belmont (Site Allocation S85).*

The council will also support new health facilities / improvements in sustainable locations in the:

- *Cheam / North Cheam / Worcester Park area.*

- *Carshalton area.*

C The council will support the proposals for the development of the London Cancer Hub (Site Allocation LCH1) in line with Policy 2 of the Local Plan and the ‘London Cancer Hub – Development Framework’ (approved September 2016).

D The council will support the development of the Royal Marsden and Institute of Cancer Research as centres of medical excellence in providing cancer care, research facilities and associated activities.

E The council will support the aim to improve access to primary care facilities, which could involve extending GP surgery hours and will also support the re-use of social infrastructure and the co-location of services wherever possible.

F The council will also require development to contribute positively to creating high quality places that support healthy communities. The council will therefore support development that involves the retention and improvement of facilities that promote healthy lifestyles, such as leisure facilities and open space (including playing pitches, allotments, and children’s play spaces) throughout the borough and will promote healthy, economic and sustainable alternatives to the car.”

3 Assessment Approach

Baseline Conditions

3.1 Baseline conditions within the area have been defined using a number of approaches:

- information on the demographics of the Borough have been collated based on information published by Public Health England (Public Health England, 2020);
- access to General Practice (GP) services has been established based on information on the NHS UK website (NHS UK, 2022); and
- information on access to local schools has been collated based on published information on the 'Find and Compare Schools in England' page of the UK Government website (UK Government, 2022).

Rapid Health Impact Assessment

3.2 The London HUDU has published a tool for desk-top Rapid Health Impact Assessment (NHS London Healthy Urban Development Unit, 2019). This tool allows the user to quickly assess the impacts of a development proposal on the built environment. The documentation identifies that "*Not all the issues or assessment criteria may be relevant, and the user is encouraged to prioritise specific actions which focus on key impacts*". It is not ideally suited to a development such as this one, so supplementary information on the previously assessed impacts on human health has been provided to provide additional context and background to the assessment (Section 4). The rapid HIA tool identifies 11 topic areas, namely:

1. housing quality and design;
2. access to healthcare services and other social infrastructure;
3. access to open space and nature;
4. air quality, noise and neighbourhood amenity;
5. accessibility and active travel;
6. crime reduction and community safety;
7. access to healthy food;
8. access to work and training;
9. social cohesion and lifetime neighbourhoods;
10. minimising the use of resources; and
11. climate change.

Healthy Urban Planning Checklist

3.3 The HUDU has also published a Healthy Urban Planning Checklist (NHS London Healthy Urban Development Unit, 2017), which aims to promote healthy urban planning, in line with the London Plan. This checklist comprises a series of questions covering four themes:

- healthy homes;
- active travel;
- healthy environment; and
- vibrant neighbourhoods.

4 Previously Assessed Impacts on Human Health

Beddington ERF Permit Application (Gair Consulting Ltd)

- 4.1 An Air Quality Assessment (Gair Consulting Ltd, 2022) and Human Health Risk Assessment (HHRA) (Gair Consulting Ltd, 2021) were submitted as part of the application to vary the permit. The Air Quality Assessment concluded that the impact of the change in the maximum continuous rating for the installation would be 'not significant' with respect to human health. The HHRA, which is based on the application of the US Environmental Protection Agency's Human Health Risk Assessment Protocol (HHRAP), assessed the impacts of accumulation of dioxins, furans and dioxin-like polychlorinated biphenyls (PCBs) via inhalation and ingestion pathways². The exposure to these chemicals was determined to be 'not significant'.

Beddington ERF Supplementary Air Quality Assessment (AQC Ltd)

- 4.2 A Supplementary Air Quality Assessment of the human health impacts of emissions due to additional traffic generated by the proposed increase in capacity has been undertaken by AQC (Report No. J10/14171A/10/3/F1) on behalf of the London Borough of Sutton. The assessment made an estimate of the number of additional Heavy Goods Vehicles that would be generated due to the proposed changes and their distribution across the road network. It set out the predicted impacts on air quality at nearby sensitive receptors, including the increase in emissions from the proposed changes as presented by Gair Consulting Ltd (2022). The assessment concluded that the air quality effects would be 'not significant'.

Energy from Waste Facilities Across London (AQC Ltd)

- 4.3 AQC considered the health effects of emissions from five Energy from Waste (EfW) facilities in London (AQC, 2020), including the Beddington ERF (see Figure 1). The study comprised two parts. The first part was a detailed literature review to identify potential health effects associated with emissions from EfW plant in general. The second part was a modelling study to show the magnitude and geographical spread of health effects from nitrogen oxides and particulate matter emissions.

² HHRAs focus on bioaccumulation in the food chain of specific pollutants. This scope is much narrower than that of an HIA.

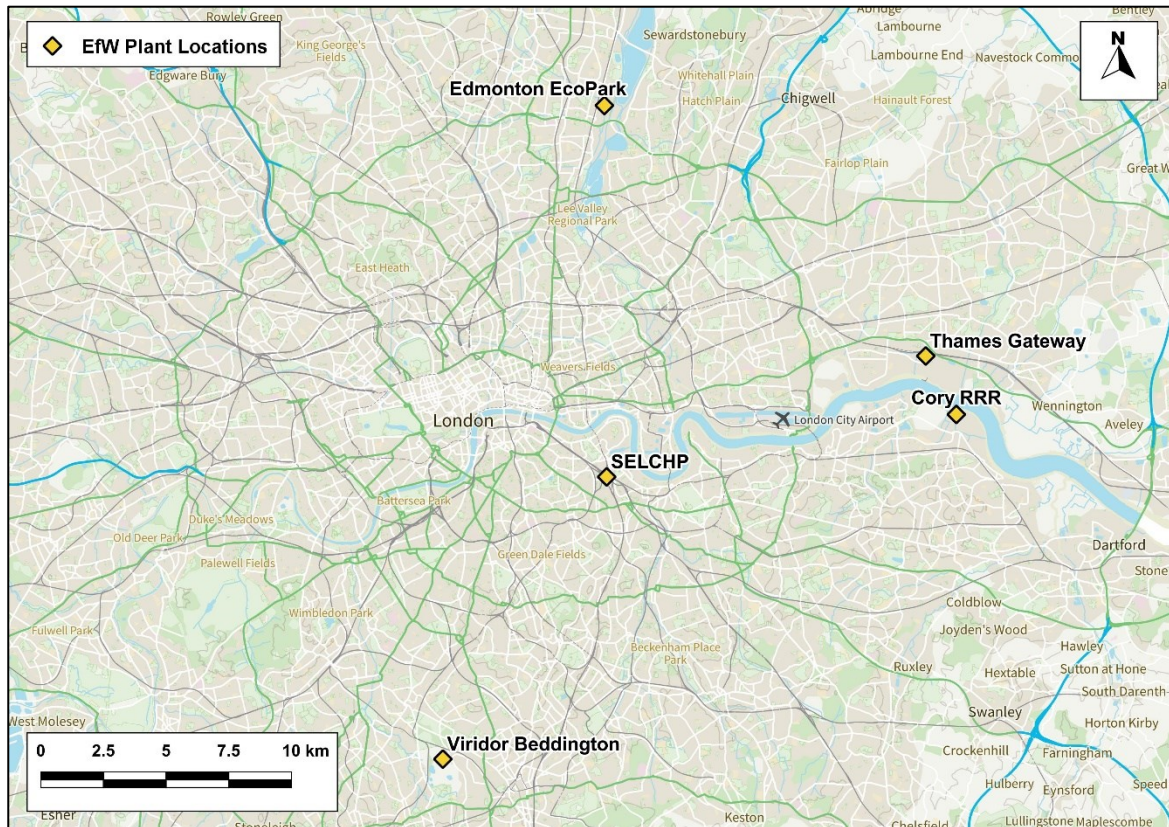


Figure 1: Locations of the EfW Plant Included in the Study. Source: AQC (2020)

- 4.4 It was shown that well-managed modern facilities, such as those that operate in the UK and in London, are unlikely to pose a significant health risk. Overall, potential health risks to individual London residents associated with emissions from EfW plant are exceedingly low.
- 4.5 Notwithstanding this conclusion, any source which emits nitrogen oxides and/or particulate matter will add to pollutant concentrations which have known statistical relationships with adverse health effects over large populations. The contribution to health effects of London residents associated with emissions of nitrogen oxides and particulate matter from five facilities in London, including the Beddington ERF, was thus calculated. Emissions were derived from measurements made at operational plant, and health effects were calculated taking account of the specific demographics in each London borough.
- 4.6 Spatial patterns in predicted concentrations combined with those of local demography to create a clear east-west gradient in both mortality and hospital admissions caused by emissions from the facilities (see Figure 2 and Figure 3). It was concluded that there would be fewer than two additional hospital admissions per year caused by respiratory and cardiovascular conditions attributed to particulate matter emissions from the five facilities, and that in total, statistically 15 deaths of London residents per year are brought forward by nitrogen oxides and particulate matter from the five EfW facilities. By comparison, a study commissioned by GLA estimated that over 9,000 Londoners died

prematurely due to long-term exposure to air pollution in 2010 (GLA, 2018). While these statistics cannot be directly compared, it suggests that emissions from the five EfWs contribute 0.17% to air pollution related deaths in London, which is less than the uncertainty of the health effects calculations themselves. It should also be noted that this calculation is based on air quality health effects only, and does not take account of any health benefits from socio-economic impacts of EfW facilities (for example, local employment) or health effects of alternative waste management arrangements that would be required were there no EfWs in operation.

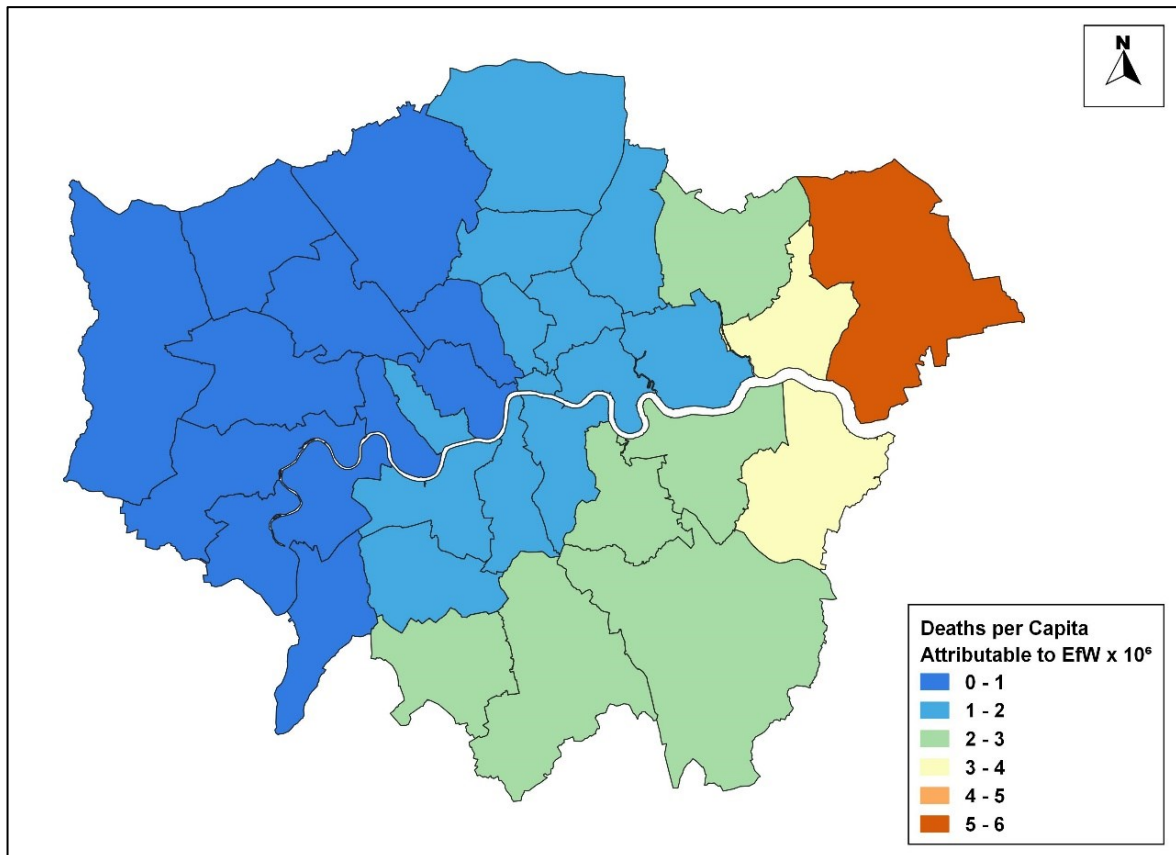


Figure 2: Annual Mortality Attributable to Air Pollution from Five EfW Facilities per Capita by London Borough (deaths brought forward per year) (e.g. 6 = 0.000006 deaths brought forward per capita per year). Source: AQC (2020).

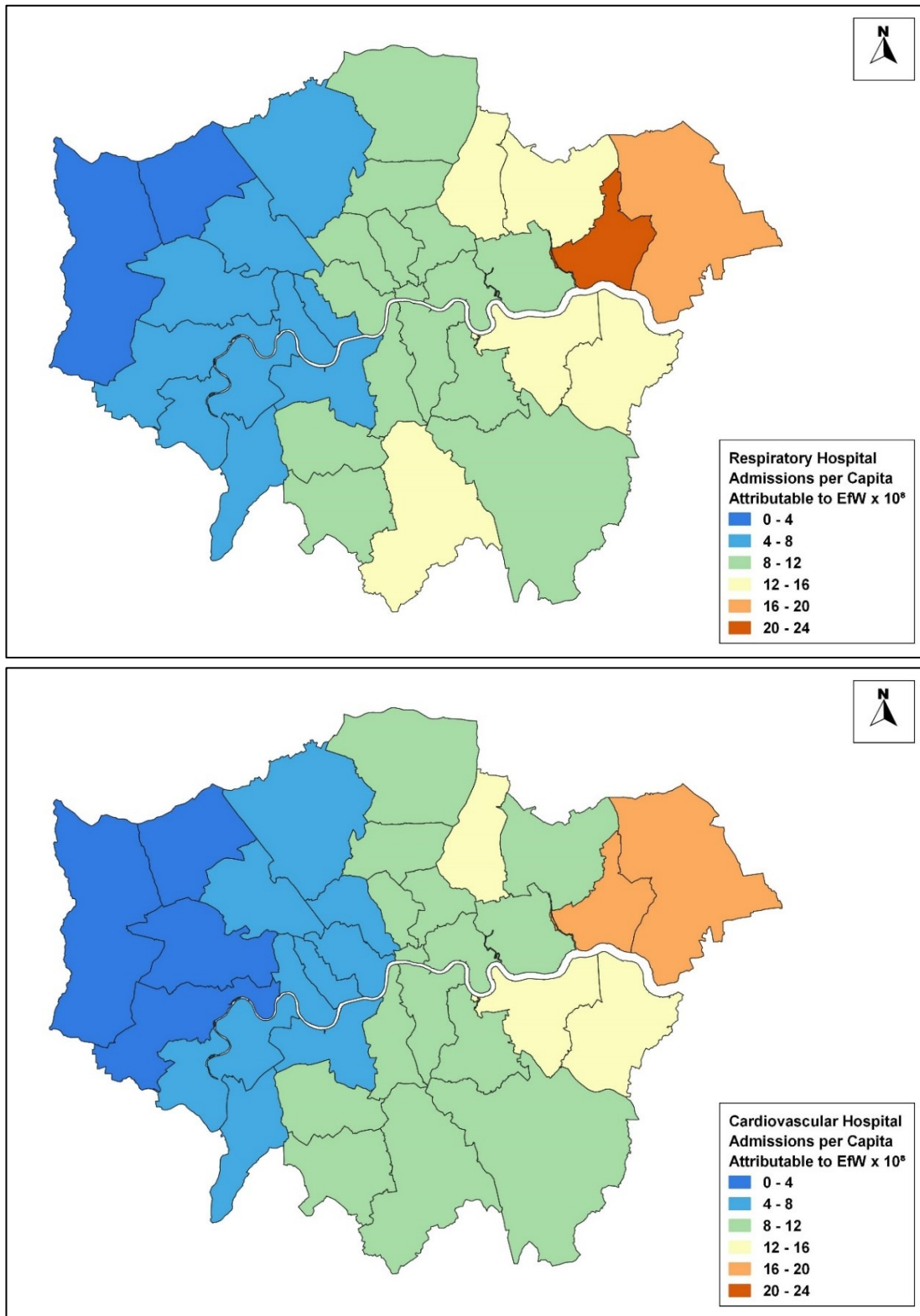


Figure 3: Top: Annual Respiratory Hospital Admissions per Capita Attributable to PM₁₀ from Five EfW Facilities by London Borough (e.g. 24 = 0.00000024 admissions per capita per year). Bottom: Annual Cardiovascular Hospital Admissions per Capita Attributable to PM₁₀ from Five EfW Facilities by London Borough (e.g. 24 = 0.00000024 admissions per capita per year). Source: AQC (2020).

- 4.7 Table 1 shows the health outcomes from the same report for the three Boroughs closest to the Beddington ERF.

Table 1: Health Outcomes Attributable to Five EfW Facilities by Borough^a. Source: AQC (2020)

London Borough	Mortality Attributable to Air Pollution (total statistical deaths brought forward per year)	Annual Statistical Hospital Admissions Attributable to PM ₁₀ per year	
		Respiratory Admissions	Cardiovascular Admissions
Croydon	1.010	0.047	0.041
Sutton	0.442	0.019	0.017
Merton	0.366	0.019	0.017

^a Ranked by mortality burden.

UK Industrial Emissions

- 4.8 The Chief Medical Officer's 2022 annual report on air pollution (Chief Medical Officer, 2022) includes a section on industrial emissions. It shows a comparison of total UK emissions from major industrial pollutants over the 50 years between 1970 and 2020 (Figure 4), illustrating how shifts in policy and emissions regulation, as well as shifts in energy production have led to a significant reduction in emissions. It also states, in regard to waste combustion, that:

"Emissions of mercury and cadmium have shown broadly similar patterns to each other, with emissions reducing rapidly in the 1990s following the introduction of improved controls on the incineration of waste. Waste incineration comprised 40% of the total reported cadmium emissions in 1987 across all sectors, and only 0.4% in 2020. While this comparison is slightly misleading, since modern incineration of waste to generate electricity is reported as electricity production... these emissions also remain low when compared with historical values..."

The largest source of dioxin and furan emissions in the early 1990s was waste incineration, followed by electricity generation. Emissions from these sources fell by 99% between 1990 and 2020, largely reflecting the closure of older incineration plant, and the imposition of more stringent emissions limits on existing and new facilities."

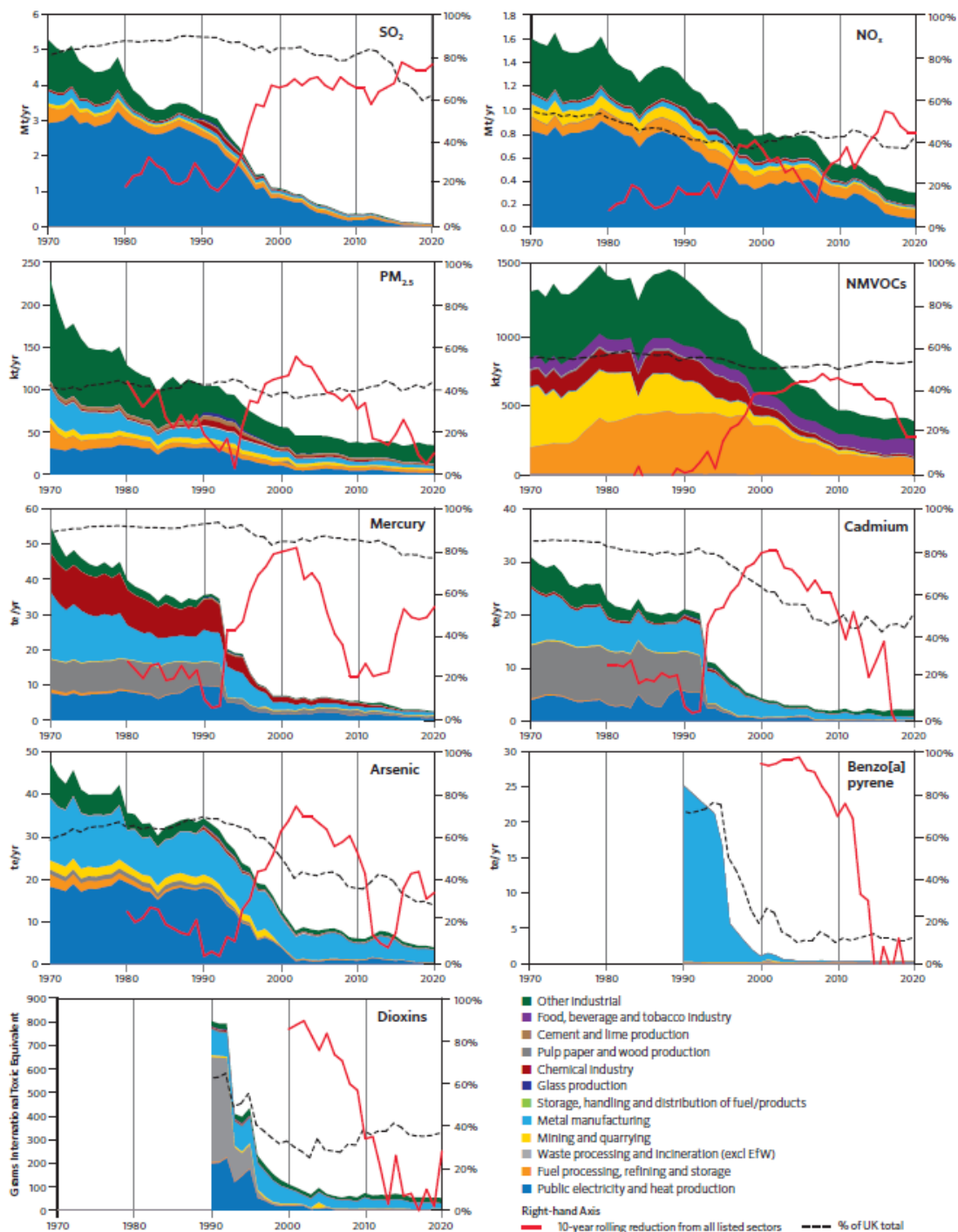


Figure 4: Total UK emissions of selected pollutants from industrial sectors reported in the National Atmospheric Emissions Inventory. Source: Figure 2 (page 146) in the Chief Medical Officer’s 2022 annual air quality report (Chief Medical Officer, 2022).

5 Baseline Conditions

- 5.1 The information set out in this section is that suggested within the Rapid Health Impact Assessment Tool documentation (NHS London Healthy Urban Development Unit, 2019).

Development Site

- 5.2 The Beddington ERF facility is located off Beddington Lane. The nearest residential properties are located approximately 185 m to the northeast, adjacent to Beddington Lane. The site is bounded by the Croydon Rifle and Pistol Club to the north, Beddington Power Plant to the south, light industry/commercial uses to the east and Beddington Farmlands to the west.

Borough Demographic

- 5.3 The demographic profile for Sutton was published in March 2020 (Public Health England, 2020). This profile provides detail on existing health conditions within the borough, as well as inequalities in health within the area.
- 5.4 Overall, Sutton is less deprived than the England average and the health of people living in Sutton is generally better than the average in England. Life expectancy for both males and females is higher than the average, though in the most deprived areas of Sutton life expectancy is 5.5 years lower for men and 4.5 years lower for women than in the least deprived areas.

Child Health

- 5.5 The level of childhood obesity in Sutton is better than the England average (20.2%), with 19.8% of children in Year 6 being classified as obese. Other factors in adolescent health care, including alcohol related hospital admission, teenage pregnancy, GCSE attainment, breastfeeding, and smoking during pregnancy, are better than the England average. However, the infant mortality rate is higher in Sutton (4.46%) than the England average (3.93%).

Adult Health

- 5.6 Adult health factors within Sutton are in general better than the national average, including, but not limited to alcohol-related harm, self-harm, suicide, smoking prevalence, excess weight, new sexually transmitted infections and under-75 mortality rate. Sutton is worse than the national average in relation to rates of physically active adults, and rates of violent crime (including sexual violence).

Access to Healthcare

- 5.7 The results of a search of the NHS UK website on 5 December 2022 are outlined in Paragraph 5.8 and are presented in Table 2.

General Practice Surgeries

- 5.8 There are 49 GP surgeries within a 2.5-mile (walking distance) radius of the facility. Given the conclusions of the Air Quality Assessment (Gair Consulting Ltd, 2022) submitted as part of the application to vary the permit, it is not anticipated that the proposed increase in capacity will put any significant strain on the existing GP services.

Table 2: Summary of GP Services within 2.5 miles of the Beddington ERF

GP Surgery	Distance (miles)
Valley Park Surgery	0.5
Thornton Road Surgery	0.8
Hackbridge Medical Centre	0.9
Greenside Medical Practice	1.1
Tamworth House Medical Centre	1.1
London Road Medical Practice	1.2
Eversley Medical Centre	1.2
Wide Way Surgery	1.2
North Croydon Medical Centre	1.2
Leander Road Surgery	1.4
Dr Sugumar And Partner (Maldon Road)	1.4
Rainbow Health Centre	1.5
Brigstock & South Norwood Partnership	1.5
Green Wrythe Surgery	1.5
Park Road Medical Centre	1.5
Greenside Group Practice	1.6
Norbury Health Centre 2	1.6
Manor Practice	1.6
The Wrythe Green Surgery	1.6
Brigstock Family Practice	1.8
The Chesser Surgery	1.8
The Whitehorse Practice	1.8
Bishopsford Road Surgery	1.8
Dr Marilyn Graham (Fairview Road)	1.9
Wallington Family Practice	1.9
Wallington Medical Centre	1.9
Shotfield Medical Practice (Formerly Dr Lings & Partners)	2.0
Ravensbury Park Medical Centre	2.0
East Croydon Medical Centre	2.0

GP Surgery	Distance (miles)
Edridge Road Community Health Centre	2.0
St James Medical Centre	2.0
Cricket Green Medical Practice	2.0
Thornton Heath Health Centre	2.1
Figges Marsh Surgery	2.1
Parchmore Medical Centre	2.1
Friends Road Medical Practice	2.1
Mitcham Family Practice	2.1
Violet Lane Medical Practice	2.1
Manor Practice Branch Surgery	2.2
Selhurst Medical Practice	2.2
Sutton Medical Practice	2.2
Faccini House Surgery	2.2
Streatham Common Group Practice	2.2
The Vale Surgery	2.3
Mersham Medical Centre	2.3
The Beeches Surgery	2.3
Morland Road Surgery	2.3
Central Medical Centre	2.4
Carshalton Fields Surgery	2.4
Birdhurst Medical Practice	2.4

Nearby Schools

A search of the UK government 'Find and compare schools in England' database has found that there are 166 schools within a 3-mile radius of the facility. Of these, 126 are primary schools, 53 are secondary and 44 are for 16- to 18-year-olds, with some schools covering more than one category.

6 Desktop Rapid Health Impact Assessment (HIA)

Table 3: 1 Housing Quality and Design

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal seek to meet all 16 design criteria of the Lifetime Homes Standard or meet Building Regulation requirement M4 (2)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	No homes are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal address the housing needs of older people, i.e., extra care housing, sheltered housing, lifetime homes and wheelchair accessible homes?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	No homes are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal include homes that can be adapted to support independent living for older and disabled people?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	No homes are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal promote good design through layout and orientation, meeting internal space standards?	<input type="checkbox"/> Yes	No homes are proposed.	<input type="checkbox"/> Positive	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		<input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal include a range of housing types and sizes, including affordable housing responding to local housing needs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	No homes are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal contain homes that are highly energy efficient (e.g., a high SAP rating)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	No homes are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 4: 2 Access to Healthcare Services and Other Social Infrastructure

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal retain or re- provide existing social infrastructure?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Neither the existing site nor the proposals include any social infrastructure.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal assess the impact on healthcare services?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal include the provision, or replacement of a healthcare facility and does the facility meet NHS requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Neither the existing site nor the proposals include any healthcare facilities.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal assess the capacity, location and accessibility of other social infrastructure, e.g., schools, social care and community facilities?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal explore opportunities for shared community use and co-location of services?	<input type="checkbox"/> Yes <input type="checkbox"/> No	The facility is purely industrial. Neither the existing site nor the proposals include any consideration of opportunities for shared	<input type="checkbox"/> Positive <input type="checkbox"/> Negative	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
	<input checked="" type="checkbox"/> N/A	community use and co-location of services, and such proposals would not be considered appropriate for this development.	<input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal contribute to meeting primary, secondary and post 19 education needs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Neither the existing site nor the proposals include any education facilities.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 5: 3 Access to Open Space and Nature

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal retain and enhance existing open and natural spaces?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<p>Neither the existing site nor the proposals include any open or natural spaces.</p> <p>The air quality assessment submitted as part of the permit variation application concludes that for nearby European habitat sites and locally designated sites, the impact of emissions from the proposed increase in capacity would be 'not significant'.</p>	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
In areas of deficiency, does the proposal provide new open or natural space, or improve access to	<input type="checkbox"/> Yes	Neither the existing site nor the proposals include any	<input type="checkbox"/> Positive	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
existing spaces?	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	open or natural spaces.	<input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal provide a range of play spaces for children and young people?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Neither the existing site nor the proposals include play spaces. The site is not suitable for provision of play spaces.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal provide links between open and natural spaces and the public realm?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Neither the existing site nor the proposals provide links between natural spaces. The site is not suitable for this purpose.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Are the open and natural spaces welcoming and safe and accessible for all?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Neither the existing site nor the proposals include any open or natural spaces.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal set out how new open space will be managed and maintained?	<input type="checkbox"/> Yes	Neither the existing site nor the proposals include any	<input type="checkbox"/> Positive	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	new open spaces.	<input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Table 6: 4 Air Quality, Noise and Neighbourhood Amenity

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal minimise construction impacts such as dust, noise, vibration and odours?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	No Construction Dust Risk Assessment or Air Quality Dust Management Plan has been undertaken for the proposed increase in capacity as the proposal does not entail any new construction. The Supporting Information documentation (Fitchner, 2021) states that it is not considered that the proposed changes will result in an increased risk of odour at the site.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal minimise air pollution caused by traffic and energy facilities?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The facility is permitted by the Environment Agency and will be required to include necessary emissions abatement and to adhere to Best Available Techniques to minimise emissions to air. The air quality assessment	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
		undertaken by AQC (Report No. J10/14171A/10/3/F1) to assess the impacts of additional traffic concluded that the air quality effects would be 'not significant', and no additional mitigation was recommended. The proposed changes do not include any changes to the existing travel infrastructure.	<input type="checkbox"/> Uncertain	
Does the proposal minimise noise pollution caused by traffic and commercial uses?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The proposed changes will not result in any changes to the noise impacts as a result of operations at the ERF or WTS. As such, no new or revised noise assessment has been undertaken.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 7: 5 Accessibility and Active Travel

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal prioritise and encourage walking (such as through shared spaces?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Due to the scale and type of the development, no new footpaths are proposed. The site is not suitable for this purpose.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal prioritise and encourage cycling (for example by providing secure cycle parking, showers and cycle lanes)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Due to the scale and type of the proposed changes, no additional cycling facilities are proposed as part of the proposed changes.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Due to the scale and type of the proposed changes, no new cycle routes or footpaths are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal include traffic management and calming measures to help reduce and minimise road injuries?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Due to the scale and type of the proposed changes, no new measures are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Is the proposal well connected to public transport, local services and facilities?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The Public Transport Accessibility Level (PTAL) for the development is low (1b - 2), but there are no changes to the existing building proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal seek to reduce car use by reducing car parking provision, supported by the controlled parking zones, car clubs and travel plans measures?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	There are no proposed changes to the existing provision.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal allow people with mobility problems or a disability to access buildings and places?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	There are no changes to the existing access proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 8: 6 Crime Reduction and Community Safety

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal incorporate elements to help design out crime?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Due to the scale and type of the proposed changes, no new measures are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal incorporate design techniques to help people feel secure and avoid creating 'gated communities'?	<input type="checkbox"/> Yes	The proposal does not include housing provision.	<input type="checkbox"/> Positive	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		<input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal include attractive, multi-use public spaces and buildings?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The facility is purely industrial. It is understood there will be no changes to the existing buildings.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Has engagement and consultation been carried out with the local community?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Public consultation on the permit variation is underway and will close on 23 December 2022.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input checked="" type="checkbox"/> Uncertain	

Table 9: 7 Access to Healthy Food

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal facilitate the supply of local food, i.e., allotments, community farms and farmers' markets?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Neither the existing facility nor the proposed changes include means for food supply.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Is there a range of retail uses, including food stores and smaller affordable shops for social enterprises?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal avoid contributing towards an over- concentration of hot food takeaways in the local area?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The proposed changes do not introduce any hot food or takeaway facilities.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 10: 8 Access to Work and Training

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal provide access to local employment and training opportunities, including temporary construction and permanent 'end-use' jobs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The existing facility provides local jobs. The increase in capacity may increase the number of jobs.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
			<input type="checkbox"/> Uncertain	
Does the proposal provide childcare facilities?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal include managed and affordable workspace for local businesses?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal include opportunities for work for local people via local procurement arrangements?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The existing facility provides local jobs, directly and indirectly. The increase in capacity may increase the number of jobs.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 11: 9 Social Cohesion and Lifetime Neighbourhoods

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal connect with existing	<input type="checkbox"/> Yes	The facility is purely	<input type="checkbox"/> Positive	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
communities, i.e., layout and movement which avoids physical barriers and severance and land uses and spaces which encourage social interaction?	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	industrial and is not suitable for providing connections between existing communities.	<input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal include a mix of uses and a range of community facilities?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal provide opportunities for the voluntary and community sectors?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The facility is purely industrial.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal address the six key components of Lifetime Neighbourhoods?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The facility provides employment within its neighbourhood. Due to the scale and type of the proposed changes, it does not contribute to Lifetime Neighbourhoods in other respects.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 12: 10 Minimising the use of Resources

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal make best use of existing land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The facility already exists in an industrial area. The proposal increases the throughput without any additional land requirement, increasing the usage of the existing land footprint.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal encourage recycling (including building materials)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Energy Recovery Facility produces energy from waste products.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input checked="" type="checkbox"/> Uncertain	N/A
Does the proposal incorporate sustainable design and construction techniques?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The facility already exists – no changes to the existing building are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A

Table 13: 11 Climate Change

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
Does the proposal incorporate renewable energy?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Mixed and residual waste are partially renewable energy sources.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input checked="" type="checkbox"/> Uncertain	N/A
Does the proposal ensure that buildings and public spaces are designed to respond to winter and summer temperatures, i.e., ventilation, shading and landscaping?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The facility already exists – no changes to the existing building are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal maintain or enhance biodiversity?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The air quality assessment submitted as part of the permit variation application concludes that for nearby European habitat sites and locally designated sites, the impact of emissions from the proposed development would be ‘not significant’.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	N/A
Does the proposal incorporate sustainable urban drainage techniques?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The facility already exists – no changes to the existing building are proposed.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral	N/A

Assessment Criteria	Relevant?	Details/ Evidence	Potential Health Impact	Recommended Mitigation or Enhancement
			<input type="checkbox"/> Uncertain	

7 Healthy Urban Planning Checklist

7.1 Table 14 to Table 17 demonstrate that the health impacts of the proposed changes have been taken into account.

Theme 1 – Healthy Housing

Table 14: Healthy Housing

Issue	Question	Answer
a. Healthy Design	Does the proposal meet all the standards for daylight, sound insulation, private space and accessible and adaptable dwellings?	N/A – no housing is proposed.
b. Accessible Housing	Does the proposal provide accessible homes for older or disabled people?	N/A – no housing is proposed.
	Does the proposal ensure that every non-ground floor dwelling is accessible by a lift that can accommodate an ambulance trolley?	N/A – no housing is proposed.
c. Healthy Living	Does the proposal provide dwellings with adequate internal space, including sufficient storage space and separate kitchen and living spaces?	N/A – no housing is proposed.
	Does the proposal encourage the use of stairs by ensuring that they are well located, attractive and welcoming?	N/A – no housing is proposed.
d. Housing Mix and Affordability	Does the proposal provide affordable family sized homes?	N/A – no housing is proposed.

Theme 2 – Active Travel

Table 15: Active Travel

Issue	Question	Answer
a. Promoting Walking and Cycling	Does the proposal promote cycling and walking through measures in a travel plan, including adequate cycle parking and cycle storage?	There are no proposed changes to the existing cycling infrastructure. No travel plan has been proposed.
b. Safety	Does the proposal include traffic management and calming measures and safe and well-lit pedestrian and cycle crossings and routes?	The proposed changes do not include any changes to the existing travel infrastructure.
c. Connectivity	Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks and public transport?	The proposed changes do not include any changes to the existing travel infrastructure.
d. Minimising Car Use	Does the proposal seek to minimise car use by reducing car parking provision, supported by the controlled parking zones, car free development and car clubs?	The proposed changes do not include any changes to the existing travel infrastructure.

Theme 3 – Healthy Environment

Table 16: Healthy Environment

Issue	Question	Answer
a. Construction	Does the proposal minimise construction impacts such as dust, noise, vibration and odours?	<p>No Construction Dust Risk Assessment or Air Quality Dust Management Plan has been undertaken for the proposed changes as the proposal does not entail any new construction.</p> <p>The Supporting Information documentation (Fitchner, 2021) states that it is not considered that the proposed changes will result in an increased risk of odour at the site.</p>
b. Air Quality	Does the proposal minimise air pollution caused by traffic and energy facilities?	<p>The facility is permitted by the Environment Agency and will be required to include necessary emissions abatement and to adhere to Best Available Techniques to minimise emissions to air.</p> <p>The air quality assessment undertaken by AQC (Report No. J10/14171A/10/3/F1) to assess the impacts of additional traffic</p>

Issue	Question	Answer
		<p>concluded that the air quality effects would be 'not significant', and no additional mitigation was recommended.</p> <p>The proposed changes do not include any changes to the existing travel infrastructure.</p>
c. Noise	Does the proposal minimise the impact of noise caused by traffic and commercial uses through insulation, site layout and landscaping?	The proposed changes will not result in any changes to the noise impacts as a result of operations at the ERF or WTS. As such, no new or revised noise Assessment has been undertaken.
d. Open Space	Does the proposal retain or replace existing open space and in areas of deficiency, provide new open or natural space, or improve access to existing spaces?	Neither the existing site nor the proposals include any open or natural spaces.
	Does the proposal set out how new open space will be managed and maintained?	N/A
e. Play Space	Does the proposal provide a range of play spaces for children and young people?	<p>Neither the existing site nor the proposals include play spaces.</p> <p>The site is not suitable for provision of play spaces.</p>
f. Biodiversity	Does the proposal contribute to nature conservation and biodiversity?	<p>Neither the existing site nor the proposals include any open or natural spaces.</p> <p>The air quality assessment submitted as part of the permit variation application concludes that for nearby European habitat sites and locally designated sites, the impact of emissions from the proposed changes would be 'not significant'.</p>
g. Local Food Growing	Does the proposal provide opportunities for food growing, for example by private and community gardens and green roofs?	The facility does not include specific means for food growing.
h. Flood Risk	Does the proposal reduce surface water flood risk through sustainable urban drainage techniques, including storing rainwater, use of permeable surfaces and green roofs?	The facility already exists – no changes to the existing building are proposed.
i. Overheating	Does the design of buildings and spaces avoid internal and external overheating, through use of passive cooling techniques and urban greening?	The facility already exists – no changes to the existing building are proposed.

Theme 4 – Vibrant Neighbourhoods

Table 17: Vibrant Neighbourhoods

Issue	Question	Answer
a. Health Services	Has the impact on healthcare services been addressed?	This HIA assesses the existing local healthcare facilities.
b. Education	Has the impact on primary, secondary and post-19 education been addressed?	Neither the existing facility, nor the proposed changes include any education facilities.
c. Access to Social Infrastructure	Does the proposal contribute to new social infrastructure provision that is accessible, affordable and timely?	Neither the existing facility, nor the proposed changes include any social infrastructure.
	Have opportunities for multi-use and the co- location of services been explored?	Neither the existing facility, nor the proposed changes include any consideration of opportunities for shared community use and co- location of services, and such proposals would not be considered appropriate for this site.
d. Local Employment and Healthy Workplaces	Does the proposal include commercial uses and local employment and provide opportunities for training, including temporary construction and permanent 'end-use' jobs?	The existing facility provides local jobs. The increase in capacity may increase the number of jobs.
	Does the proposal promote the health and wellbeing of future employees by achieving BREEAM health and wellbeing credits?	Unknown
e. Access to Local Food Shops	Does the proposal provide opportunities for local food shops?	The facility is purely industrial.
	Does the proposal avoid an over concentration or clustering of hot food takeaways in the local area?	The proposed changes do not introduce any hot food or takeaway facilities.
f. Public Realm	Does the design of the public realm maximise opportunities for social interaction and connect the proposal with neighbouring communities?	Neither the existing facility, nor the proposed changes include any public realm or social infrastructure.
	Does the proposal allow people with mobility problems or a disability to access buildings and places?	There are no changes to the existing access proposed.

8 Conclusions

- 8.1 This report has assessed the health impacts of the proposed increase in capacity on the local area. The assessment has utilised the HUDU Rapid HIA tool and Healthy Urban Planning Checklist.
- 8.2 The London Borough of Sutton is better than the national average for many health factors, including life expectancy, cancer mortality rate and overall deprivation. The HUDU Rapid HIA Tool and Healthy Urban Planning Checklist are not tailored toward developments such as this one, so supplementary information on the previously assessed impacts on human health has been provided to give additional context and background to the assessment. According to the assessment, the proposed changes will have an overall neutral impact on the local area, as there will be no additional social provisions or relevant changes to the site itself as part of the increase in capacity of the facility. There may be an increase in employment from the proposed changes.
- 8.3 The air quality assessment undertaken for the permit variation application concluded that the air quality effects of the proposed increase in capacity would be 'not significant' on both human health and ecology. A review of the air quality assessment by AQC (Report No. J10/14171A/10/2/F1) has determined that those conclusions are robust. An air quality assessment undertaken by AQC (Report No. J10/14171A/10/3/F1) to assess the potential impacts of increased traffic movements generated by the increase in capacity concluded that the effects would be 'not significant'. The proposed development is, therefore, consistent with the NPPF, Policy GG3 of the London Plan and Policy 21 of the Sutton Local Plan 2016-2031.

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10 Appendices

A1	Sutton Full Demographic Profile	40
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A1 Sutton Full Demographic Profile



Public Health
England



Sutton

Published on 03/03/2020

Area type: Unitary authority
Region: London

Local Authority Health Profile 2019

This profile gives a picture of people's health in Sutton. It is designed to act as a 'conversation starter', to help local government and health services understand their community's needs, so that they can work together to improve people's health and reduce health inequalities.

Visit <https://fingertips.phe.org.uk/profile/health-profiles> for more area profiles, more information and interactive maps and tools.

Health in summary

The health of people in Sutton is generally better than the England average. About 9.8% (3,850) children live in low income families. Life expectancy for both men and women is higher than the England average.

Health inequalities

Life expectancy is 5.5 years lower for men and 4.5 years lower for women in the most deprived areas of Sutton than in the least deprived areas.

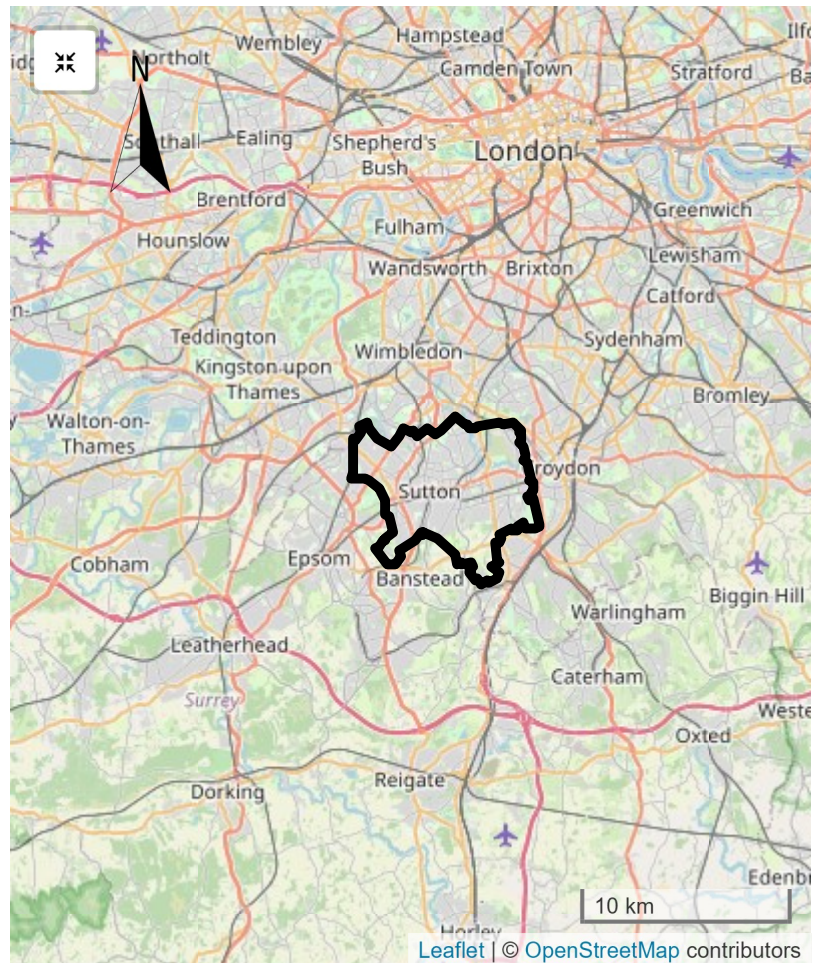
Child health

In Year 6, 19.8% (492) of children are classified as obese. The rate for alcohol-specific hospital admissions among those under 18 is 21*, better than the average for England. This represents 10 admissions per year. Levels of GCSE attainment (average attainment 8 score), breastfeeding and smoking in pregnancy are better than the England average.

Adult health

The rate for alcohol-related harm hospital admissions is 579*, better than the average for England. This represents 1,098 admissions per year. The rate for self-harm hospital admissions is 158*, better than the average for England. This represents 310 admissions per year. Estimated levels of physically active adults (aged 19+) are worse than the England average. The rates of new sexually transmitted infections and killed and seriously injured on roads are better than the England average. The rates of under 75 mortality rate from cardiovascular diseases and under 75 mortality rate from cancer are better than the England average. The rates of statutory homelessness and violent crime (hospital admissions for violence) are worse than the England average.

* rate per 100,000 population



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Local authority displayed with full resolution clipped boundary

Health summary for Sutton

Key

Significance compared to goal / England average:

Significantly worse	Significantly lower	↑ Increasing / Getting worse	↑ Increasing / Getting better
Not significantly different	Significantly higher	↓ Decreasing / Getting worse	↓ Decreasing / Getting better
Significantly better	Significance not tested	↑ Increasing	↓ Decreasing
		↑ Increasing (not significant)	↓ Decreasing (not significant)
		— Could not be calculated	→ No significant change

Life expectancy and causes of death

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
1 Life expectancy at birth (male)	All ages	2016 - 18	n/a	80.6	80.7	79.6	↓
2 Life expectancy at birth (female)	All ages	2016 - 18	n/a	83.9	84.5	83.2	↓
3 Under 75 mortality rate from all causes	<75 yrs	2016 - 18	1383	291.1	303.3	330.5	↑
4 Mortality rate from all cardiovascular diseases	<75 yrs	2016 - 18	262	56.8	70.5	71.7	↓
5 Mortality rate from cancer	<75 yrs	2016 - 18	560	120.3	120.1	132.3	↑
6 Suicide rate	10+ yrs	2016 - 18	40	7.66	8.11	9.64	↑

Injuries and ill health

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
7 Killed and seriously injured (KSI) rate on England's roads	All ages	2016 - 18	161	26.4	39.5 \$	42.6 \$	—
8 Emergency hospital admission rate for intentional self-harm	All ages	2018/19	310	157.5	83.4	193.4	↓
9 Emergency hospital admission rate for hip fractures	65+ yrs	2018/19	200	610.2	485.3	558.4	↑
10 Percentage of cancer diagnosed at early stage	All ages	2017	431	53.3	52.7	52.2	↑
11 Estimated diabetes diagnosis rate	17+ yrs	2018	n/a	83.2	71.4	78.0	↑
12 Estimated dementia diagnosis rate	65+ yrs	2019	1412	74.6 *	72.6 *	68.7 *	↓

Behavioural risk factors

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
13 Hospital admission rate for alcohol-specific conditions	<18 yrs	2016/17 - 18/19	30	21.1	16.5	31.6	↓
14 Hospital admission rate for alcohol-related conditions	All ages	2018/19	1098	579.0	556.5	663.7	↑
15 Smoking prevalence in adults	18+ yrs	2018	22020	14.1	13.9	14.4	↑
16 Percentage of physically active adults	19+ yrs	2017/18	n/a	57.5	66.4	66.3	↓
17 Percentage of adults classified as overweight or obese	18+ yrs	2017/18	n/a	60.1	55.9	62.0	↑

Child health

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
18 Teenage conception rate	<18 yrs	2017	50	15.2	16.4	17.8	↓
19 Percentage of smoking during pregnancy	All ages	2018/19	131	6.09	4.81 \$	10.6	↓
20 Percentage of breastfeeding initiation	All ages	2016/17	2068	83.0	- ~	74.5	↓
21 Infant mortality rate	<1 yr	2016 - 18	35	4.46	3.30	3.93	↑
22 Year 6: Prevalence of obesity (including severe obesity)	10-11 yrs	2018/19	492	19.8	23.2	20.2	↑

Inequalities

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
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Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
23 Deprivation score (IMD 2015)	All ages	2015	n/a	14.6	-	21.8	—
24 Smoking prevalence in adults in routine and manual occupations	18-64 yrs	2018	n/a	26.3	23.6	25.4	↑

Wider determinants of health

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
25 Percentage of children in low income families	<16 yrs	2016	3850	9.80	18.8	17.0	↓
26 Average GCSE attainment (average attainment 8 score)	15-16 yrs	2018/19	117806	54.3	50.0	46.9	↑
27 Percentage of people in employment	16-64 yrs	2018/19	102200	79.0	74.2	75.6	→
28 Statutory homelessness rate - eligible homeless people not in priority need	Not applicable	2017/18	93	1.08	0.98	0.79	↑
29 Violent crime - hospital admission rate for violence (including sexual violence)	All ages	2016/17 - 18/19	345	58.6	46.2	44.9	↑

Health protection

Indicator	Age	Period	Count	Value (Local)	Value (Region)	Value (England)	Change from previous
30 Excess winter deaths index	All ages	Aug 2017 - Jul 2018	168	36.2	27.1	30.1	↑
31 New STI diagnoses rate (exc chlamydia aged <25)	15-64 yrs	2018	1028	780.2	1713	850.6	↑
32 TB incidence rate	All ages	2016 - 18	64	10.5	21.9	9.19	↑

For full details on each indicator, see the [definitions tab of the Local Authority Health Profiles online tool](#).

For a full list of profiles produced by Public Health England, see the fingertips website: <https://fingertips.phe.org.uk/>

Indicator value types

1,2 Life expectancy - years 3,4,5 Directly age-standardised rate per 100,000 population aged under 75 6 Directly age-standardised rate per 100,000 population aged 10 and over 7 Crude rate per 100,000 population 8 Directly age-standardised rate per 100,000 population 9 Directly age-standardised rate per 100,000 population aged 65 and over 10 Proportion - % of cancers diagnosed at stage 1 or 2 11 Proportion - % recorded diagnosis of diabetes as a proportion of the estimated number with diabetes 12 Proportion - % recorded diagnosis of dementia as a proportion of the estimated number with dementia 13 Crude rate per 100,000 population aged under 18 14 Directly age-standardised rate per 100,000 population 15,16,17 Proportion 18 Crude rate per 1,000 females aged 15 to 17 19,20 Proportion 21 Crude rate per 1,000 live births 22 Proportion 23 Index of Multiple Deprivation (IMD) 2015 score 24 Proportion 25,26 Slope index of inequality 27 Proportion 28 Mean average across 8 qualifications 29 Proportion 30 Crude rate per 1,000 households 31 Directly age-standardised rate per 100,000 population 32 Ratio of excess winter deaths to average of non-winter deaths 33 Crude rate per 100,000 population aged 15 to 64 (excluding Chlamydia) 34 Crude rate per 100,000 population

- * Value compared to a goal (see below)
- ~ Value not published for data quality reasons
- \$ Aggregated from all known lower geography values

Thresholds for indicators that are compared against a goal

Indicator Name	Green	Amber	Red
12 Estimated dementia diagnosis rate (aged 65 and over)	>= 66.7% (significantly)	similar to 66.7%	< 66.7% (significantly)

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